Extended Power Quality Data Interchange Formats

This global standard define the formats to exchange PQ measurements and events between PQI and PQMS, mainly based on extension to international standard formats (particurarly PQDIF according to IEEE 1159.3) or on the adoption of a REST server.

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It is for internal Use. Each Country can provide a translation in local language but the official reference document is this GS English version.

Revision	Data	List of modifications
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1 ACRONYMS

- **PQ** Power Quality
- **PQI** Power Quality Instrument according to IEC 62586-1
- **M3G** Modem GSM – GPRS – UMTS (2G + 3G)
- **RTU** Remote Terminal Unit
- **GPS** Global Positioning System
- **GPSR** GPS Receiver Time Syncro Receiver
- **PQMS** Power Quality Management System
- **DNP3** Distributed Network Protocol
- **REST** Representational State Transfer
- **COMTRADE** Common format for Transient Data Exchange for power systems
- **DNS** Domain Name System
- **DHCP** Dynamic Host Configuration Protocol
- **DHCPv6** Dynamic Host Configuration Protocol (IPv6)
- **JSON** JavaScript Object Notation
- **CSV** Comma-separated values
- **TCP** Transmission Control Protocol
- **HTTP** Hypertext Transfer Protocol
- **HTTPS** Hypertext Transfer Protocol Secure

2 NORMATIVE REFERENCES AND BIBLIOGRAPHY

All the references are intended in the last revision or amendement.

2.1 For all countries

IEC 61000-4-30	Electromagnetic compatibility (EMC) – Part 4-30: Testing and measurement techniques – Power quality measurement methods.
IEEE 1159.3	IEEE Recommended Practice for the Transfer of Power Quality Data.
IEEE C37.111	IEEE Standard Common Format for Transient Data Exchange (COMTRADE) for Power Systems
ISO 8601:2004	Data elements and interchange formats – Information interchange – Representation of dates and times
ECMA-404 (October 2013)	The JSON Data Interchange Format
RFC 4180 (October 2005)	Common Format and MIME Type for Comma-Separated Values (CSV) Files
RFC 791	Internet Protocol, Version 4 (IPv4)
RFC 2460	Internet Protocol, Version 6 (IPv6)
Appnote,1 APPNOTE.TX	ZIP File Format Specification, PKWARE® Inc., September 2012
NMEA 0183	National Marine Electronics Association electrical signal requirements, data transmission protocol and time, and specific sentence formats for a 4800-baud serial data bus
ISO/IEC 7810	Identification cards - Physical characteristics
GSTQ003	Power Quality Management System
GSTQ001	Power Quality Instrument
IEC 60870-5-104	Telecontrol equipment and systems - Part 5-104: Transmission protocols - Network access for IEC 60870-5-101 using standard transport profiles
IEC 62749	Assessment of power quality - Characteristics of electricity supplied by public networks

2.2 For EU countries

EN 50160	Voltage characteristics of electricity supplied by public distribution systems.

2.3 For Italy

RSE 12004159	Specifiche tecnico-funzionali delle apparecchiature di monitoraggio della qualità della tensione per le reti MT.
[1]	R. Chiumeo, M. de Nigris, L. Garbero, C. Gandolfi, L. Tenti, E. Carpaneto, “Implementation of a New Method for an Improved Voltage Dips Evaluation by the Italian Power Quality Monitoring System in Presence of VT Saturation Effects”, International Conference on Renewable Energies and Power Quality (ICREPQ’10), Granada (Spain), 23rd to 25th March, 2010.
ARG/elt 198/11	Testo integrato della qualità dei servizi di distribuzione e misura dell’energia elettrica per il periodo di regolazione 2012-2015

3 REPLACED STANDARDS

Codification	Country	Title
DV908	Italy	Apparecchiatura di monitoraggio della qualita' della tensione delle reti elettriche MT

4 APPLICATION FIELDS

The PQ monitoring architecture can be made by central system and distributed instruments.

The PQI (according to GSTQ001) will be installed in the MV or LV distribution grid in order to meausure all the relevant PQ parameters. The relevant PQ parameters are defined in IEC 61000-4-30, IEC 62749 and EN 50160.

The installation will be a substation or another indoor premise in a country where one or more utilities are under Enel control.

The PQMS is the Power Quality Management System (according to GSTQ003), including data acquisition from PQI.

The PQI must include RTU functionalities in order to allow data exchange (according to this GS) with the PQMS.

5 EXTENDED PQDIF REQUIREMENTS

PQI and PQMS must exchange the data about the relevant PQ parameters fully compliant with PQDIF (according to IEEE 1159.3), additional requests are present in this chapter.

5.1 Main considerations

In the PQDIF, the ID_QT_MAGDURTIME is used for the management of PQ events, by a start timestamp, a duration and a characteristics value (the minimum in the case of dips/interruptions, the maximum in case of swells, etc ...); ID_QT_MAGDURTIME is defined by the tag tagQuantityTypeID in the "data source definition record" for each input channel.

So, tagQuantityTypeID = ID_QT_MAGDURTIME has three data series (see also par.5.5):

a. Timestamp;
b. Event duration;
c. Characteristics value.

In order to identify the PQ parameter (dips, interruption, swell, flicker, thd, etc...), the tag DisturbanceCategoryID is used in the "observation records".

In the following the term "Voltage Li" (i = 1, .., 4) identify the voltage measured by the i-th channel, which corresponds to the i-th phase-to-neutral voltage in the case of 4-wire connection, or to the phase-to-phase voltage in the case of 3-wire connection.

In the implementation of the PQDIF for event management two approach are allowed:

d. To hold a definition of channels independent for the two types of connection (4 wires = phase-to-neutral or 3 wires = phase-to-phase);
e. To use a single definition of channels (corresponding to the type of wiring actually in use).

In both cases the specification of the phase must be properly appropriate: this in view of the fact that voltage events are, however, recognized only for the type of wiring in use.

Although not strictly related to the measurement of the PQ parametrs, the system events, related to the diagnosis of abnormal conditions of the equipment, contribute to the correct interpretation of the measurements made by the device.

Following crucial events must be approached as follow:

f. NO GPS SYNCHRONIZATION;
g. MEMORY FULL;
h. VOLTAGE ANOMALY.

5.2 No GPS synchronization

due to a recognition of a no synchronized time base (typically on start before engaging the GPS or absence/interruption connection to GPSR) the PIMS must record an event of "time base of sync", identifying the instant of start and the duration of this condition.

If the condition of no synchronization continues for a long time (for example, for a permanent failure of the GPS receiver), in order to signal this condition, (power quality events can take place in such condition), the analyzer records the event of "NO GPS SYNCHRONIZATION" at the permanence in this condition for 4 hours, and, it reiterated this periodic registration until the restoration of the synchronism of the time base. This avoids recognize the event of "no synchronism" at the end of the abnormal condition (in the case of permanent fault to the GPS receiver could during for days), and then invalidate the elaborations on the origin of voltage dips already carried out. The organization of information "NO GPS SYNCHRONIZATION" in the format IEEE 1159.3 "PQDIF" uses the standard type of greatness ID_QT_MAGDURTIME, defined in the definition tag tagQuantityTypeID in the relative channel in the "data source definition record". At this type of channel ("System Event") are associated three series, which respectively specify the instant of occurrence (time stamp), the event duration and the amplitude

(not significant and conventionally equal to 1 (one)). The series of data associated with the events in '"observation records" specify the nature of the event through the tag tagDisturbanceCategoryID, but the standard does not provide a value applicable to this type of event, so is necessary create one specifically (ID_TIME_NO_SYNC).

5.3 Memory full

This event occurs when the internal data storage occupation overcome the 80% of filling, identifying the instant of happening. The organization of information " MEMORY FULL" in the format IEEE 1159.3 "PQDIF" uses the standard type of greatness ID_QT_MAGDURTIME, defined in the definition tag tagQuantityTypeID in the relative channel in the "data source definition record". At this type of channel ("System Event") are associated three series, which respectively specify the instant of occurrence (time stamp), the event duration and the amplitude (not significant and conventionally equal to 2 (two)). The series of data associated with the events in '"observation records" specify the nature of the event through the tag tagDisturbanceCategoryID, but the standard does not provide a value applicable to this type of event, so is necessary create one specifically (ID_MEMORY_FULL).

5.4 Voltage anomaly

This event is due the persistence (at least 6 hours) of the voltage measurement in the range ± 10% Vn for one or two channels of the PQI and the voltage measuring over the range ± 30% Vn for the remaining channels (two or one, respectively). Identifying the instant of start and the duration of this condition. After the first recording (after 6 hours of the occurrence of the fault condition), the event is repeated at most once a day, for the duration of the fault condition. Note that the absence of voltage on all channels of the apparatus is not considered an anomaly voltage channels. Furthermore, the management of this event is significant only if the device is configured for three-phase measures, while not provided for single-phase measures. The organization of information "VOLTAGE ANOMALY" in the format IEEE 1159.3 "PQDIF" uses the standard type of greatness ID_QT_MAGDURTIME, defined in the definition tag tagQuantityTypeID in the relative channel in the "data source definition record". At this type of channel ("System Event") are associated three series, which respectively specify the instant of occurrence (time stamp), the event duration and the amplitude (not significant and conventionally equal to 3 (three)). The series of data associated with the events in '"observation records" specify the nature of the event through the tag tagDisturbanceCategoryID, but the standard does not provide a value applicable to this type of event, so is necessary create one specifically (ID_VOLTAGE_ANOMALY).

5.5 Logical channels for PQ events

The following input channels are mapped in the "data source definition record":

a. Voltage events: up to 4 channels (L1, L2, L3, L4) for events of dips, interruptions, swells etc.;
b. Frequency events: 1 channel for under/over frequency events;
c. Imbalance events: 1 channel for over-imbalance events;
d. Flicker events: 3 channels (L1, L2, L3) per over-P_{lt}/ P_{st} events;
e. Voltage THD events: 3 channels (L1, L2, L3) for over-Thd events;
f. Current events: 3 channels (L1, L2, L3) for overcurrent events;
g. Events of digital inputs: 12 channels (one for each digital input) for event of input variation.

The following tags are defined for the channels:

h. tagChannelName that is a character string;
i. tagPhaseID;
j. tagQuantityTypeID = ID_QT_MAGDURTIME;
k. tagQuantityMeasuredID.

Three data series (tagValueTypeID) are available for each channel:

l. ID_SERIES_VALUE_TYPE_TIME: timestamp event;
m. ID_SERIES_VALUE_TYPE_VAL: characteristics value;
n. ID_SERIES_VALUE_TYPE_DURATION: event duration.

With reference to tagPhaseID:

o. for the voltage events on L1, L2 and L3, tagPhaseID = ID_PHASE_AN/BN/CN in the case of 4-wire configuration, and/or tagPhaseID = ID_PHASE_AB/CB/CA in the case of 3-wire configuration;
p. for the voltage events on L4, tagPhaseID = IID_PHASE_RES;
q. for channels of frequency and imbalance events takes the values ID_PHASE_NONE
r. for channels of L1-L2-L3 current events takes the values of ID_PHASE_AN/BN/CN
s. for channels of digital inputs events takes values ID_PHASE_GENERAL_1, …, ID_PHASE_GENERAL_12

With reference to tagQuantityMeasuredID:

t. for channels of events voltage, frequency, imbalance, Voltage THD events takes the value of ID_QM_VOLTAGE
u. for the channels of the current events takes the value of ID_QM_CURRENT
v. for channels of digital events takes the value of ID_QM_STATUS

Par. 8.1 shows an example of “data source definition record” mapping with the definition of channels for event management.

5.6 Data about PQ parameters

Power quality events are stored in “observation record” as instances of the channels previously defined.

The tag tagDisturbanceCategoryID is used to qualify the nature of the event in the type of channel:

a. ID_DISTURB_1159_SHORTDUR_INSTANT_SAG: voltage dips <500ms
b. ID_DISTURB_1159_SHORTDUR_MOMENT_SAG: voltage dips ≥500ms and <3sec
c. ID_DISTURB_1159_SHORTDUR_TEMP_SAG: voltage dips ≥3sec and <60sec
d. ID_DISTURB_1159_LONGDUR_SAG: voltage dips ≥60sec
e. ID_DISTURB_1159_SHORTDUR_MOMENT_INTERRUPT: interruption <3 sec
f. ID_DISTURB_1159_SHORTDUR_TEMP_INTERRUPT: interruption ≥3 sec and <60 sec
g. ID_DISTURB_1159_LONGDUR_INTERRUPT: interruption ≥60 sec
h. ID_DISTURB_1159_SHORTDUR_INSTANT_SWELL: voltage swell <500 ms
i. ID_DISTURB_1159_SHORTDUR_MOMENT_SWELL: voltage swell ≥500 and <3 sec
j. ID_DISTURB_1159_SHORTDUR_TEMP_SWELL: voltage swell ≥3 sec and <60 sec
k. ID_DISTURB_1159_LONGDUR_SWELL: voltage swell ≥60 sec
l. ID_DISTURB_1159_SHORTDUR: rapid voltage changes
m. ID_DISTURB_1159_POWERFREQVARIATION: over- and under-frequency events
n. ID_DISTURB_1159_IMBALANCE: events of over-imbalance
o. ID_DISTURB_1159_VOLTAGEFLUCTUATION: events of over-flicker Plt

The following categories of disturbance are defined (not present in the IEEE 1159.3 standard):

p. ID_INRUSH_CURRENT (in-rush current events): static const GUID ID_INRUSH_CURRENT = { 0xdec995f, 0x2f83, 0x4302, { 0xbc, 0x62, 0x29,0x67, 0x4c, 0x53, 0xb, 0x87 } };
q. ID_LOW_TO_HIGH INPUT (digital input events from logic state off to on): static const GUID ID_LOW_TO_HIGH_INPUT = { 0x1cfe23bd, 0xac40, 0x416b, { 0x84, 0xc9,0x11, 0x64, 0x36, 0x8f, 0xdc, 0x0b } };
r. ID_HIGH_TO_LOW_INPUT (digital input events from logic state on to off): static const GUID ID_HIGH_TO_LOW_INPUT = { 0x89f6b3cf, 0xe2f5, 0x4ac9, { 0xa2, 0x42,0xaf, 0xe5, 0x53, 0x5f, 0xba, 0x4e } };

Par. 8.2 shows an example of recorded event as an instance of a series of type ID_QT_MAGDURTIME.

5.7 Logical channels for system events

Is defined the following logical channel "System Event" in the “data source definition record” for the management of system events, with the following tags:

a. tagChannelName: CHAR1: "System Event"

b. tagPhaseID: ID_PHASE_NONE
c. tagQuantityTypeID: ID_QT_MAGDURTIME
d. tagQuantityMeasuredID: ID_QM_STATUS

To each channel is associated three series with the following typologies (tagValueTypeID):

e. ID_SERIES_VALUE_TYPE_TIME: event timestamp
f. ID_SERIES_VALUE_TYPE_VAL: conventionally set equal to 1 for "NO GPS SYNCHRONIZATION", 2 for event "MEMORY FULL", 3 for event "VOLTAGE ANOMALY"
g. ID_SERIES_VALUE_TYPE_DURATION: event duration (seconds).

5.8 Data about system events

The system events are stored in the “observation record” as instances of the the channel previously defined. The tag tagDisturbanceCategoryID is used to qualify within the type of the channel concerned the nature of the event, by the following category of event that has been defined specifically, as not present in the standard IEEE 1159.3:

a. ID_TIME_NO_SYNC (no GPS synchronization): static const GUID ID_TIME_NO_SYNC = {0x59402026, 0x7a96, 0x44d3, {0xb1, 0x99, 0x66, 0x9b, 0x51, 0xa5, 0xd0, 0xf4} };
b. ID_MEMORY_FULL (memory full): static const GUID ID_MEMORY_FULL = {0x08a90717, 0x6263, 0x4119, {0xae, 0xb6, 0x1e, 0x60, 0x2d, 0x17, 0xc8, 0x13} };
c. ID_VOLTAGE_ANOMALY (voltage anomaly): static const GUID ID_VOLTAGE_ANOMALY = {0x79678710, 0x b45e, 0x4936, {0x86, 0x6e, 0x9f, 0x5a, 0xb5, 0xd0, 0x47, 0x27} }.

Par. 8.3 shows an example of recorded event as an instance of a series of type ID_QT_MAGDURTIME.

5.9 Voltage dip monitoring according to Italian Regulation

The voltage dip validation described in [1] may give three attribute for each voltage dip:

a. Good;
b. Fittizio;
c. Not Defined.

The management of this attribute is not present in IEEE 1159.3 and it is defined in this GS, by creating a dummy dip immediately after the real one just in cases b and c.

The data series of the dummy dip are:

d. TIMESTAMP: istante di riconoscimento [1];
e. DURATION: “Fittizio” = -1; “Not Defined” = -2;
f. MAGNITUDE: “Fittizio” = -1; “Not Defined” = -2;
g. PHASE: L1.

6 REST SERVER REQUIREMENTS

According to GSTQ001, the PQ instrument can have an inbuilt REST server; this chapter define the data exchange characteristics by that server.

The server must listen both at its IPv4 and its IPv6 address, a specific TCP port for HTTP transport and another one for HTTPS. The server must publish a set of URLs and methods which are described in this chapter.

For HTTP authentication is optional, while for HTTPS it is mandatory. Any method based on username+password is allowed. Username and password must be added to any input JSON dictionary.

6.1 URLs

The path of these URLS must be absolute.

Next table shows all the functionalities (each element of the URL column needs to be prefixed with *http://server:port/* or *https://server:port/*).

Table 1 – REST server URLS functionalities

URL	method	description	input	output
tools/reboot	GET	cold restart		$output_simple
tools/recycle	GET	hard restart		$output_simple
config/upload	POST/PUT	JSON encoded configuration file	$config_upload_json	$output_simple
config/reload	GET			$output_simple
files/list	POST	folder name in JSON format	$input_files_list	$output_files_list
files/download	POST	full path name in JSON format	$input_files_download	binary file
files/delete	POST	folder or full path name in JSON format	$input_files_delete	$output_simple
data/periodic	POST	recorded periodic values in JSON or CSV format	$input_data_periodic	$output_data_periodic_json $output_data_periodic_csv
data/events/list	POST	events list with associated data in JSON format	$input_data_events	$output_data_events
data/waveform	POST	waveform datapoints in CSV format	$input_data_waveform	$output_data_waveform_csv
		waveform datapoints in JSON format		$output_data_waveform_json
		waveform datapoints in ZIP+COMTRADE format		$output_data_waveform_zipcomtrade
data/delete	POST	delete periodic, event or waveform data	$input_data_delete	$output_simple

a. TOOLS/REBOOT: cold restart of the device (status is saved and devices are unmounted prior to rebooting).
b. TOOLS/RECYCLE: a hard restart (power recycling) is performed without saving status nor unmounting devices.
c. CONFIG/UPLOAD: a complete or partial configuration is uploaded to the PQI in JSON format.
d. CONFIG/RELOAD: in case of trouble the existent configuration is reloaded.
e. FILES/LIST: this is a replacement for the inbuilt SFTP server functionality, listing any folder content.
f. FILES/DOWNLOAD: a single file may be downloaded.
g. FILES/DELETE: a single file may be erased. For several files a complete path or filter may be used.
h. DATA/PERIODIC: this is the real strength of the REST server, since it provides a fully distributed database functionality. A specific time frame and set of periodic variables are requested in JSON format. The output is made of time series vectors in JSON format or a single table in CSV.
i. DATA/EVENTS/LIST: it gives a list of events for a certain time frame. If any of these events has an associated waveform, its id is also returned. Any event and waveform has a unique id, either numeric or alphanumeric.
j. DATA/WAVEFORM: it returns the full time series data of any waveform given by a single id.

k. DATA/DELETE: recorded data between two timestamps may be deleted. This function shall be used for keeping the internal database within certain size limits.

6.2 Variables encoding

An extensive set of variables is defined. Any PQI shall include this complete list or a subset. This list may be upgraded in the future according to the state-of-the-art.

The whole set of codes and variables are enumerated and described in par. 8.4.

6.3 $config_upload_json

It consists of a JSON dictionary with all or a few configuration parameters. Thus partial reconfiguration may be accomplished without resetting the PQI.

Next table shows some generic parameters.

Table 2 – REST server $config_upload_json

name	values	type	example
wiring	3-wire, 4-wire	text	3-wire
nominal voltage		number	230
nominal current		number	300
voltage ratio		number	100
current ratio		number	200
ipv4 address		text	192.168.1.10
netmask4			255.255.255.0
dns1			8.8.8.8
dns2			2a00:1410:4003:807::2003
dhcp	true or false		false
ipv6 address			2a00:1450:4003:807::2003
prefixlen6			16
dhcpv6	true or false		false
rtsol6	true or false		false

```
{
        "wiring":           "3-wire"                ,
        "nominal voltage":  230                     ,
        "nominal current":  300                     ,
        "voltage ratio":    100                     ,
        "current ratio":    200                     ,

        "ipv4 address":     "192.168.1.10"          ,
        "netmask4":         "255.255.255.0"         ,
        "dns1":             "8.8.8.8"               ,
        "dns2":             "2a00:1410:4003:807::2003" ,
        "dhcp":             "false"                 ,

        "ipv6 address":     "2a00:1450:4003:807::2003" ,
        "prefixlen6":       "16"                    ,
        "dhcpv6":           "false"                 ,
        "rtsol6":           "false"
}
```

6.4 $output_simple

It gives basic success or error information just after a POST, GET or PUT request.

Next table shows the parameters.

Table 3 – REST server $output_simple

name	values	type	example
ok	true, false	boolean	false
error		text	not found

```
{
        "ok":                   "false"         ,
        "error":                "not found"
}
```

6.5 $input_file_list

Either a path or a path and a filter may be requested for listing files from PQI's internal storage.

Next table shows the parameters.

Table 4 – REST server $input_file_list

name	values	type	example
folder		text	rec/waveforms
filter		text	*

```
{
        "folder":               "rec/waveforms"     ,
        "filter":               "*"
}
```

6.6 $output_file_list

A JSON vector is returned. Each vector component consists of a tuple of both filename and size in bytes. This information allows trivial remote file synchronization between the PQI and a central server.

Next table shows the parameters.

Table 5 – REST server $output_file_list

name	values	type	example
list	[[name, size]]	[[text, number]]	[["filename1", 212], ["filename2", 10234], …, ["filename10", 523]]

```
{
        "list":                 [ [ "filename1",  212 ], [ "filename2", 10234 ], …, [ "filename10", 523 ] ]
}
```

6.7 $input_files_download

Complete path and filename in JSON format are requested.

Next table shows the parameters.

Table 6 – REST server $input_files_download

name	values	type	example
fullpathname		text	rec/waveforms/reg01.pqd

```
{
        "fullpathname":         "rec/waveforms/reg01.pqd"
}
```

6.8 $input_file_delete

A single file or a set of files given by a filter may be erased.

Next table shows the parameters.

Table 7 – REST server $input_files_delete

name	values	type	example
path		text	rec/waveforms
filter		text	*

```
{
        "path":                 "rec/waveforms"     ,
        "filter":               "*"
}
```

6.9 $input_data_periodic

Input parameters are the time frame for data extraction and the requested variables. Time must be written in ISO 8601 format.

Next table shows the parameters.

Table 8 – REST server $input_data_periodic

name	values	type	example
start	timestamp	timestamp (ISO 8601 format)	"2015-11-16T22:20:00Z"
end	timestamp	timestamp (ISO 8601 format)	"2015-11-19T10:20:00Z"
vars	[[name]]	[[text]]	["v_AN_min", "v_BN_avg", …, "q_AN_min"]
			["*"]
format	csv or json	text	"csv"
			"json"

```
{
        "start":                "2015-11-16T22:20:00Z"                  ,
        "end":                  "2015-11-19T10:20:00Z"                  ,
        "vars":                 [ "v_AN_min", "v_BN_avg", …, "q_AN_min" ]       ,
        "format":               "csv"
}
```

```
{
    "start":        "2015-11-16T22:20:00Z"                  ,
    "end":          "2015-11-19T10:20:00Z"                  ,
    "vars":         [ "v_AN_min", "v_BN_avg", ..., "q_AN_min" ]  ,
    "format":       "json"
}
```

```
{
    "start":        "2015-11-16T22:20:00Z"                  ,
    "end":          "2015-11-19T10:20:00Z"                  ,
    "vars":         [ "*" ]                                 ,
    "format":       "json"
}
```

6.10 $output_data_periodic_json

A JSON dictionary with single vectors for time and requested variables is returned. Start and end of each time interval are enumerated in separated vectors (“timestamps1” and “timestamps2”). Requested variables are evaluated for each time interval.

Next example shows a special case for 10-minute intervals.

Table 9 – REST server $input_data_periodic_json

name	values	type	example
timestamps1	[timestamps]	[timestamp (ISO 8601 format)]	["2015-11-16T22:20:00Z", "2015-11-16T22:30:00Z", ..., "2015-11-16T23:50:00Z"]
timestamps2	[timestamps]	[timestamp (ISO 8601 format)]	["2015-11-16T22:30:00Z", "2015-11-16T22:40:00Z", ..., "2015-11-17T00:00:00Z"]
"var1"	[values]	[numeric]	[231.5, 232.7, ..., 235.3]
"var2"	[values]	[numeric]	[5.12, 5.20, ..., 5.68]
...	...	...	...

```
{
    "timestamps1":      [ "2015-11-16T22:20:00Z", "2015-11-16T22:30:00Z", ..., "2015-11-16T23:50:00Z" ] ,
    "timestamps2":      [ "2015-11-16T22:30:00Z", "2015-11-16T22:40:00Z", ..., "2015-11-17T00:00:00Z" ] ,
    "v_AN_avg":         [ 231.5, 232.7, ..., 235.3 ] ,
    ...                ... ,
    "v_CN_THD_avg":     [ 5.12, 5.20, ..., 5.68 ]
}
```

6.11 $output_data_periodic_csv

The same information is expressed in tabular form (CSV flat output).

Next table shows the parameters.

Table 10 – REST server $output_data_periodic_csv

t1	t2	v_AN_avg	...	v_CN_THD_avg
2015-11-16T22:20:00Z	2015-11-16T22:30:00Z	231.5	...	5.12
2015-11-16T22:30:00Z	2015-11-16T22:40:00Z	232.7	...	5.20
...		...	...	...
2015-11-16T23:50:00Z	2015-11-17T00:00:00Z	235.3	...	5.68

6.12 $input_data_events

Simple JSON dictionary with start and end time request.

Next table shows the parameters.

Table 11 – REST server $input_data_events

name	values	type	example
start	timestamp	timestamp (ISO 8601 format)	"2015-11-16T22:20:00Z"
end	timestamp	timestamp (ISO 8601 format)	"2015-11-19T10:20:00Z"

```
{
    "start":        "2015-11-16T22:20:00Z"    ,
    "end":          "2015-11-19T10:20:00Z"
}
```

6.13 $output_data_events

The output is a JSON vector made of single dictionaries. Each dictionary describes an event by its unique id and additional numeric of alphanumeric information.

Next table shows the parameters.

Table 12 – REST server $output_data_events1

name	values	type	example
events	[{ }]	[json dictionary]	see below

```
[
        {
                "event_id":         "93815260fcfa1d677847b4026cbc36c0" ,
                "start":            "2015-11-15T10:23:45.015010Z" ,
                "end":              "2015-11-15T10:23:45.126730Z" ,
                "waveform_id":      "34e6431b6430362f8ff277c0c5b3456d" ,
                "type":             "dip" ,
                "magnitude":        75.1 ,
                "phases":           [ "AN", "BN", "AB" ] ,
                "info":             [ "RSE good", "HV origin" ]
        } ,
        {
                "event_id":         "5a413cbd4bedfca97045d7814202fafd" ,
                "start":            "2015-11-16T09:11:35.023020Z" ,
                "end":              "2015-11-16T09:11:35.030100Z" ,
                "waveform_id":      "" ,
                "type":             "swell" ,
                "magnitude":        115.2 ,
                "phases":           [ "CA" ] ,
                "info":             [ ]
        }
]
```

Type of events, affected phases and extra information are encoded according to the next tables.

RSE good/bad/unknown means that the algorithm in [1] gives good, bad or not definitive results. According to par. 5.9:

a. Good = RSE good;
b. Fittizio = RSE bad;
c. Not Defined = RSE unknown.

Next table shows the parameters.

Table 13 – REST server $output_data_events2

type
dip
swell
overcurrent
undercurrent
overfrequency
underfrequency
over_thd
over_pst
over_unbalance
…

phases
AN
BN
CN
AB
BC
CA
AG
BG
CG
NG

info
RSE good
RSE bad
RSE unknown
HV origin
MV origin
EHV origin
LV origin
…

6.14 $input_data_waveform

It consists of a very simple JSON dictionary with a unique waveform id and the requested output format.

Next table shows the parameters.

Table 14 – REST server $input_data_waveform

name	values	type	example
waveform_id	unique id	text	"93815260fcfa1d677847b4026cbc36c0"
format	csv, json or zipcomtrade	text	"csv"

```
{
        "waveform_id":          "93815260fcfa1d677847b4026cbc36c0" ,
        "format":               "csv"
}
```

```
{
        "waveform_id":          "93815260fcfa1d677847b4026cbc36c0" ,
        "format":               "json"
}
```

```
{
        "waveform_id":          "93815260fcfa1d677847b4026cbc36c0" ,
        "format":               "zipcomtrade"
}
```

6.15 $output_data_waveform_json

Similar to the “$output_data_periodic_json” format but with a single time vector.

Next table shows the parameters.

Table 15 – REST server $output_data_waveform_json

name	values	type	example
timestamps	[timestamps]	[timestamp (ISO 8601 format)]	["2015-11-16T22:20:00.01Z", "2015-11-16T22:20:00.02Z", ..., "2015-11-16T22:20:00.88Z"]
"var1"	[values]	[numeric]	[231.5, 232.7, ..., 235.3]
"var2"	[values]	[numeric]	[230.5, 233.1, ..., 234.1]
...	...	...	...

```
{
        "timestamps":     [ "2015-11-16T22:20:00.01Z", "2015-11-16T22:20:00.02Z", …, "2015-11-16T22:20:00.88Z" ] ,
        "v_AN":           [ 231.5, 232.7, …, 235.3 ] ,
        "v_CA":           [ 230.5, 233.1, …, 234.1 ],
        …                 …
}
```

6.16 $output_data_waveform_csv

Similar to the “$output_data_periodic_csv” format but with a single time vector.

Next table shows the parameters.

Table 16 – REST server $output_data_waveform_csv

timestamps	v_AN	v_CA	…
2015-11-16T22:20:00.01Z	231.5	230.5	…
2015-11-16T22:20:00.02Z	232.7	233.1	…
…	…	…	…
2015-11-16T22:20:00.88Z	235.3	234.1	…

6.17 $output_data_zipcomtrade

It consists of a zip-file containing standard COMTRADE files (CFG, DAT and optional HDR). COMTRADE DAT file may be encoded in binary or plain text format.

6.18 $input_data_delete

Recorded data in PQI’s internal database is deleted. Time frames and type of data are input parameters.

Next table shows the parameters.

Table 17 – REST server $input_data_delete

name	values	type	example
start	timestamp	timestamp (ISO 8601 format)	"2015-11-16T22:20:00Z"
end	timestamp	timestamp (ISO 8601 format)	"2015-11-19T10:20:00Z"
type		text	"periodic"
			"event"
			"waveform"
			"any"

```
{
        "start":          "2015-11-16T22:20:00Z",
        "end":            "2015-11-19T10:20:00Z",
        "type":           "periodic"
}
```

```
{
        "start":        "2015-11-16T22:20:00Z",
        "end":          "2015-11-19T10:20:00Z",
        "type":         "event"
}
{
        "start":        "2015-11-16T22:20:00Z",
        "end":          "2015-11-19T10:20:00Z",
        "type":         "waveform"
}
{
        "start":        "2015-11-16T22:20:00Z",
        "end":          "2015-11-19T10:20:00Z",
        "type":         "any"
}
```

7 MISCELLANEOUS

This chapter include further requirements, recommendations and additional information.

7.1 Amendement

Because of the earlier stage of some international standards used in this GS, Enel may derogate some prescriptions.

Possible derogations must be requested by the provider just during the procurement process.

8 ANNEXES

This chapter include data source definition examples.

8.1 Annex A: “data source definition record” examples for PQ events

```
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 5 - ID_PHASE_AB
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 24 ]
| | | value: 'Voltage Event Phase A-B'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_QU_VOLTS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31ae5-b451-11d1-ae170060} - ID_QC_RMS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Rms'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
```

```
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 6 - ID_PHASE_BC
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 24 ]
| | | value: 'Voltage Event Phase B-C'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_QU_VOLTS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31ae5-b451-11d1-ae170060} - ID_QC_RMS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
```

```
| | | | | value: 'Magnitude Rms'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 7 - ID_PHASE_CA
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 24 ]
| | | value: 'Voltage Event Phase C-A'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
```

```
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_QU_VOLTS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31ae5-b451-11d1-ae170060} - ID_QC_RMS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Rms'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 8 - ID_PHASE_RES
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 23 ]
| | | value: 'Voltage Event Phase L4'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
```

```
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_QU_VOLTS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31ae5-b451-11d1-ae170060} - ID_QC_RMS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Rms'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
```

```
| | | value: 0 - ID_PHASE_NONE
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 16 ]
| | | value: 'Frequency Event'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 15 - ID_QU_HERTZ
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {07ef68af-9ff5-11d2-b30b0060} - ID_QC_FREQUENCY
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 20 ]
| | | | | value: 'Magnitude Frequency'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 50.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
```

```
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 0 - ID_PHASE_NONE
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 16 ]
| | | value: 'Unbalance Event'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 19 - ID_QU_PERCENT
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {07ef68af-9ff5-11d2-b30b0060} - ID_QC_FREQUENCY
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 20 ]
| | | | | value: 'Magnitude Unbalance'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
```

```
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 5 - ID_PHASE_AB
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 20 ]
| | | value: 'Plt Event Phase A-B'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
```

```
| | | | | value: 20 - ID_QU_PERUNIT
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {515bf321-71ca-11d4-a4b34445} - ID_QC_FLKR_PLT
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Plt'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 6 - ID_PHASE_BC
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 20 ]
| | | value: 'Plt Event Phase B-C'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
```

```
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 20 - ID_QU_PERUNIT
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {515bf321-71ca-11d4-a4b34445} - ID_QC_FLKR_PLT
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Plt'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 7 - ID_PHASE_CA
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 20 ]
```

```
| | | value: 'Plt Event Phase C-A'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 20 - ID_QU_PERUNIT
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {515bf321-71ca-11d4-a4b34445} - ID_QC_FLKR_PLT
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Plt'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
```

```
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 5 - ID_PHASE_AB
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 21 ]
| | | value: 'ThdV Event Phase A-B'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 19 - ID_QU_PERCENT
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31aec-b451-11d1-ae170060} - ID_QC_TOTAL_THD
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 15 ]
| | | | | value: 'Magnitude ThdV'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
```

```
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 6 - ID_PHASE_BC
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 21 ]
| | | value: 'ThdV Event Phase B-C'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 19 - ID_QU_PERCENT
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31aec-b451-11d1-ae170060} - ID_QC_TOTAL_THD
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 15 ]
| | | | | value: 'Magnitude ThdV'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
```

```
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 7 - ID_PHASE_CA
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 21 ]
| | | value: 'ThdV Event Phase C-A'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 1 - ID_QM_VOLTAGE
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
```

```
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 19 - ID_QU_PERCENT
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31aec-b451-11d1-ae170060} - ID_QC_TOTAL_THD
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 15 ]
| | | | | value: 'Magnitude ThdV'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 1 - ID_PHASE_AN
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 22 ]
| | | value: 'Current Event Phase A'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 2 - ID_QM_CURRENT
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
```

```
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 7 - ID_QU_AMPS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31ae5-b451-11d1-ae170060} - ID_QC_RMS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Rms'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 2 - ID_PHASE_BN
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
```

```
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 22 ]
| | | value: 'Current Event Phase B'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 2 - ID_QM_CURRENT
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 7 - ID_QU_AMPS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31ae5-b451-11d1-ae170060} - ID_QC_RMS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Rms'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
```

```
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 3 - ID_PHASE_CN
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 22 ]
| | | value: 'Current Event Phase C'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 2 - ID_QM_CURRENT
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 7 - ID_QU_AMPS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31ae5-b451-11d1-ae170060} - ID_QC_RMS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 14 ]
| | | | | value: 'Magnitude Rms'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
```

```
| | | | | value: 230.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 19 - ID_PHASE_GENERAL_1
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 1'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
```

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| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 20 - ID_PHASE_GENERAL_2
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 2'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
```

```
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 21 - ID_PHASE_GENERAL_3
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 3'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
```

```
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
```

```
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 22 - ID_PHASE_GENERAL_4
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 4'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
```

```
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 23 - ID_PHASE_GENERAL_5
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 5'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
```

```
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 24 - ID_PHASE_GENERAL_6
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 6'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
```

```
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 25 - ID_PHASE_GENERAL_7
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 7'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
```

```
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 26 - ID_PHASE_GENERAL_8
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
```

```
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 8'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
```

```
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 27 - ID_PHASE_GENERAL_9
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 25 ]
| | | value: 'Digital Input Event N. 9'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
```

```
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 28 - ID_PHASE_GENERAL_10
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 26 ]
| | | value: 'Digital Input Event N. 10'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
```

```
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 29 - ID_PHASE_GENERAL_11
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 26 ]
| | | value: 'Digital Input Event N. 11'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
```

```
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 30 - ID_PHASE_GENERAL_12
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 26 ]
| | | value: 'Digital Input Event N. 12'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
```

```
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
```

```
    | | +-(End of collection)
```

8.2 Annex B: “observation record” examples

```
-Collection -- tag: tagRecObservation (level 0)
| The checksum for this record is correct.
+-Vector -- tag: tagObservationName (type: CHAR1) [ 18 ]
| value: 'Swell Observation'
+-Scalar -- tag: tagTimeCreate (type: TIMESTAMPPQDIF)
| value: 3/15/2013 15:43:3.000000000
+-Scalar -- tag: tagTimeStart (type: TIMESTAMPPQDIF)
| value: 3/15/2013 13:3:27.190000000
+-Scalar -- tag: tagTriggerMethodID (type: UNS_INTEGER4)
| value: 1 - ID_TRIGGER_METH_CHANNEL
+-Scalar -- tag: tagTimeTriggered (type: TIMESTAMPPQDIF)
| value: 3/15/2013 13:3:27.190000000
+-Vector -- tag: tagChannelTriggerIdx (type: UNS_INTEGER4) [ 1 ]
| values: 41
+-Scalar -- tag: tagObservationSerial (type: UNS_INTEGER4)
| value: 0
+-Scalar -- tag: tagDisturbanceCategoryID (type: GUID)
| value: {dd56ef73-7edd-11d2-b30a0060} - ID_DISTURB_1159_SHORTDUR_TEMP_SWELL
+-Collection -- tag: tagChannelInstances (level 1)
| +-Collection -- tag: tagOneChannelInst (level 2)
| | +-Scalar -- tag: tagChannelDefnIdx (type: UNS_INTEGER4)
| | | value: 41
| | +-Scalar -- tag: tagCharactMagnitude (type: REAL8)
| | | value: 263.146439
| | +-Collection -- tag: tagSeriesInstances (level 3)
| | | +-Collection -- tag: tagOneSeriesInstance (level 4)
| | | | +-Scalar -- tag: tagSeriesBaseQuantity (type: REAL8)
| | | | | value: 100.000000
| | | | +-Scalar -- tag: tagSeriesScale (type: REAL8)
| | | | | value: 1.000000
| | | | +-Scalar -- tag: tagSeriesOffset (type: REAL8)
| | | | | value: 0.000000
| | | | +-Vector -- tag: tagSeriesValues (type: TIMESTAMPPQDIF) [ 1 ]
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesInstance (level 4)
| | | | +-Scalar -- tag: tagSeriesBaseQuantity (type: REAL8)
| | | | | value: 230.000000
| | | | +-Scalar -- tag: tagSeriesScale (type: REAL8)
| | | | | value: 1.000000
| | | | +-Scalar -- tag: tagSeriesOffset (type: REAL8)
| | | | | value: 0.000000
| | | | +-Vector -- tag: tagSeriesValues (type: REAL8) [ 1 ]
| | | | | values: 263.146439
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesInstance (level 4)
| | | | +-Scalar -- tag: tagSeriesBaseQuantity (type: REAL8)
| | | | | value: 100.000000
| | | | +-Scalar -- tag: tagSeriesScale (type: REAL8)
| | | | | value: 1.000000
| | | | +-Scalar -- tag: tagSeriesOffset (type: REAL8)
| | | | | value: 0.000000
| | | | +-Vector -- tag: tagSeriesValues (type: REAL8) [ 1 ]
| | | | | values: 9.940000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
| +-Scalar -- tag: tagCharactDuration (type: REAL8)
| | value: 9.940000
| +-(End of collection)
+-(End of collection)
```

```
+---- Record information
| Size on disk: 333
| The record was compressed; size after decompression: 964
    +-(End of record)
```

8.3 Annex C: “data source definition record” examples for system events

```
| +-Collection -- tag: tagOneChannelDefn (level 2)
| +-Collection -- tag: tagOneChannelDefn (level 2)
| | +-Scalar -- tag: tagPhaseID (type: UNS_INTEGER4)
| | | value: 30 - ID_PHASE_NONE
| | +-Vector -- tag: tagOtherChannelIdentifier (type: CHAR1) [ 1 ]
| | | value: ''
| | +-Scalar -- tag: tagQuantityTypeID (type: GUID)
| | | value: {67f6af8d-f753-11cf-9d890080} - ID_QT_MAGDURTIME
| | +-Vector -- tag: tagGroupName (type: CHAR1) [ 5 ]
| | | value: 'None'
| | +-Vector -- tag: tagChannelName (type: CHAR1) [ 26 ]
| | | value: System Event'
| | +-Scalar -- tag: tagPrimarySeriesIdx (type: UNS_INTEGER4)
| | | value: 0
| | +-Scalar -- tag: tagQuantityMeasuredID (type: UNS_INTEGER4)
| | | value: 17 - ID_QM_STATUS
| | +-Collection -- tag: tagSeriesDefns (level 3)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e862-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_TIME
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 5 ]
| | | | | value: 'Time'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 0 - ID_QU_NONE
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {b82b5c83-55c7-11d5-a4b34445} - ID_QC_STATUS
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {67f6af97-f753-11cf-9d890080} - ID_SERIES_VALUE_TYPE_VAL
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 12 ]
| | | | | value: 'Logic State'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 1.000000
| | | | +-(End of collection)
```

```
| | | +-Collection -- tag: tagOneSeriesDefn (level 4)
| | | | +-Scalar -- tag: tagQuantityUnitsID (type: UNS_INTEGER4)
| | | | | value: 2 - ID_QU_SECONDS
| | | | +-Scalar -- tag: tagQuantityCharacteristicID (type: GUID)
| | | | | value: {a6b31adf-b451-11d1-ae170060} - ID_QC_NONE
| | | | +-Scalar -- tag: tagValueTypeID (type: GUID)
| | | | | value: {c690e863-f755-11cf-9d890080} - ID_SERIES_VALUE_TYPE_DURATION
| | | | +-Vector -- tag: tagValueTypeName (type: CHAR1) [ 9 ]
| | | | | value: 'Duration'
| | | | +-Scalar -- tag: tagStorageMethodID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_SERIES_METHOD_VALUES
| | | | +-Scalar -- tag: tagHintGreekPrefixID (type: UNS_INTEGER4)
| | | | | value: 6 - ID_GREEK_NONE
| | | | +-Scalar -- tag: tagHintPreferredUnitsID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_PREFER_ENG
| | | | +-Scalar -- tag: tagHintDefaultDisplayID (type: UNS_INTEGER4)
| | | | | value: 1 - ID_DEFAULT_MAG
| | | | +-Scalar -- tag: tagSeriesNominalQuantity (type: REAL8)
| | | | | value: 0.000000
| | | | +-(End of collection)
| | | +-(End of collection)
| | +-(End of collection)
```

8.4 Annex D: List of variables

Table 1 summarize the variables that the PQI and PDMS must be able to exchange.

For interharmonic variables, just replace _harm_ by _iharm_.

Table 18 – List of variables

Code	Description
v_AN_min	RMS voltage, between phase A and NEUTRAL, minimum of 10/12-cycle intervals
v_BN_min	RMS voltage, between phase B and NEUTRAL, minimum of 10/12-cycle intervals
v_CN_min	RMS voltage, between phase C and NEUTRAL, minimum of 10/12-cycle intervals
v_AB_min	RMS voltage, between phase A and B, minimum of 10/12-cycle intervals
v_BC_min	RMS voltage, between phase B and C, minimum of 10/12-cycle intervals
v_CA_min	RMS voltage, between phase C and A, minimum of 10/12-cycle intervals
a_AN_min	RMS current, phase A, minimum of 10/12-cycle intervals
a_BN_min	RMS current, phase B, minimum of 10/12-cycle intervals
a_CN_min	RMS current, phase C, minimum of 10/12-cycle intervals
p_AN_min	active power, between phase A and NEUTRAL, minimum of 10/12-cycle intervals
p_BN_min	active power, between phase B and NEUTRAL, minimum of 10/12-cycle intervals
p_CN_min	active power, between phase C and NEUTRAL, minimum of 10/12-cycle intervals
p_TOTAL_min	active power, AB+BC+CA, minimum of 10/12-cycle intervals
q_AN_min	reactive power, between phase A and NEUTRAL, minimum of 10/12-cycle intervals
q_BN_min	reactive power, between phase B and NEUTRAL, minimum of 10/12-cycle intervals
q_CN_min	reactive power, between phase C and NEUTRAL, minimum of 10/12-cycle intervals
q_TOTAL_min	reactive power, AB+BC+CA, minimum of 10/12-cycle intervals
v_AN_harm_0_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #0,

	minimum of 10/12-cycle intervals
v_AN_harm_1_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #1, minimum of 10/12-cycle intervals
v_AN_harm_2_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #2, minimum of 10/12-cycle intervals
v_AN_harm_3_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #3, minimum of 10/12-cycle intervals
v_AN_harm_4_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #4, minimum of 10/12-cycle intervals
v_AN_harm_5_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #5, minimum of 10/12-cycle intervals
v_AN_harm_6_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #6, minimum of 10/12-cycle intervals
v_AN_harm_7_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #7, minimum of 10/12-cycle intervals
v_AN_harm_8_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #8, minimum of 10/12-cycle intervals
v_AN_harm_9_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #9, minimum of 10/12-cycle intervals
v_AN_harm_10_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #10, minimum of 10/12-cycle intervals
v_AN_harm_11_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #11, minimum of 10/12-cycle intervals
v_AN_harm_12_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #12, minimum of 10/12-cycle intervals
v_AN_harm_13_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #13, minimum of 10/12-cycle intervals
v_AN_harm_14_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #14, minimum of 10/12-cycle intervals
v_AN_harm_15_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #15, minimum of 10/12-cycle intervals
v_AN_harm_16_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #16, minimum of 10/12-cycle intervals
v_AN_harm_17_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #17, minimum of 10/12-cycle intervals
v_AN_harm_18_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #18, minimum of 10/12-cycle intervals
v_AN_harm_19_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #19, minimum of 10/12-cycle intervals
v_AN_harm_20_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #20, minimum of 10/12-cycle intervals
v_AN_harm_21_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #21, minimum of 10/12-cycle intervals
v_AN_harm_22_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #22, minimum of 10/12-cycle intervals
v_AN_harm_23_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #23, minimum of 10/12-cycle intervals
v_AN_harm_24_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #24, minimum of 10/12-cycle intervals
v_AN_harm_25_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #25, minimum of 10/12-cycle intervals

v_AN_harm_26_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #26, minimum of 10/12-cycle intervals
v_AN_harm_27_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #27, minimum of 10/12-cycle intervals
v_AN_harm_28_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #28, minimum of 10/12-cycle intervals
v_AN_harm_29_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #29, minimum of 10/12-cycle intervals
v_AN_harm_30_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #30, minimum of 10/12-cycle intervals
v_AN_harm_31_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #31, minimum of 10/12-cycle intervals
v_AN_harm_32_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #32, minimum of 10/12-cycle intervals
v_AN_harm_33_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #33, minimum of 10/12-cycle intervals
v_AN_harm_34_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #34, minimum of 10/12-cycle intervals
v_AN_harm_35_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #35, minimum of 10/12-cycle intervals
v_AN_harm_36_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #36, minimum of 10/12-cycle intervals
v_AN_harm_37_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #37, minimum of 10/12-cycle intervals
v_AN_harm_38_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #38, minimum of 10/12-cycle intervals
v_AN_harm_39_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #39, minimum of 10/12-cycle intervals
v_AN_harm_40_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #40, minimum of 10/12-cycle intervals
v_AN_harm_41_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #41, minimum of 10/12-cycle intervals
v_AN_harm_42_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #42, minimum of 10/12-cycle intervals
v_AN_harm_43_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #43, minimum of 10/12-cycle intervals
v_AN_harm_44_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #44, minimum of 10/12-cycle intervals
v_AN_harm_45_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #45, minimum of 10/12-cycle intervals
v_AN_harm_46_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #46, minimum of 10/12-cycle intervals
v_AN_harm_47_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #47, minimum of 10/12-cycle intervals
v_AN_harm_48_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #48, minimum of 10/12-cycle intervals
v_AN_harm_49_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #49, minimum of 10/12-cycle intervals
v_AN_harm_50_min	RMS voltage, between phase A and NEUTRAL, harmonic component, component #50, minimum of 10/12-cycle intervals
v_BN_harm_0_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #0,

	minimum of 10/12-cycle intervals
v_BN_harm_1_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #1, minimum of 10/12-cycle intervals
v_BN_harm_2_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #2, minimum of 10/12-cycle intervals
v_BN_harm_3_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #3, minimum of 10/12-cycle intervals
v_BN_harm_4_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #4, minimum of 10/12-cycle intervals
v_BN_harm_5_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #5, minimum of 10/12-cycle intervals
v_BN_harm_6_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #6, minimum of 10/12-cycle intervals
v_BN_harm_7_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #7, minimum of 10/12-cycle intervals
v_BN_harm_8_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #8, minimum of 10/12-cycle intervals
v_BN_harm_9_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #9, minimum of 10/12-cycle intervals
v_BN_harm_10_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #10, minimum of 10/12-cycle intervals
v_BN_harm_11_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #11, minimum of 10/12-cycle intervals
v_BN_harm_12_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #12, minimum of 10/12-cycle intervals
v_BN_harm_13_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #13, minimum of 10/12-cycle intervals
v_BN_harm_14_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #14, minimum of 10/12-cycle intervals
v_BN_harm_15_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #15, minimum of 10/12-cycle intervals
v_BN_harm_16_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #16, minimum of 10/12-cycle intervals
v_BN_harm_17_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #17, minimum of 10/12-cycle intervals
v_BN_harm_18_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #18, minimum of 10/12-cycle intervals
v_BN_harm_19_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #19, minimum of 10/12-cycle intervals
v_BN_harm_20_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #20, minimum of 10/12-cycle intervals
v_BN_harm_21_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #21, minimum of 10/12-cycle intervals
v_BN_harm_22_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #22, minimum of 10/12-cycle intervals
v_BN_harm_23_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #23, minimum of 10/12-cycle intervals
v_BN_harm_24_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #24, minimum of 10/12-cycle intervals
v_BN_harm_25_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #25, minimum of 10/12-cycle intervals

v_BN_harm_26_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #26, minimum of 10/12-cycle intervals
v_BN_harm_27_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #27, minimum of 10/12-cycle intervals
v_BN_harm_28_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #28, minimum of 10/12-cycle intervals
v_BN_harm_29_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #29, minimum of 10/12-cycle intervals
v_BN_harm_30_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #30, minimum of 10/12-cycle intervals
v_BN_harm_31_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #31, minimum of 10/12-cycle intervals
v_BN_harm_32_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #32, minimum of 10/12-cycle intervals
v_BN_harm_33_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #33, minimum of 10/12-cycle intervals
v_BN_harm_34_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #34, minimum of 10/12-cycle intervals
v_BN_harm_35_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #35, minimum of 10/12-cycle intervals
v_BN_harm_36_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #36, minimum of 10/12-cycle intervals
v_BN_harm_37_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #37, minimum of 10/12-cycle intervals
v_BN_harm_38_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #38, minimum of 10/12-cycle intervals
v_BN_harm_39_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #39, minimum of 10/12-cycle intervals
v_BN_harm_40_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #40, minimum of 10/12-cycle intervals
v_BN_harm_41_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #41, minimum of 10/12-cycle intervals
v_BN_harm_42_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #42, minimum of 10/12-cycle intervals
v_BN_harm_43_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #43, minimum of 10/12-cycle intervals
v_BN_harm_44_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #44, minimum of 10/12-cycle intervals
v_BN_harm_45_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #45, minimum of 10/12-cycle intervals
v_BN_harm_46_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #46, minimum of 10/12-cycle intervals
v_BN_harm_47_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #47, minimum of 10/12-cycle intervals
v_BN_harm_48_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #48, minimum of 10/12-cycle intervals
v_BN_harm_49_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #49, minimum of 10/12-cycle intervals
v_BN_harm_50_min	RMS voltage, between phase B and NEUTRAL, harmonic component, component #50, minimum of 10/12-cycle intervals
v_CN_harm_0_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #0,

	minimum of 10/12-cycle intervals
v_CN_harm_1_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #1, minimum of 10/12-cycle intervals
v_CN_harm_2_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #2, minimum of 10/12-cycle intervals
v_CN_harm_3_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #3, minimum of 10/12-cycle intervals
v_CN_harm_4_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #4, minimum of 10/12-cycle intervals
v_CN_harm_5_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #5, minimum of 10/12-cycle intervals
v_CN_harm_6_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #6, minimum of 10/12-cycle intervals
v_CN_harm_7_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #7, minimum of 10/12-cycle intervals
v_CN_harm_8_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #8, minimum of 10/12-cycle intervals
v_CN_harm_9_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #9, minimum of 10/12-cycle intervals
v_CN_harm_10_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #10, minimum of 10/12-cycle intervals
v_CN_harm_11_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #11, minimum of 10/12-cycle intervals
v_CN_harm_12_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #12, minimum of 10/12-cycle intervals
v_CN_harm_13_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #13, minimum of 10/12-cycle intervals
v_CN_harm_14_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #14, minimum of 10/12-cycle intervals
v_CN_harm_15_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #15, minimum of 10/12-cycle intervals
v_CN_harm_16_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #16, minimum of 10/12-cycle intervals
v_CN_harm_17_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #17, minimum of 10/12-cycle intervals
v_CN_harm_18_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #18, minimum of 10/12-cycle intervals
v_CN_harm_19_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #19, minimum of 10/12-cycle intervals
v_CN_harm_20_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #20, minimum of 10/12-cycle intervals
v_CN_harm_21_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #21, minimum of 10/12-cycle intervals
v_CN_harm_22_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #22, minimum of 10/12-cycle intervals
v_CN_harm_23_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #23, minimum of 10/12-cycle intervals
v_CN_harm_24_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #24, minimum of 10/12-cycle intervals
v_CN_harm_25_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #25, minimum of 10/12-cycle intervals

v_CN_harm_26_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #26, minimum of 10/12-cycle intervals
v_CN_harm_27_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #27, minimum of 10/12-cycle intervals
v_CN_harm_28_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #28, minimum of 10/12-cycle intervals
v_CN_harm_29_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #29, minimum of 10/12-cycle intervals
v_CN_harm_30_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #30, minimum of 10/12-cycle intervals
v_CN_harm_31_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #31, minimum of 10/12-cycle intervals
v_CN_harm_32_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #32, minimum of 10/12-cycle intervals
v_CN_harm_33_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #33, minimum of 10/12-cycle intervals
v_CN_harm_34_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #34, minimum of 10/12-cycle intervals
v_CN_harm_35_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #35, minimum of 10/12-cycle intervals
v_CN_harm_36_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #36, minimum of 10/12-cycle intervals
v_CN_harm_37_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #37, minimum of 10/12-cycle intervals
v_CN_harm_38_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #38, minimum of 10/12-cycle intervals
v_CN_harm_39_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #39, minimum of 10/12-cycle intervals
v_CN_harm_40_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #40, minimum of 10/12-cycle intervals
v_CN_harm_41_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #41, minimum of 10/12-cycle intervals
v_CN_harm_42_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #42, minimum of 10/12-cycle intervals
v_CN_harm_43_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #43, minimum of 10/12-cycle intervals
v_CN_harm_44_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #44, minimum of 10/12-cycle intervals
v_CN_harm_45_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #45, minimum of 10/12-cycle intervals
v_CN_harm_46_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #46, minimum of 10/12-cycle intervals
v_CN_harm_47_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #47, minimum of 10/12-cycle intervals
v_CN_harm_48_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #48, minimum of 10/12-cycle intervals
v_CN_harm_49_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #49, minimum of 10/12-cycle intervals
v_CN_harm_50_min	RMS voltage, between phase C and NEUTRAL, harmonic component, component #50, minimum of 10/12-cycle intervals
v_AB_harm_0_min	RMS voltage, between phase A and B, harmonic component, component #0, minimum

	of 10/12-cycle intervals
v_AB_harm_1_min	RMS voltage, between phase A and B, harmonic component, component #1, minimum of 10/12-cycle intervals
v_AB_harm_2_min	RMS voltage, between phase A and B, harmonic component, component #2, minimum of 10/12-cycle intervals
v_AB_harm_3_min	RMS voltage, between phase A and B, harmonic component, component #3, minimum of 10/12-cycle intervals
v_AB_harm_4_min	RMS voltage, between phase A and B, harmonic component, component #4, minimum of 10/12-cycle intervals
v_AB_harm_5_min	RMS voltage, between phase A and B, harmonic component, component #5, minimum of 10/12-cycle intervals
v_AB_harm_6_min	RMS voltage, between phase A and B, harmonic component, component #6, minimum of 10/12-cycle intervals
v_AB_harm_7_min	RMS voltage, between phase A and B, harmonic component, component #7, minimum of 10/12-cycle intervals
v_AB_harm_8_min	RMS voltage, between phase A and B, harmonic component, component #8, minimum of 10/12-cycle intervals
v_AB_harm_9_min	RMS voltage, between phase A and B, harmonic component, component #9, minimum of 10/12-cycle intervals
v_AB_harm_10_min	RMS voltage, between phase A and B, harmonic component, component #10, minimum of 10/12-cycle intervals
v_AB_harm_11_min	RMS voltage, between phase A and B, harmonic component, component #11, minimum of 10/12-cycle intervals
v_AB_harm_12_min	RMS voltage, between phase A and B, harmonic component, component #12, minimum of 10/12-cycle intervals
v_AB_harm_13_min	RMS voltage, between phase A and B, harmonic component, component #13, minimum of 10/12-cycle intervals
v_AB_harm_14_min	RMS voltage, between phase A and B, harmonic component, component #14, minimum of 10/12-cycle intervals
v_AB_harm_15_min	RMS voltage, between phase A and B, harmonic component, component #15, minimum of 10/12-cycle intervals
v_AB_harm_16_min	RMS voltage, between phase A and B, harmonic component, component #16, minimum of 10/12-cycle intervals
v_AB_harm_17_min	RMS voltage, between phase A and B, harmonic component, component #17, minimum of 10/12-cycle intervals
v_AB_harm_18_min	RMS voltage, between phase A and B, harmonic component, component #18, minimum of 10/12-cycle intervals
v_AB_harm_19_min	RMS voltage, between phase A and B, harmonic component, component #19, minimum of 10/12-cycle intervals
v_AB_harm_20_min	RMS voltage, between phase A and B, harmonic component, component #20, minimum of 10/12-cycle intervals
v_AB_harm_21_min	RMS voltage, between phase A and B, harmonic component, component #21, minimum of 10/12-cycle intervals
v_AB_harm_22_min	RMS voltage, between phase A and B, harmonic component, component #22, minimum of 10/12-cycle intervals
v_AB_harm_23_min	RMS voltage, between phase A and B, harmonic component, component #23, minimum of 10/12-cycle intervals
v_AB_harm_24_min	RMS voltage, between phase A and B, harmonic component, component #24, minimum of 10/12-cycle intervals
v_AB_harm_25_min	RMS voltage, between phase A and B, harmonic component, component #25, minimum of 10/12-cycle intervals

v_AB_harm_26_min	RMS voltage, between phase A and B, harmonic component, component #26, minimum of 10/12-cycle intervals
v_AB_harm_27_min	RMS voltage, between phase A and B, harmonic component, component #27, minimum of 10/12-cycle intervals
v_AB_harm_28_min	RMS voltage, between phase A and B, harmonic component, component #28, minimum of 10/12-cycle intervals
v_AB_harm_29_min	RMS voltage, between phase A and B, harmonic component, component #29, minimum of 10/12-cycle intervals
v_AB_harm_30_min	RMS voltage, between phase A and B, harmonic component, component #30, minimum of 10/12-cycle intervals
v_AB_harm_31_min	RMS voltage, between phase A and B, harmonic component, component #31, minimum of 10/12-cycle intervals
v_AB_harm_32_min	RMS voltage, between phase A and B, harmonic component, component #32, minimum of 10/12-cycle intervals
v_AB_harm_33_min	RMS voltage, between phase A and B, harmonic component, component #33, minimum of 10/12-cycle intervals
v_AB_harm_34_min	RMS voltage, between phase A and B, harmonic component, component #34, minimum of 10/12-cycle intervals
v_AB_harm_35_min	RMS voltage, between phase A and B, harmonic component, component #35, minimum of 10/12-cycle intervals
v_AB_harm_36_min	RMS voltage, between phase A and B, harmonic component, component #36, minimum of 10/12-cycle intervals
v_AB_harm_37_min	RMS voltage, between phase A and B, harmonic component, component #37, minimum of 10/12-cycle intervals
v_AB_harm_38_min	RMS voltage, between phase A and B, harmonic component, component #38, minimum of 10/12-cycle intervals
v_AB_harm_39_min	RMS voltage, between phase A and B, harmonic component, component #39, minimum of 10/12-cycle intervals
v_AB_harm_40_min	RMS voltage, between phase A and B, harmonic component, component #40, minimum of 10/12-cycle intervals
v_AB_harm_41_min	RMS voltage, between phase A and B, harmonic component, component #41, minimum of 10/12-cycle intervals
v_AB_harm_42_min	RMS voltage, between phase A and B, harmonic component, component #42, minimum of 10/12-cycle intervals
v_AB_harm_43_min	RMS voltage, between phase A and B, harmonic component, component #43, minimum of 10/12-cycle intervals
v_AB_harm_44_min	RMS voltage, between phase A and B, harmonic component, component #44, minimum of 10/12-cycle intervals
v_AB_harm_45_min	RMS voltage, between phase A and B, harmonic component, component #45, minimum of 10/12-cycle intervals
v_AB_harm_46_min	RMS voltage, between phase A and B, harmonic component, component #46, minimum of 10/12-cycle intervals
v_AB_harm_47_min	RMS voltage, between phase A and B, harmonic component, component #47, minimum of 10/12-cycle intervals
v_AB_harm_48_min	RMS voltage, between phase A and B, harmonic component, component #48, minimum of 10/12-cycle intervals
v_AB_harm_49_min	RMS voltage, between phase A and B, harmonic component, component #49, minimum of 10/12-cycle intervals
v_AB_harm_50_min	RMS voltage, between phase A and B, harmonic component, component #50, minimum of 10/12-cycle intervals
v_BC_harm_0_min	RMS voltage, between phase B and C, harmonic component, component #0, minimum

	of 10/12-cycle intervals
v_BC_harm_1_min	RMS voltage, between phase B and C, harmonic component, component #1, minimum of 10/12-cycle intervals
v_BC_harm_2_min	RMS voltage, between phase B and C, harmonic component, component #2, minimum of 10/12-cycle intervals
v_BC_harm_3_min	RMS voltage, between phase B and C, harmonic component, component #3, minimum of 10/12-cycle intervals
v_BC_harm_4_min	RMS voltage, between phase B and C, harmonic component, component #4, minimum of 10/12-cycle intervals
v_BC_harm_5_min	RMS voltage, between phase B and C, harmonic component, component #5, minimum of 10/12-cycle intervals
v_BC_harm_6_min	RMS voltage, between phase B and C, harmonic component, component #6, minimum of 10/12-cycle intervals
v_BC_harm_7_min	RMS voltage, between phase B and C, harmonic component, component #7, minimum of 10/12-cycle intervals
v_BC_harm_8_min	RMS voltage, between phase B and C, harmonic component, component #8, minimum of 10/12-cycle intervals
v_BC_harm_9_min	RMS voltage, between phase B and C, harmonic component, component #9, minimum of 10/12-cycle intervals
v_BC_harm_10_min	RMS voltage, between phase B and C, harmonic component, component #10, minimum of 10/12-cycle intervals
v_BC_harm_11_min	RMS voltage, between phase B and C, harmonic component, component #11, minimum of 10/12-cycle intervals
v_BC_harm_12_min	RMS voltage, between phase B and C, harmonic component, component #12, minimum of 10/12-cycle intervals
v_BC_harm_13_min	RMS voltage, between phase B and C, harmonic component, component #13, minimum of 10/12-cycle intervals
v_BC_harm_14_min	RMS voltage, between phase B and C, harmonic component, component #14, minimum of 10/12-cycle intervals
v_BC_harm_15_min	RMS voltage, between phase B and C, harmonic component, component #15, minimum of 10/12-cycle intervals
v_BC_harm_16_min	RMS voltage, between phase B and C, harmonic component, component #16, minimum of 10/12-cycle intervals
v_BC_harm_17_min	RMS voltage, between phase B and C, harmonic component, component #17, minimum of 10/12-cycle intervals
v_BC_harm_18_min	RMS voltage, between phase B and C, harmonic component, component #18, minimum of 10/12-cycle intervals
v_BC_harm_19_min	RMS voltage, between phase B and C, harmonic component, component #19, minimum of 10/12-cycle intervals
v_BC_harm_20_min	RMS voltage, between phase B and C, harmonic component, component #20, minimum of 10/12-cycle intervals
v_BC_harm_21_min	RMS voltage, between phase B and C, harmonic component, component #21, minimum of 10/12-cycle intervals
v_BC_harm_22_min	RMS voltage, between phase B and C, harmonic component, component #22, minimum of 10/12-cycle intervals
v_BC_harm_23_min	RMS voltage, between phase B and C, harmonic component, component #23, minimum of 10/12-cycle intervals
v_BC_harm_24_min	RMS voltage, between phase B and C, harmonic component, component #24, minimum of 10/12-cycle intervals
v_BC_harm_25_min	RMS voltage, between phase B and C, harmonic component, component #25, minimum of 10/12-cycle intervals

v_BC_harm_26_min	RMS voltage, between phase B and C, harmonic component, component #26, minimum of 10/12-cycle intervals
v_BC_harm_27_min	RMS voltage, between phase B and C, harmonic component, component #27, minimum of 10/12-cycle intervals
v_BC_harm_28_min	RMS voltage, between phase B and C, harmonic component, component #28, minimum of 10/12-cycle intervals
v_BC_harm_29_min	RMS voltage, between phase B and C, harmonic component, component #29, minimum of 10/12-cycle intervals
v_BC_harm_30_min	RMS voltage, between phase B and C, harmonic component, component #30, minimum of 10/12-cycle intervals
v_BC_harm_31_min	RMS voltage, between phase B and C, harmonic component, component #31, minimum of 10/12-cycle intervals
v_BC_harm_32_min	RMS voltage, between phase B and C, harmonic component, component #32, minimum of 10/12-cycle intervals
v_BC_harm_33_min	RMS voltage, between phase B and C, harmonic component, component #33, minimum of 10/12-cycle intervals
v_BC_harm_34_min	RMS voltage, between phase B and C, harmonic component, component #34, minimum of 10/12-cycle intervals
v_BC_harm_35_min	RMS voltage, between phase B and C, harmonic component, component #35, minimum of 10/12-cycle intervals
v_BC_harm_36_min	RMS voltage, between phase B and C, harmonic component, component #36, minimum of 10/12-cycle intervals
v_BC_harm_37_min	RMS voltage, between phase B and C, harmonic component, component #37, minimum of 10/12-cycle intervals
v_BC_harm_38_min	RMS voltage, between phase B and C, harmonic component, component #38, minimum of 10/12-cycle intervals
v_BC_harm_39_min	RMS voltage, between phase B and C, harmonic component, component #39, minimum of 10/12-cycle intervals
v_BC_harm_40_min	RMS voltage, between phase B and C, harmonic component, component #40, minimum of 10/12-cycle intervals
v_BC_harm_41_min	RMS voltage, between phase B and C, harmonic component, component #41, minimum of 10/12-cycle intervals
v_BC_harm_42_min	RMS voltage, between phase B and C, harmonic component, component #42, minimum of 10/12-cycle intervals
v_BC_harm_43_min	RMS voltage, between phase B and C, harmonic component, component #43, minimum of 10/12-cycle intervals
v_BC_harm_44_min	RMS voltage, between phase B and C, harmonic component, component #44, minimum of 10/12-cycle intervals
v_BC_harm_45_min	RMS voltage, between phase B and C, harmonic component, component #45, minimum of 10/12-cycle intervals
v_BC_harm_46_min	RMS voltage, between phase B and C, harmonic component, component #46, minimum of 10/12-cycle intervals
v_BC_harm_47_min	RMS voltage, between phase B and C, harmonic component, component #47, minimum of 10/12-cycle intervals
v_BC_harm_48_min	RMS voltage, between phase B and C, harmonic component, component #48, minimum of 10/12-cycle intervals
v_BC_harm_49_min	RMS voltage, between phase B and C, harmonic component, component #49, minimum of 10/12-cycle intervals
v_BC_harm_50_min	RMS voltage, between phase B and C, harmonic component, component #50, minimum of 10/12-cycle intervals
v_CA_harm_0_min	RMS voltage, between phase C and A, harmonic component, component #0, minimum

	of 10/12-cycle intervals
v_CA_harm_1_min	RMS voltage, between phase C and A, harmonic component, component #1, minimum of 10/12-cycle intervals
v_CA_harm_2_min	RMS voltage, between phase C and A, harmonic component, component #2, minimum of 10/12-cycle intervals
v_CA_harm_3_min	RMS voltage, between phase C and A, harmonic component, component #3, minimum of 10/12-cycle intervals
v_CA_harm_4_min	RMS voltage, between phase C and A, harmonic component, component #4, minimum of 10/12-cycle intervals
v_CA_harm_5_min	RMS voltage, between phase C and A, harmonic component, component #5, minimum of 10/12-cycle intervals
v_CA_harm_6_min	RMS voltage, between phase C and A, harmonic component, component #6, minimum of 10/12-cycle intervals
v_CA_harm_7_min	RMS voltage, between phase C and A, harmonic component, component #7, minimum of 10/12-cycle intervals
v_CA_harm_8_min	RMS voltage, between phase C and A, harmonic component, component #8, minimum of 10/12-cycle intervals
v_CA_harm_9_min	RMS voltage, between phase C and A, harmonic component, component #9, minimum of 10/12-cycle intervals
v_CA_harm_10_min	RMS voltage, between phase C and A, harmonic component, component #10, minimum of 10/12-cycle intervals
v_CA_harm_11_min	RMS voltage, between phase C and A, harmonic component, component #11, minimum of 10/12-cycle intervals
v_CA_harm_12_min	RMS voltage, between phase C and A, harmonic component, component #12, minimum of 10/12-cycle intervals
v_CA_harm_13_min	RMS voltage, between phase C and A, harmonic component, component #13, minimum of 10/12-cycle intervals
v_CA_harm_14_min	RMS voltage, between phase C and A, harmonic component, component #14, minimum of 10/12-cycle intervals
v_CA_harm_15_min	RMS voltage, between phase C and A, harmonic component, component #15, minimum of 10/12-cycle intervals
v_CA_harm_16_min	RMS voltage, between phase C and A, harmonic component, component #16, minimum of 10/12-cycle intervals
v_CA_harm_17_min	RMS voltage, between phase C and A, harmonic component, component #17, minimum of 10/12-cycle intervals
v_CA_harm_18_min	RMS voltage, between phase C and A, harmonic component, component #18, minimum of 10/12-cycle intervals
v_CA_harm_19_min	RMS voltage, between phase C and A, harmonic component, component #19, minimum of 10/12-cycle intervals
v_CA_harm_20_min	RMS voltage, between phase C and A, harmonic component, component #20, minimum of 10/12-cycle intervals
v_CA_harm_21_min	RMS voltage, between phase C and A, harmonic component, component #21, minimum of 10/12-cycle intervals
v_CA_harm_22_min	RMS voltage, between phase C and A, harmonic component, component #22, minimum of 10/12-cycle intervals
v_CA_harm_23_min	RMS voltage, between phase C and A, harmonic component, component #23, minimum of 10/12-cycle intervals
v_CA_harm_24_min	RMS voltage, between phase C and A, harmonic component, component #24, minimum of 10/12-cycle intervals
v_CA_harm_25_min	RMS voltage, between phase C and A, harmonic component, component #25, minimum of 10/12-cycle intervals

v_CA_harm_26_min	RMS voltage, between phase C and A, harmonic component, component #26, minimum of 10/12-cycle intervals
v_CA_harm_27_min	RMS voltage, between phase C and A, harmonic component, component #27, minimum of 10/12-cycle intervals
v_CA_harm_28_min	RMS voltage, between phase C and A, harmonic component, component #28, minimum of 10/12-cycle intervals
v_CA_harm_29_min	RMS voltage, between phase C and A, harmonic component, component #29, minimum of 10/12-cycle intervals
v_CA_harm_30_min	RMS voltage, between phase C and A, harmonic component, component #30, minimum of 10/12-cycle intervals
v_CA_harm_31_min	RMS voltage, between phase C and A, harmonic component, component #31, minimum of 10/12-cycle intervals
v_CA_harm_32_min	RMS voltage, between phase C and A, harmonic component, component #32, minimum of 10/12-cycle intervals
v_CA_harm_33_min	RMS voltage, between phase C and A, harmonic component, component #33, minimum of 10/12-cycle intervals
v_CA_harm_34_min	RMS voltage, between phase C and A, harmonic component, component #34, minimum of 10/12-cycle intervals
v_CA_harm_35_min	RMS voltage, between phase C and A, harmonic component, component #35, minimum of 10/12-cycle intervals
v_CA_harm_36_min	RMS voltage, between phase C and A, harmonic component, component #36, minimum of 10/12-cycle intervals
v_CA_harm_37_min	RMS voltage, between phase C and A, harmonic component, component #37, minimum of 10/12-cycle intervals
v_CA_harm_38_min	RMS voltage, between phase C and A, harmonic component, component #38, minimum of 10/12-cycle intervals
v_CA_harm_39_min	RMS voltage, between phase C and A, harmonic component, component #39, minimum of 10/12-cycle intervals
v_CA_harm_40_min	RMS voltage, between phase C and A, harmonic component, component #40, minimum of 10/12-cycle intervals
v_CA_harm_41_min	RMS voltage, between phase C and A, harmonic component, component #41, minimum of 10/12-cycle intervals
v_CA_harm_42_min	RMS voltage, between phase C and A, harmonic component, component #42, minimum of 10/12-cycle intervals
v_CA_harm_43_min	RMS voltage, between phase C and A, harmonic component, component #43, minimum of 10/12-cycle intervals
v_CA_harm_44_min	RMS voltage, between phase C and A, harmonic component, component #44, minimum of 10/12-cycle intervals
v_CA_harm_45_min	RMS voltage, between phase C and A, harmonic component, component #45, minimum of 10/12-cycle intervals
v_CA_harm_46_min	RMS voltage, between phase C and A, harmonic component, component #46, minimum of 10/12-cycle intervals
v_CA_harm_47_min	RMS voltage, between phase C and A, harmonic component, component #47, minimum of 10/12-cycle intervals
v_CA_harm_48_min	RMS voltage, between phase C and A, harmonic component, component #48, minimum of 10/12-cycle intervals
v_CA_harm_49_min	RMS voltage, between phase C and A, harmonic component, component #49, minimum of 10/12-cycle intervals
v_CA_harm_50_min	RMS voltage, between phase C and A, harmonic component, component #50, minimum of 10/12-cycle intervals
a_AN_harm_0_min	RMS current, phase A, harmonic component, component #0, minimum of 10/12-cycle

	intervals
a_AN_harm_1_min	RMS current, phase A, harmonic component, component #1, minimum of 10/12-cycle intervals
a_AN_harm_2_min	RMS current, phase A, harmonic component, component #2, minimum of 10/12-cycle intervals
a_AN_harm_3_min	RMS current, phase A, harmonic component, component #3, minimum of 10/12-cycle intervals
a_AN_harm_4_min	RMS current, phase A, harmonic component, component #4, minimum of 10/12-cycle intervals
a_AN_harm_5_min	RMS current, phase A, harmonic component, component #5, minimum of 10/12-cycle intervals
a_AN_harm_6_min	RMS current, phase A, harmonic component, component #6, minimum of 10/12-cycle intervals
a_AN_harm_7_min	RMS current, phase A, harmonic component, component #7, minimum of 10/12-cycle intervals
a_AN_harm_8_min	RMS current, phase A, harmonic component, component #8, minimum of 10/12-cycle intervals
a_AN_harm_9_min	RMS current, phase A, harmonic component, component #9, minimum of 10/12-cycle intervals
a_AN_harm_10_min	RMS current, phase A, harmonic component, component #10, minimum of 10/12-cycle intervals
a_AN_harm_11_min	RMS current, phase A, harmonic component, component #11, minimum of 10/12-cycle intervals
a_AN_harm_12_min	RMS current, phase A, harmonic component, component #12, minimum of 10/12-cycle intervals
a_AN_harm_13_min	RMS current, phase A, harmonic component, component #13, minimum of 10/12-cycle intervals
a_AN_harm_14_min	RMS current, phase A, harmonic component, component #14, minimum of 10/12-cycle intervals
a_AN_harm_15_min	RMS current, phase A, harmonic component, component #15, minimum of 10/12-cycle intervals
a_AN_harm_16_min	RMS current, phase A, harmonic component, component #16, minimum of 10/12-cycle intervals
a_AN_harm_17_min	RMS current, phase A, harmonic component, component #17, minimum of 10/12-cycle intervals
a_AN_harm_18_min	RMS current, phase A, harmonic component, component #18, minimum of 10/12-cycle intervals
a_AN_harm_19_min	RMS current, phase A, harmonic component, component #19, minimum of 10/12-cycle intervals
a_AN_harm_20_min	RMS current, phase A, harmonic component, component #20, minimum of 10/12-cycle intervals
a_AN_harm_21_min	RMS current, phase A, harmonic component, component #21, minimum of 10/12-cycle intervals
a_AN_harm_22_min	RMS current, phase A, harmonic component, component #22, minimum of 10/12-cycle intervals
a_AN_harm_23_min	RMS current, phase A, harmonic component, component #23, minimum of 10/12-cycle intervals
a_AN_harm_24_min	RMS current, phase A, harmonic component, component #24, minimum of 10/12-cycle intervals
a_AN_harm_25_min	RMS current, phase A, harmonic component, component #25, minimum of 10/12-cycle intervals

a_AN_harm_26_min	RMS current, phase A, harmonic component, component #26, minimum of 10/12-cycle intervals
a_AN_harm_27_min	RMS current, phase A, harmonic component, component #27, minimum of 10/12-cycle intervals
a_AN_harm_28_min	RMS current, phase A, harmonic component, component #28, minimum of 10/12-cycle intervals
a_AN_harm_29_min	RMS current, phase A, harmonic component, component #29, minimum of 10/12-cycle intervals
a_AN_harm_30_min	RMS current, phase A, harmonic component, component #30, minimum of 10/12-cycle intervals
a_AN_harm_31_min	RMS current, phase A, harmonic component, component #31, minimum of 10/12-cycle intervals
a_AN_harm_32_min	RMS current, phase A, harmonic component, component #32, minimum of 10/12-cycle intervals
a_AN_harm_33_min	RMS current, phase A, harmonic component, component #33, minimum of 10/12-cycle intervals
a_AN_harm_34_min	RMS current, phase A, harmonic component, component #34, minimum of 10/12-cycle intervals
a_AN_harm_35_min	RMS current, phase A, harmonic component, component #35, minimum of 10/12-cycle intervals
a_AN_harm_36_min	RMS current, phase A, harmonic component, component #36, minimum of 10/12-cycle intervals
a_AN_harm_37_min	RMS current, phase A, harmonic component, component #37, minimum of 10/12-cycle intervals
a_AN_harm_38_min	RMS current, phase A, harmonic component, component #38, minimum of 10/12-cycle intervals
a_AN_harm_39_min	RMS current, phase A, harmonic component, component #39, minimum of 10/12-cycle intervals
a_AN_harm_40_min	RMS current, phase A, harmonic component, component #40, minimum of 10/12-cycle intervals
a_AN_harm_41_min	RMS current, phase A, harmonic component, component #41, minimum of 10/12-cycle intervals
a_AN_harm_42_min	RMS current, phase A, harmonic component, component #42, minimum of 10/12-cycle intervals
a_AN_harm_43_min	RMS current, phase A, harmonic component, component #43, minimum of 10/12-cycle intervals
a_AN_harm_44_min	RMS current, phase A, harmonic component, component #44, minimum of 10/12-cycle intervals
a_AN_harm_45_min	RMS current, phase A, harmonic component, component #45, minimum of 10/12-cycle intervals
a_AN_harm_46_min	RMS current, phase A, harmonic component, component #46, minimum of 10/12-cycle intervals
a_AN_harm_47_min	RMS current, phase A, harmonic component, component #47, minimum of 10/12-cycle intervals
a_AN_harm_48_min	RMS current, phase A, harmonic component, component #48, minimum of 10/12-cycle intervals
a_AN_harm_49_min	RMS current, phase A, harmonic component, component #49, minimum of 10/12-cycle intervals
a_AN_harm_50_min	RMS current, phase A, harmonic component, component #50, minimum of 10/12-cycle intervals
a_BN_harm_0_min	RMS current, phase B, harmonic component, component #0, minimum of 10/12-cycle

	intervals
a_BN_harm_1_min	RMS current, phase B, harmonic component, component #1, minimum of 10/12-cycle intervals
a_BN_harm_2_min	RMS current, phase B, harmonic component, component #2, minimum of 10/12-cycle intervals
a_BN_harm_3_min	RMS current, phase B, harmonic component, component #3, minimum of 10/12-cycle intervals
a_BN_harm_4_min	RMS current, phase B, harmonic component, component #4, minimum of 10/12-cycle intervals
a_BN_harm_5_min	RMS current, phase B, harmonic component, component #5, minimum of 10/12-cycle intervals
a_BN_harm_6_min	RMS current, phase B, harmonic component, component #6, minimum of 10/12-cycle intervals
a_BN_harm_7_min	RMS current, phase B, harmonic component, component #7, minimum of 10/12-cycle intervals
a_BN_harm_8_min	RMS current, phase B, harmonic component, component #8, minimum of 10/12-cycle intervals
a_BN_harm_9_min	RMS current, phase B, harmonic component, component #9, minimum of 10/12-cycle intervals
a_BN_harm_10_min	RMS current, phase B, harmonic component, component #10, minimum of 10/12-cycle intervals
a_BN_harm_11_min	RMS current, phase B, harmonic component, component #11, minimum of 10/12-cycle intervals
a_BN_harm_12_min	RMS current, phase B, harmonic component, component #12, minimum of 10/12-cycle intervals
a_BN_harm_13_min	RMS current, phase B, harmonic component, component #13, minimum of 10/12-cycle intervals
a_BN_harm_14_min	RMS current, phase B, harmonic component, component #14, minimum of 10/12-cycle intervals
a_BN_harm_15_min	RMS current, phase B, harmonic component, component #15, minimum of 10/12-cycle intervals
a_BN_harm_16_min	RMS current, phase B, harmonic component, component #16, minimum of 10/12-cycle intervals
a_BN_harm_17_min	RMS current, phase B, harmonic component, component #17, minimum of 10/12-cycle intervals
a_BN_harm_18_min	RMS current, phase B, harmonic component, component #18, minimum of 10/12-cycle intervals
a_BN_harm_19_min	RMS current, phase B, harmonic component, component #19, minimum of 10/12-cycle intervals
a_BN_harm_20_min	RMS current, phase B, harmonic component, component #20, minimum of 10/12-cycle intervals
a_BN_harm_21_min	RMS current, phase B, harmonic component, component #21, minimum of 10/12-cycle intervals
a_BN_harm_22_min	RMS current, phase B, harmonic component, component #22, minimum of 10/12-cycle intervals
a_BN_harm_23_min	RMS current, phase B, harmonic component, component #23, minimum of 10/12-cycle intervals
a_BN_harm_24_min	RMS current, phase B, harmonic component, component #24, minimum of 10/12-cycle intervals
a_BN_harm_25_min	RMS current, phase B, harmonic component, component #25, minimum of 10/12-cycle intervals

a_BN_harm_26_min	RMS current, phase B, harmonic component, component #26, minimum of 10/12-cycle intervals
a_BN_harm_27_min	RMS current, phase B, harmonic component, component #27, minimum of 10/12-cycle intervals
a_BN_harm_28_min	RMS current, phase B, harmonic component, component #28, minimum of 10/12-cycle intervals
a_BN_harm_29_min	RMS current, phase B, harmonic component, component #29, minimum of 10/12-cycle intervals
a_BN_harm_30_min	RMS current, phase B, harmonic component, component #30, minimum of 10/12-cycle intervals
a_BN_harm_31_min	RMS current, phase B, harmonic component, component #31, minimum of 10/12-cycle intervals
a_BN_harm_32_min	RMS current, phase B, harmonic component, component #32, minimum of 10/12-cycle intervals
a_BN_harm_33_min	RMS current, phase B, harmonic component, component #33, minimum of 10/12-cycle intervals
a_BN_harm_34_min	RMS current, phase B, harmonic component, component #34, minimum of 10/12-cycle intervals
a_BN_harm_35_min	RMS current, phase B, harmonic component, component #35, minimum of 10/12-cycle intervals
a_BN_harm_36_min	RMS current, phase B, harmonic component, component #36, minimum of 10/12-cycle intervals
a_BN_harm_37_min	RMS current, phase B, harmonic component, component #37, minimum of 10/12-cycle intervals
a_BN_harm_38_min	RMS current, phase B, harmonic component, component #38, minimum of 10/12-cycle intervals
a_BN_harm_39_min	RMS current, phase B, harmonic component, component #39, minimum of 10/12-cycle intervals
a_BN_harm_40_min	RMS current, phase B, harmonic component, component #40, minimum of 10/12-cycle intervals
a_BN_harm_41_min	RMS current, phase B, harmonic component, component #41, minimum of 10/12-cycle intervals
a_BN_harm_42_min	RMS current, phase B, harmonic component, component #42, minimum of 10/12-cycle intervals
a_BN_harm_43_min	RMS current, phase B, harmonic component, component #43, minimum of 10/12-cycle intervals
a_BN_harm_44_min	RMS current, phase B, harmonic component, component #44, minimum of 10/12-cycle intervals
a_BN_harm_45_min	RMS current, phase B, harmonic component, component #45, minimum of 10/12-cycle intervals
a_BN_harm_46_min	RMS current, phase B, harmonic component, component #46, minimum of 10/12-cycle intervals
a_BN_harm_47_min	RMS current, phase B, harmonic component, component #47, minimum of 10/12-cycle intervals
a_BN_harm_48_min	RMS current, phase B, harmonic component, component #48, minimum of 10/12-cycle intervals
a_BN_harm_49_min	RMS current, phase B, harmonic component, component #49, minimum of 10/12-cycle intervals
a_BN_harm_50_min	RMS current, phase B, harmonic component, component #50, minimum of 10/12-cycle intervals
a_CN_harm_0_min	RMS current, phase C, harmonic component, component #0, minimum of 10/12-cycle

	intervals
a_CN_harm_1_min	RMS current, phase C, harmonic component, component #1, minimum of 10/12-cycle intervals
a_CN_harm_2_min	RMS current, phase C, harmonic component, component #2, minimum of 10/12-cycle intervals
a_CN_harm_3_min	RMS current, phase C, harmonic component, component #3, minimum of 10/12-cycle intervals
a_CN_harm_4_min	RMS current, phase C, harmonic component, component #4, minimum of 10/12-cycle intervals
a_CN_harm_5_min	RMS current, phase C, harmonic component, component #5, minimum of 10/12-cycle intervals
a_CN_harm_6_min	RMS current, phase C, harmonic component, component #6, minimum of 10/12-cycle intervals
a_CN_harm_7_min	RMS current, phase C, harmonic component, component #7, minimum of 10/12-cycle intervals
a_CN_harm_8_min	RMS current, phase C, harmonic component, component #8, minimum of 10/12-cycle intervals
a_CN_harm_9_min	RMS current, phase C, harmonic component, component #9, minimum of 10/12-cycle intervals
a_CN_harm_10_min	RMS current, phase C, harmonic component, component #10, minimum of 10/12-cycle intervals
a_CN_harm_11_min	RMS current, phase C, harmonic component, component #11, minimum of 10/12-cycle intervals
a_CN_harm_12_min	RMS current, phase C, harmonic component, component #12, minimum of 10/12-cycle intervals
a_CN_harm_13_min	RMS current, phase C, harmonic component, component #13, minimum of 10/12-cycle intervals
a_CN_harm_14_min	RMS current, phase C, harmonic component, component #14, minimum of 10/12-cycle intervals
a_CN_harm_15_min	RMS current, phase C, harmonic component, component #15, minimum of 10/12-cycle intervals
a_CN_harm_16_min	RMS current, phase C, harmonic component, component #16, minimum of 10/12-cycle intervals
a_CN_harm_17_min	RMS current, phase C, harmonic component, component #17, minimum of 10/12-cycle intervals
a_CN_harm_18_min	RMS current, phase C, harmonic component, component #18, minimum of 10/12-cycle intervals
a_CN_harm_19_min	RMS current, phase C, harmonic component, component #19, minimum of 10/12-cycle intervals
a_CN_harm_20_min	RMS current, phase C, harmonic component, component #20, minimum of 10/12-cycle intervals
a_CN_harm_21_min	RMS current, phase C, harmonic component, component #21, minimum of 10/12-cycle intervals
a_CN_harm_22_min	RMS current, phase C, harmonic component, component #22, minimum of 10/12-cycle intervals
a_CN_harm_23_min	RMS current, phase C, harmonic component, component #23, minimum of 10/12-cycle intervals
a_CN_harm_24_min	RMS current, phase C, harmonic component, component #24, minimum of 10/12-cycle intervals
a_CN_harm_25_min	RMS current, phase C, harmonic component, component #25, minimum of 10/12-cycle intervals

a_CN_harm_26_min	RMS current, phase C, harmonic component, component #26, minimum of 10/12-cycle intervals
a_CN_harm_27_min	RMS current, phase C, harmonic component, component #27, minimum of 10/12-cycle intervals
a_CN_harm_28_min	RMS current, phase C, harmonic component, component #28, minimum of 10/12-cycle intervals
a_CN_harm_29_min	RMS current, phase C, harmonic component, component #29, minimum of 10/12-cycle intervals
a_CN_harm_30_min	RMS current, phase C, harmonic component, component #30, minimum of 10/12-cycle intervals
a_CN_harm_31_min	RMS current, phase C, harmonic component, component #31, minimum of 10/12-cycle intervals
a_CN_harm_32_min	RMS current, phase C, harmonic component, component #32, minimum of 10/12-cycle intervals
a_CN_harm_33_min	RMS current, phase C, harmonic component, component #33, minimum of 10/12-cycle intervals
a_CN_harm_34_min	RMS current, phase C, harmonic component, component #34, minimum of 10/12-cycle intervals
a_CN_harm_35_min	RMS current, phase C, harmonic component, component #35, minimum of 10/12-cycle intervals
a_CN_harm_36_min	RMS current, phase C, harmonic component, component #36, minimum of 10/12-cycle intervals
a_CN_harm_37_min	RMS current, phase C, harmonic component, component #37, minimum of 10/12-cycle intervals
a_CN_harm_38_min	RMS current, phase C, harmonic component, component #38, minimum of 10/12-cycle intervals
a_CN_harm_39_min	RMS current, phase C, harmonic component, component #39, minimum of 10/12-cycle intervals
a_CN_harm_40_min	RMS current, phase C, harmonic component, component #40, minimum of 10/12-cycle intervals
a_CN_harm_41_min	RMS current, phase C, harmonic component, component #41, minimum of 10/12-cycle intervals
a_CN_harm_42_min	RMS current, phase C, harmonic component, component #42, minimum of 10/12-cycle intervals
a_CN_harm_43_min	RMS current, phase C, harmonic component, component #43, minimum of 10/12-cycle intervals
a_CN_harm_44_min	RMS current, phase C, harmonic component, component #44, minimum of 10/12-cycle intervals
a_CN_harm_45_min	RMS current, phase C, harmonic component, component #45, minimum of 10/12-cycle intervals
a_CN_harm_46_min	RMS current, phase C, harmonic component, component #46, minimum of 10/12-cycle intervals
a_CN_harm_47_min	RMS current, phase C, harmonic component, component #47, minimum of 10/12-cycle intervals
a_CN_harm_48_min	RMS current, phase C, harmonic component, component #48, minimum of 10/12-cycle intervals
a_CN_harm_49_min	RMS current, phase C, harmonic component, component #49, minimum of 10/12-cycle intervals
a_CN_harm_50_min	RMS current, phase C, harmonic component, component #50, minimum of 10/12-cycle intervals
v_AN_THD_min	RMS voltage, between phase A and NEUTRAL, total harmonic distortion, minimum of

	10/12-cycle intervals
v_BN_THD_min	RMS voltage, between phase B and NEUTRAL, total harmonic distortion, minimum of 10/12-cycle intervals
v_CN_THD_min	RMS voltage, between phase C and NEUTRAL, total harmonic distortion, minimum of 10/12-cycle intervals
v_AB_THD_min	RMS voltage, between phase A and B, total harmonic distortion, minimum of 10/12-cycle intervals
v_BC_THD_min	RMS voltage, between phase B and C, total harmonic distortion, minimum of 10/12-cycle intervals
v_CA_THD_min	RMS voltage, between phase C and A, total harmonic distortion, minimum of 10/12-cycle intervals
a_AN_THD_min	RMS current, phase A, total harmonic distortion, minimum of 10/12-cycle intervals
a_BN_THD_min	RMS current, phase B, total harmonic distortion, minimum of 10/12-cycle intervals
a_CN_THD_min	RMS current, phase C, total harmonic distortion, minimum of 10/12-cycle intervals
v_zero_min	RMS voltage, zero sequence component, minimum of 10/12-cycle intervals
v_neg_min	RMS voltage, negative sequence component, minimum of 10/12-cycle intervals
freq_min	frequency, minimum of 10/12-cycle intervals
v_AN_pst_min	RMS voltage, between phase A and NEUTRAL, short term flicker, minimum of 10/12-cycle intervals
v_BN_pst_min	RMS voltage, between phase B and NEUTRAL, short term flicker, minimum of 10/12-cycle intervals
v_CN_pst_min	RMS voltage, between phase C and NEUTRAL, short term flicker, minimum of 10/12-cycle intervals
v_AN_plt_min	RMS voltage, between phase A and NEUTRAL, long term flicker, minimum of 10/12-cycle intervals
v_BN_plt_min	RMS voltage, between phase B and NEUTRAL, long term flicker, minimum of 10/12-cycle intervals
v_CN_plt_min	RMS voltage, between phase C and NEUTRAL, long term flicker, minimum of 10/12-cycle intervals
v_AN_avg	RMS voltage, between phase A and NEUTRAL, average of 10/12-cycle intervals
v_BN_avg	RMS voltage, between phase B and NEUTRAL, average of 10/12-cycle intervals
v_CN_avg	RMS voltage, between phase C and NEUTRAL, average of 10/12-cycle intervals
v_AB_avg	RMS voltage, between phase A and B, average of 10/12-cycle intervals
v_BC_avg	RMS voltage, between phase B and C, average of 10/12-cycle intervals
v_CA_avg	RMS voltage, between phase C and A, average of 10/12-cycle intervals
a_AN_avg	RMS current, phase A, average of 10/12-cycle intervals
a_BN_avg	RMS current, phase B, average of 10/12-cycle intervals
a_CN_avg	RMS current, phase C, average of 10/12-cycle intervals
p_AN_avg	active power, between phase A and NEUTRAL, average of 10/12-cycle intervals
p_BN_avg	active power, between phase B and NEUTRAL, average of 10/12-cycle intervals
p_CN_avg	active power, between phase C and NEUTRAL, average of 10/12-cycle intervals
p_TOTAL_avg	active power, AB+BC+CA, average of 10/12-cycle intervals
q_AN_avg	reactive power, between phase A and NEUTRAL, average of 10/12-cycle intervals
q_BN_avg	reactive power, between phase B and NEUTRAL, average of 10/12-cycle intervals
q_CN_avg	reactive power, between phase C and NEUTRAL, average of 10/12-cycle intervals

q_TOTAL_avg	reactive power, AB+BC+CA, average of 10/12-cycle intervals
v_AN_harm_0_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #0, average of 10/12-cycle intervals
v_AN_harm_1_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #1, average of 10/12-cycle intervals
v_AN_harm_2_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #2, average of 10/12-cycle intervals
v_AN_harm_3_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #3, average of 10/12-cycle intervals
v_AN_harm_4_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #4, average of 10/12-cycle intervals
v_AN_harm_5_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #5, average of 10/12-cycle intervals
v_AN_harm_6_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #6, average of 10/12-cycle intervals
v_AN_harm_7_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #7, average of 10/12-cycle intervals
v_AN_harm_8_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #8, average of 10/12-cycle intervals
v_AN_harm_9_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #9, average of 10/12-cycle intervals
v_AN_harm_10_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #10, average of 10/12-cycle intervals
v_AN_harm_11_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #11, average of 10/12-cycle intervals
v_AN_harm_12_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #12, average of 10/12-cycle intervals
v_AN_harm_13_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #13, average of 10/12-cycle intervals
v_AN_harm_14_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #14, average of 10/12-cycle intervals
v_AN_harm_15_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #15, average of 10/12-cycle intervals
v_AN_harm_16_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #16, average of 10/12-cycle intervals
v_AN_harm_17_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #17, average of 10/12-cycle intervals
v_AN_harm_18_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #18, average of 10/12-cycle intervals
v_AN_harm_19_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #19, average of 10/12-cycle intervals
v_AN_harm_20_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #20, average of 10/12-cycle intervals
v_AN_harm_21_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #21, average of 10/12-cycle intervals
v_AN_harm_22_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #22, average of 10/12-cycle intervals
v_AN_harm_23_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #23, average of 10/12-cycle intervals
v_AN_harm_24_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #24, average of 10/12-cycle intervals

v_AN_harm_25_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #25, average of 10/12-cycle intervals
v_AN_harm_26_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #26, average of 10/12-cycle intervals
v_AN_harm_27_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #27, average of 10/12-cycle intervals
v_AN_harm_28_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #28, average of 10/12-cycle intervals
v_AN_harm_29_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #29, average of 10/12-cycle intervals
v_AN_harm_30_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #30, average of 10/12-cycle intervals
v_AN_harm_31_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #31, average of 10/12-cycle intervals
v_AN_harm_32_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #32, average of 10/12-cycle intervals
v_AN_harm_33_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #33, average of 10/12-cycle intervals
v_AN_harm_34_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #34, average of 10/12-cycle intervals
v_AN_harm_35_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #35, average of 10/12-cycle intervals
v_AN_harm_36_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #36, average of 10/12-cycle intervals
v_AN_harm_37_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #37, average of 10/12-cycle intervals
v_AN_harm_38_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #38, average of 10/12-cycle intervals
v_AN_harm_39_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #39, average of 10/12-cycle intervals
v_AN_harm_40_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #40, average of 10/12-cycle intervals
v_AN_harm_41_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #41, average of 10/12-cycle intervals
v_AN_harm_42_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #42, average of 10/12-cycle intervals
v_AN_harm_43_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #43, average of 10/12-cycle intervals
v_AN_harm_44_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #44, average of 10/12-cycle intervals
v_AN_harm_45_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #45, average of 10/12-cycle intervals
v_AN_harm_46_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #46, average of 10/12-cycle intervals
v_AN_harm_47_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #47, average of 10/12-cycle intervals
v_AN_harm_48_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #48, average of 10/12-cycle intervals
v_AN_harm_49_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #49, average of 10/12-cycle intervals
v_AN_harm_50_avg	RMS voltage, between phase A and NEUTRAL, harmonic component, component #50,

	average of 10/12-cycle intervals
v_BN_harm_0_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #0, average of 10/12-cycle intervals
v_BN_harm_1_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #1, average of 10/12-cycle intervals
v_BN_harm_2_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #2, average of 10/12-cycle intervals
v_BN_harm_3_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #3, average of 10/12-cycle intervals
v_BN_harm_4_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #4, average of 10/12-cycle intervals
v_BN_harm_5_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #5, average of 10/12-cycle intervals
v_BN_harm_6_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #6, average of 10/12-cycle intervals
v_BN_harm_7_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #7, average of 10/12-cycle intervals
v_BN_harm_8_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #8, average of 10/12-cycle intervals
v_BN_harm_9_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #9, average of 10/12-cycle intervals
v_BN_harm_10_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #10, average of 10/12-cycle intervals
v_BN_harm_11_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #11, average of 10/12-cycle intervals
v_BN_harm_12_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #12, average of 10/12-cycle intervals
v_BN_harm_13_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #13, average of 10/12-cycle intervals
v_BN_harm_14_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #14, average of 10/12-cycle intervals
v_BN_harm_15_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #15, average of 10/12-cycle intervals
v_BN_harm_16_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #16, average of 10/12-cycle intervals
v_BN_harm_17_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #17, average of 10/12-cycle intervals
v_BN_harm_18_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #18, average of 10/12-cycle intervals
v_BN_harm_19_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #19, average of 10/12-cycle intervals
v_BN_harm_20_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #20, average of 10/12-cycle intervals
v_BN_harm_21_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #21, average of 10/12-cycle intervals
v_BN_harm_22_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #22, average of 10/12-cycle intervals
v_BN_harm_23_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #23, average of 10/12-cycle intervals
v_BN_harm_24_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #24, average of 10/12-cycle intervals

v_BN_harm_25_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #25, average of 10/12-cycle intervals
v_BN_harm_26_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #26, average of 10/12-cycle intervals
v_BN_harm_27_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #27, average of 10/12-cycle intervals
v_BN_harm_28_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #28, average of 10/12-cycle intervals
v_BN_harm_29_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #29, average of 10/12-cycle intervals
v_BN_harm_30_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #30, average of 10/12-cycle intervals
v_BN_harm_31_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #31, average of 10/12-cycle intervals
v_BN_harm_32_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #32, average of 10/12-cycle intervals
v_BN_harm_33_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #33, average of 10/12-cycle intervals
v_BN_harm_34_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #34, average of 10/12-cycle intervals
v_BN_harm_35_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #35, average of 10/12-cycle intervals
v_BN_harm_36_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #36, average of 10/12-cycle intervals
v_BN_harm_37_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #37, average of 10/12-cycle intervals
v_BN_harm_38_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #38, average of 10/12-cycle intervals
v_BN_harm_39_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #39, average of 10/12-cycle intervals
v_BN_harm_40_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #40, average of 10/12-cycle intervals
v_BN_harm_41_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #41, average of 10/12-cycle intervals
v_BN_harm_42_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #42, average of 10/12-cycle intervals
v_BN_harm_43_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #43, average of 10/12-cycle intervals
v_BN_harm_44_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #44, average of 10/12-cycle intervals
v_BN_harm_45_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #45, average of 10/12-cycle intervals
v_BN_harm_46_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #46, average of 10/12-cycle intervals
v_BN_harm_47_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #47, average of 10/12-cycle intervals
v_BN_harm_48_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #48, average of 10/12-cycle intervals
v_BN_harm_49_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #49, average of 10/12-cycle intervals
v_BN_harm_50_avg	RMS voltage, between phase B and NEUTRAL, harmonic component, component #50,

	average of 10/12-cycle intervals
v_CN_harm_0_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #0, average of 10/12-cycle intervals
v_CN_harm_1_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #1, average of 10/12-cycle intervals
v_CN_harm_2_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #2, average of 10/12-cycle intervals
v_CN_harm_3_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #3, average of 10/12-cycle intervals
v_CN_harm_4_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #4, average of 10/12-cycle intervals
v_CN_harm_5_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #5, average of 10/12-cycle intervals
v_CN_harm_6_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #6, average of 10/12-cycle intervals
v_CN_harm_7_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #7, average of 10/12-cycle intervals
v_CN_harm_8_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #8, average of 10/12-cycle intervals
v_CN_harm_9_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #9, average of 10/12-cycle intervals
v_CN_harm_10_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #10, average of 10/12-cycle intervals
v_CN_harm_11_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #11, average of 10/12-cycle intervals
v_CN_harm_12_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #12, average of 10/12-cycle intervals
v_CN_harm_13_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #13, average of 10/12-cycle intervals
v_CN_harm_14_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #14, average of 10/12-cycle intervals
v_CN_harm_15_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #15, average of 10/12-cycle intervals
v_CN_harm_16_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #16, average of 10/12-cycle intervals
v_CN_harm_17_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #17, average of 10/12-cycle intervals
v_CN_harm_18_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #18, average of 10/12-cycle intervals
v_CN_harm_19_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #19, average of 10/12-cycle intervals
v_CN_harm_20_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #20, average of 10/12-cycle intervals
v_CN_harm_21_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #21, average of 10/12-cycle intervals
v_CN_harm_22_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #22, average of 10/12-cycle intervals
v_CN_harm_23_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #23, average of 10/12-cycle intervals
v_CN_harm_24_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #24, average of 10/12-cycle intervals

v_CN_harm_25_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #25, average of 10/12-cycle intervals
v_CN_harm_26_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #26, average of 10/12-cycle intervals
v_CN_harm_27_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #27, average of 10/12-cycle intervals
v_CN_harm_28_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #28, average of 10/12-cycle intervals
v_CN_harm_29_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #29, average of 10/12-cycle intervals
v_CN_harm_30_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #30, average of 10/12-cycle intervals
v_CN_harm_31_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #31, average of 10/12-cycle intervals
v_CN_harm_32_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #32, average of 10/12-cycle intervals
v_CN_harm_33_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #33, average of 10/12-cycle intervals
v_CN_harm_34_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #34, average of 10/12-cycle intervals
v_CN_harm_35_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #35, average of 10/12-cycle intervals
v_CN_harm_36_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #36, average of 10/12-cycle intervals
v_CN_harm_37_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #37, average of 10/12-cycle intervals
v_CN_harm_38_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #38, average of 10/12-cycle intervals
v_CN_harm_39_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #39, average of 10/12-cycle intervals
v_CN_harm_40_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #40, average of 10/12-cycle intervals
v_CN_harm_41_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #41, average of 10/12-cycle intervals
v_CN_harm_42_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #42, average of 10/12-cycle intervals
v_CN_harm_43_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #43, average of 10/12-cycle intervals
v_CN_harm_44_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #44, average of 10/12-cycle intervals
v_CN_harm_45_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #45, average of 10/12-cycle intervals
v_CN_harm_46_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #46, average of 10/12-cycle intervals
v_CN_harm_47_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #47, average of 10/12-cycle intervals
v_CN_harm_48_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #48, average of 10/12-cycle intervals
v_CN_harm_49_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #49, average of 10/12-cycle intervals
v_CN_harm_50_avg	RMS voltage, between phase C and NEUTRAL, harmonic component, component #50,

	average of 10/12-cycle intervals
v_AB_harm_0_avg	RMS voltage, between phase A and B, harmonic component, component #0, average of 10/12-cycle intervals
v_AB_harm_1_avg	RMS voltage, between phase A and B, harmonic component, component #1, average of 10/12-cycle intervals
v_AB_harm_2_avg	RMS voltage, between phase A and B, harmonic component, component #2, average of 10/12-cycle intervals
v_AB_harm_3_avg	RMS voltage, between phase A and B, harmonic component, component #3, average of 10/12-cycle intervals
v_AB_harm_4_avg	RMS voltage, between phase A and B, harmonic component, component #4, average of 10/12-cycle intervals
v_AB_harm_5_avg	RMS voltage, between phase A and B, harmonic component, component #5, average of 10/12-cycle intervals
v_AB_harm_6_avg	RMS voltage, between phase A and B, harmonic component, component #6, average of 10/12-cycle intervals
v_AB_harm_7_avg	RMS voltage, between phase A and B, harmonic component, component #7, average of 10/12-cycle intervals
v_AB_harm_8_avg	RMS voltage, between phase A and B, harmonic component, component #8, average of 10/12-cycle intervals
v_AB_harm_9_avg	RMS voltage, between phase A and B, harmonic component, component #9, average of 10/12-cycle intervals
v_AB_harm_10_avg	RMS voltage, between phase A and B, harmonic component, component #10, average of 10/12-cycle intervals
v_AB_harm_11_avg	RMS voltage, between phase A and B, harmonic component, component #11, average of 10/12-cycle intervals
v_AB_harm_12_avg	RMS voltage, between phase A and B, harmonic component, component #12, average of 10/12-cycle intervals
v_AB_harm_13_avg	RMS voltage, between phase A and B, harmonic component, component #13, average of 10/12-cycle intervals
v_AB_harm_14_avg	RMS voltage, between phase A and B, harmonic component, component #14, average of 10/12-cycle intervals
v_AB_harm_15_avg	RMS voltage, between phase A and B, harmonic component, component #15, average of 10/12-cycle intervals
v_AB_harm_16_avg	RMS voltage, between phase A and B, harmonic component, component #16, average of 10/12-cycle intervals
v_AB_harm_17_avg	RMS voltage, between phase A and B, harmonic component, component #17, average of 10/12-cycle intervals
v_AB_harm_18_avg	RMS voltage, between phase A and B, harmonic component, component #18, average of 10/12-cycle intervals
v_AB_harm_19_avg	RMS voltage, between phase A and B, harmonic component, component #19, average of 10/12-cycle intervals
v_AB_harm_20_avg	RMS voltage, between phase A and B, harmonic component, component #20, average of 10/12-cycle intervals
v_AB_harm_21_avg	RMS voltage, between phase A and B, harmonic component, component #21, average of 10/12-cycle intervals
v_AB_harm_22_avg	RMS voltage, between phase A and B, harmonic component, component #22, average of 10/12-cycle intervals
v_AB_harm_23_avg	RMS voltage, between phase A and B, harmonic component, component #23, average of 10/12-cycle intervals
v_AB_harm_24_avg	RMS voltage, between phase A and B, harmonic component, component #24, average of 10/12-cycle intervals

v_AB_harm_25_avg	RMS voltage, between phase A and B, harmonic component, component #25, average of 10/12-cycle intervals
v_AB_harm_26_avg	RMS voltage, between phase A and B, harmonic component, component #26, average of 10/12-cycle intervals
v_AB_harm_27_avg	RMS voltage, between phase A and B, harmonic component, component #27, average of 10/12-cycle intervals
v_AB_harm_28_avg	RMS voltage, between phase A and B, harmonic component, component #28, average of 10/12-cycle intervals
v_AB_harm_29_avg	RMS voltage, between phase A and B, harmonic component, component #29, average of 10/12-cycle intervals
v_AB_harm_30_avg	RMS voltage, between phase A and B, harmonic component, component #30, average of 10/12-cycle intervals
v_AB_harm_31_avg	RMS voltage, between phase A and B, harmonic component, component #31, average of 10/12-cycle intervals
v_AB_harm_32_avg	RMS voltage, between phase A and B, harmonic component, component #32, average of 10/12-cycle intervals
v_AB_harm_33_avg	RMS voltage, between phase A and B, harmonic component, component #33, average of 10/12-cycle intervals
v_AB_harm_34_avg	RMS voltage, between phase A and B, harmonic component, component #34, average of 10/12-cycle intervals
v_AB_harm_35_avg	RMS voltage, between phase A and B, harmonic component, component #35, average of 10/12-cycle intervals
v_AB_harm_36_avg	RMS voltage, between phase A and B, harmonic component, component #36, average of 10/12-cycle intervals
v_AB_harm_37_avg	RMS voltage, between phase A and B, harmonic component, component #37, average of 10/12-cycle intervals
v_AB_harm_38_avg	RMS voltage, between phase A and B, harmonic component, component #38, average of 10/12-cycle intervals
v_AB_harm_39_avg	RMS voltage, between phase A and B, harmonic component, component #39, average of 10/12-cycle intervals
v_AB_harm_40_avg	RMS voltage, between phase A and B, harmonic component, component #40, average of 10/12-cycle intervals
v_AB_harm_41_avg	RMS voltage, between phase A and B, harmonic component, component #41, average of 10/12-cycle intervals
v_AB_harm_42_avg	RMS voltage, between phase A and B, harmonic component, component #42, average of 10/12-cycle intervals
v_AB_harm_43_avg	RMS voltage, between phase A and B, harmonic component, component #43, average of 10/12-cycle intervals
v_AB_harm_44_avg	RMS voltage, between phase A and B, harmonic component, component #44, average of 10/12-cycle intervals
v_AB_harm_45_avg	RMS voltage, between phase A and B, harmonic component, component #45, average of 10/12-cycle intervals
v_AB_harm_46_avg	RMS voltage, between phase A and B, harmonic component, component #46, average of 10/12-cycle intervals
v_AB_harm_47_avg	RMS voltage, between phase A and B, harmonic component, component #47, average of 10/12-cycle intervals
v_AB_harm_48_avg	RMS voltage, between phase A and B, harmonic component, component #48, average of 10/12-cycle intervals
v_AB_harm_49_avg	RMS voltage, between phase A and B, harmonic component, component #49, average of 10/12-cycle intervals
v_AB_harm_50_avg	RMS voltage, between phase A and B, harmonic component, component #50, average

	of 10/12-cycle intervals
v_BC_harm_0_avg	RMS voltage, between phase B and C, harmonic component, component #0, average of 10/12-cycle intervals
v_BC_harm_1_avg	RMS voltage, between phase B and C, harmonic component, component #1, average of 10/12-cycle intervals
v_BC_harm_2_avg	RMS voltage, between phase B and C, harmonic component, component #2, average of 10/12-cycle intervals
v_BC_harm_3_avg	RMS voltage, between phase B and C, harmonic component, component #3, average of 10/12-cycle intervals
v_BC_harm_4_avg	RMS voltage, between phase B and C, harmonic component, component #4, average of 10/12-cycle intervals
v_BC_harm_5_avg	RMS voltage, between phase B and C, harmonic component, component #5, average of 10/12-cycle intervals
v_BC_harm_6_avg	RMS voltage, between phase B and C, harmonic component, component #6, average of 10/12-cycle intervals
v_BC_harm_7_avg	RMS voltage, between phase B and C, harmonic component, component #7, average of 10/12-cycle intervals
v_BC_harm_8_avg	RMS voltage, between phase B and C, harmonic component, component #8, average of 10/12-cycle intervals
v_BC_harm_9_avg	RMS voltage, between phase B and C, harmonic component, component #9, average of 10/12-cycle intervals
v_BC_harm_10_avg	RMS voltage, between phase B and C, harmonic component, component #10, average of 10/12-cycle intervals
v_BC_harm_11_avg	RMS voltage, between phase B and C, harmonic component, component #11, average of 10/12-cycle intervals
v_BC_harm_12_avg	RMS voltage, between phase B and C, harmonic component, component #12, average of 10/12-cycle intervals
v_BC_harm_13_avg	RMS voltage, between phase B and C, harmonic component, component #13, average of 10/12-cycle intervals
v_BC_harm_14_avg	RMS voltage, between phase B and C, harmonic component, component #14, average of 10/12-cycle intervals
v_BC_harm_15_avg	RMS voltage, between phase B and C, harmonic component, component #15, average of 10/12-cycle intervals
v_BC_harm_16_avg	RMS voltage, between phase B and C, harmonic component, component #16, average of 10/12-cycle intervals
v_BC_harm_17_avg	RMS voltage, between phase B and C, harmonic component, component #17, average of 10/12-cycle intervals
v_BC_harm_18_avg	RMS voltage, between phase B and C, harmonic component, component #18, average of 10/12-cycle intervals
v_BC_harm_19_avg	RMS voltage, between phase B and C, harmonic component, component #19, average of 10/12-cycle intervals
v_BC_harm_20_avg	RMS voltage, between phase B and C, harmonic component, component #20, average of 10/12-cycle intervals
v_BC_harm_21_avg	RMS voltage, between phase B and C, harmonic component, component #21, average of 10/12-cycle intervals
v_BC_harm_22_avg	RMS voltage, between phase B and C, harmonic component, component #22, average of 10/12-cycle intervals
v_BC_harm_23_avg	RMS voltage, between phase B and C, harmonic component, component #23, average of 10/12-cycle intervals
v_BC_harm_24_avg	RMS voltage, between phase B and C, harmonic component, component #24, average of 10/12-cycle intervals

v_BC_harm_25_avg	RMS voltage, between phase B and C, harmonic component, component #25, average of 10/12-cycle intervals
v_BC_harm_26_avg	RMS voltage, between phase B and C, harmonic component, component #26, average of 10/12-cycle intervals
v_BC_harm_27_avg	RMS voltage, between phase B and C, harmonic component, component #27, average of 10/12-cycle intervals
v_BC_harm_28_avg	RMS voltage, between phase B and C, harmonic component, component #28, average of 10/12-cycle intervals
v_BC_harm_29_avg	RMS voltage, between phase B and C, harmonic component, component #29, average of 10/12-cycle intervals
v_BC_harm_30_avg	RMS voltage, between phase B and C, harmonic component, component #30, average of 10/12-cycle intervals
v_BC_harm_31_avg	RMS voltage, between phase B and C, harmonic component, component #31, average of 10/12-cycle intervals
v_BC_harm_32_avg	RMS voltage, between phase B and C, harmonic component, component #32, average of 10/12-cycle intervals
v_BC_harm_33_avg	RMS voltage, between phase B and C, harmonic component, component #33, average of 10/12-cycle intervals
v_BC_harm_34_avg	RMS voltage, between phase B and C, harmonic component, component #34, average of 10/12-cycle intervals
v_BC_harm_35_avg	RMS voltage, between phase B and C, harmonic component, component #35, average of 10/12-cycle intervals
v_BC_harm_36_avg	RMS voltage, between phase B and C, harmonic component, component #36, average of 10/12-cycle intervals
v_BC_harm_37_avg	RMS voltage, between phase B and C, harmonic component, component #37, average of 10/12-cycle intervals
v_BC_harm_38_avg	RMS voltage, between phase B and C, harmonic component, component #38, average of 10/12-cycle intervals
v_BC_harm_39_avg	RMS voltage, between phase B and C, harmonic component, component #39, average of 10/12-cycle intervals
v_BC_harm_40_avg	RMS voltage, between phase B and C, harmonic component, component #40, average of 10/12-cycle intervals
v_BC_harm_41_avg	RMS voltage, between phase B and C, harmonic component, component #41, average of 10/12-cycle intervals
v_BC_harm_42_avg	RMS voltage, between phase B and C, harmonic component, component #42, average of 10/12-cycle intervals
v_BC_harm_43_avg	RMS voltage, between phase B and C, harmonic component, component #43, average of 10/12-cycle intervals
v_BC_harm_44_avg	RMS voltage, between phase B and C, harmonic component, component #44, average of 10/12-cycle intervals
v_BC_harm_45_avg	RMS voltage, between phase B and C, harmonic component, component #45, average of 10/12-cycle intervals
v_BC_harm_46_avg	RMS voltage, between phase B and C, harmonic component, component #46, average of 10/12-cycle intervals
v_BC_harm_47_avg	RMS voltage, between phase B and C, harmonic component, component #47, average of 10/12-cycle intervals
v_BC_harm_48_avg	RMS voltage, between phase B and C, harmonic component, component #48, average of 10/12-cycle intervals
v_BC_harm_49_avg	RMS voltage, between phase B and C, harmonic component, component #49, average of 10/12-cycle intervals
v_BC_harm_50_avg	RMS voltage, between phase B and C, harmonic component, component #50, average

	of 10/12-cycle intervals
v_CA_harm_0_avg	RMS voltage, between phase C and A, harmonic component, component #0, average of 10/12-cycle intervals
v_CA_harm_1_avg	RMS voltage, between phase C and A, harmonic component, component #1, average of 10/12-cycle intervals
v_CA_harm_2_avg	RMS voltage, between phase C and A, harmonic component, component #2, average of 10/12-cycle intervals
v_CA_harm_3_avg	RMS voltage, between phase C and A, harmonic component, component #3, average of 10/12-cycle intervals
v_CA_harm_4_avg	RMS voltage, between phase C and A, harmonic component, component #4, average of 10/12-cycle intervals
v_CA_harm_5_avg	RMS voltage, between phase C and A, harmonic component, component #5, average of 10/12-cycle intervals
v_CA_harm_6_avg	RMS voltage, between phase C and A, harmonic component, component #6, average of 10/12-cycle intervals
v_CA_harm_7_avg	RMS voltage, between phase C and A, harmonic component, component #7, average of 10/12-cycle intervals
v_CA_harm_8_avg	RMS voltage, between phase C and A, harmonic component, component #8, average of 10/12-cycle intervals
v_CA_harm_9_avg	RMS voltage, between phase C and A, harmonic component, component #9, average of 10/12-cycle intervals
v_CA_harm_10_avg	RMS voltage, between phase C and A, harmonic component, component #10, average of 10/12-cycle intervals
v_CA_harm_11_avg	RMS voltage, between phase C and A, harmonic component, component #11, average of 10/12-cycle intervals
v_CA_harm_12_avg	RMS voltage, between phase C and A, harmonic component, component #12, average of 10/12-cycle intervals
v_CA_harm_13_avg	RMS voltage, between phase C and A, harmonic component, component #13, average of 10/12-cycle intervals
v_CA_harm_14_avg	RMS voltage, between phase C and A, harmonic component, component #14, average of 10/12-cycle intervals
v_CA_harm_15_avg	RMS voltage, between phase C and A, harmonic component, component #15, average of 10/12-cycle intervals
v_CA_harm_16_avg	RMS voltage, between phase C and A, harmonic component, component #16, average of 10/12-cycle intervals
v_CA_harm_17_avg	RMS voltage, between phase C and A, harmonic component, component #17, average of 10/12-cycle intervals
v_CA_harm_18_avg	RMS voltage, between phase C and A, harmonic component, component #18, average of 10/12-cycle intervals
v_CA_harm_19_avg	RMS voltage, between phase C and A, harmonic component, component #19, average of 10/12-cycle intervals
v_CA_harm_20_avg	RMS voltage, between phase C and A, harmonic component, component #20, average of 10/12-cycle intervals
v_CA_harm_21_avg	RMS voltage, between phase C and A, harmonic component, component #21, average of 10/12-cycle intervals
v_CA_harm_22_avg	RMS voltage, between phase C and A, harmonic component, component #22, average of 10/12-cycle intervals
v_CA_harm_23_avg	RMS voltage, between phase C and A, harmonic component, component #23, average of 10/12-cycle intervals
v_CA_harm_24_avg	RMS voltage, between phase C and A, harmonic component, component #24, average of 10/12-cycle intervals

v_CA_harm_25_avg	RMS voltage, between phase C and A, harmonic component, component #25, average of 10/12-cycle intervals
v_CA_harm_26_avg	RMS voltage, between phase C and A, harmonic component, component #26, average of 10/12-cycle intervals
v_CA_harm_27_avg	RMS voltage, between phase C and A, harmonic component, component #27, average of 10/12-cycle intervals
v_CA_harm_28_avg	RMS voltage, between phase C and A, harmonic component, component #28, average of 10/12-cycle intervals
v_CA_harm_29_avg	RMS voltage, between phase C and A, harmonic component, component #29, average of 10/12-cycle intervals
v_CA_harm_30_avg	RMS voltage, between phase C and A, harmonic component, component #30, average of 10/12-cycle intervals
v_CA_harm_31_avg	RMS voltage, between phase C and A, harmonic component, component #31, average of 10/12-cycle intervals
v_CA_harm_32_avg	RMS voltage, between phase C and A, harmonic component, component #32, average of 10/12-cycle intervals
v_CA_harm_33_avg	RMS voltage, between phase C and A, harmonic component, component #33, average of 10/12-cycle intervals
v_CA_harm_34_avg	RMS voltage, between phase C and A, harmonic component, component #34, average of 10/12-cycle intervals
v_CA_harm_35_avg	RMS voltage, between phase C and A, harmonic component, component #35, average of 10/12-cycle intervals
v_CA_harm_36_avg	RMS voltage, between phase C and A, harmonic component, component #36, average of 10/12-cycle intervals
v_CA_harm_37_avg	RMS voltage, between phase C and A, harmonic component, component #37, average of 10/12-cycle intervals
v_CA_harm_38_avg	RMS voltage, between phase C and A, harmonic component, component #38, average of 10/12-cycle intervals
v_CA_harm_39_avg	RMS voltage, between phase C and A, harmonic component, component #39, average of 10/12-cycle intervals
v_CA_harm_40_avg	RMS voltage, between phase C and A, harmonic component, component #40, average of 10/12-cycle intervals
v_CA_harm_41_avg	RMS voltage, between phase C and A, harmonic component, component #41, average of 10/12-cycle intervals
v_CA_harm_42_avg	RMS voltage, between phase C and A, harmonic component, component #42, average of 10/12-cycle intervals
v_CA_harm_43_avg	RMS voltage, between phase C and A, harmonic component, component #43, average of 10/12-cycle intervals
v_CA_harm_44_avg	RMS voltage, between phase C and A, harmonic component, component #44, average of 10/12-cycle intervals
v_CA_harm_45_avg	RMS voltage, between phase C and A, harmonic component, component #45, average of 10/12-cycle intervals
v_CA_harm_46_avg	RMS voltage, between phase C and A, harmonic component, component #46, average of 10/12-cycle intervals
v_CA_harm_47_avg	RMS voltage, between phase C and A, harmonic component, component #47, average of 10/12-cycle intervals
v_CA_harm_48_avg	RMS voltage, between phase C and A, harmonic component, component #48, average of 10/12-cycle intervals
v_CA_harm_49_avg	RMS voltage, between phase C and A, harmonic component, component #49, average of 10/12-cycle intervals
v_CA_harm_50_avg	RMS voltage, between phase C and A, harmonic component, component #50, average

	of 10/12-cycle intervals
a_AN_harm_0_avg	RMS current, phase A, harmonic component, component #0, average of 10/12-cycle intervals
a_AN_harm_1_avg	RMS current, phase A, harmonic component, component #1, average of 10/12-cycle intervals
a_AN_harm_2_avg	RMS current, phase A, harmonic component, component #2, average of 10/12-cycle intervals
a_AN_harm_3_avg	RMS current, phase A, harmonic component, component #3, average of 10/12-cycle intervals
a_AN_harm_4_avg	RMS current, phase A, harmonic component, component #4, average of 10/12-cycle intervals
a_AN_harm_5_avg	RMS current, phase A, harmonic component, component #5, average of 10/12-cycle intervals
a_AN_harm_6_avg	RMS current, phase A, harmonic component, component #6, average of 10/12-cycle intervals
a_AN_harm_7_avg	RMS current, phase A, harmonic component, component #7, average of 10/12-cycle intervals
a_AN_harm_8_avg	RMS current, phase A, harmonic component, component #8, average of 10/12-cycle intervals
a_AN_harm_9_avg	RMS current, phase A, harmonic component, component #9, average of 10/12-cycle intervals
a_AN_harm_10_avg	RMS current, phase A, harmonic component, component #10, average of 10/12-cycle intervals
a_AN_harm_11_avg	RMS current, phase A, harmonic component, component #11, average of 10/12-cycle intervals
a_AN_harm_12_avg	RMS current, phase A, harmonic component, component #12, average of 10/12-cycle intervals
a_AN_harm_13_avg	RMS current, phase A, harmonic component, component #13, average of 10/12-cycle intervals
a_AN_harm_14_avg	RMS current, phase A, harmonic component, component #14, average of 10/12-cycle intervals
a_AN_harm_15_avg	RMS current, phase A, harmonic component, component #15, average of 10/12-cycle intervals
a_AN_harm_16_avg	RMS current, phase A, harmonic component, component #16, average of 10/12-cycle intervals
a_AN_harm_17_avg	RMS current, phase A, harmonic component, component #17, average of 10/12-cycle intervals
a_AN_harm_18_avg	RMS current, phase A, harmonic component, component #18, average of 10/12-cycle intervals
a_AN_harm_19_avg	RMS current, phase A, harmonic component, component #19, average of 10/12-cycle intervals
a_AN_harm_20_avg	RMS current, phase A, harmonic component, component #20, average of 10/12-cycle intervals
a_AN_harm_21_avg	RMS current, phase A, harmonic component, component #21, average of 10/12-cycle intervals
a_AN_harm_22_avg	RMS current, phase A, harmonic component, component #22, average of 10/12-cycle intervals
a_AN_harm_23_avg	RMS current, phase A, harmonic component, component #23, average of 10/12-cycle intervals
a_AN_harm_24_avg	RMS current, phase A, harmonic component, component #24, average of 10/12-cycle intervals

a_AN_harm_25_avg	RMS current, phase A, harmonic component, component #25, average of 10/12-cycle intervals
a_AN_harm_26_avg	RMS current, phase A, harmonic component, component #26, average of 10/12-cycle intervals
a_AN_harm_27_avg	RMS current, phase A, harmonic component, component #27, average of 10/12-cycle intervals
a_AN_harm_28_avg	RMS current, phase A, harmonic component, component #28, average of 10/12-cycle intervals
a_AN_harm_29_avg	RMS current, phase A, harmonic component, component #29, average of 10/12-cycle intervals
a_AN_harm_30_avg	RMS current, phase A, harmonic component, component #30, average of 10/12-cycle intervals
a_AN_harm_31_avg	RMS current, phase A, harmonic component, component #31, average of 10/12-cycle intervals
a_AN_harm_32_avg	RMS current, phase A, harmonic component, component #32, average of 10/12-cycle intervals
a_AN_harm_33_avg	RMS current, phase A, harmonic component, component #33, average of 10/12-cycle intervals
a_AN_harm_34_avg	RMS current, phase A, harmonic component, component #34, average of 10/12-cycle intervals
a_AN_harm_35_avg	RMS current, phase A, harmonic component, component #35, average of 10/12-cycle intervals
a_AN_harm_36_avg	RMS current, phase A, harmonic component, component #36, average of 10/12-cycle intervals
a_AN_harm_37_avg	RMS current, phase A, harmonic component, component #37, average of 10/12-cycle intervals
a_AN_harm_38_avg	RMS current, phase A, harmonic component, component #38, average of 10/12-cycle intervals
a_AN_harm_39_avg	RMS current, phase A, harmonic component, component #39, average of 10/12-cycle intervals
a_AN_harm_40_avg	RMS current, phase A, harmonic component, component #40, average of 10/12-cycle intervals
a_AN_harm_41_avg	RMS current, phase A, harmonic component, component #41, average of 10/12-cycle intervals
a_AN_harm_42_avg	RMS current, phase A, harmonic component, component #42, average of 10/12-cycle intervals
a_AN_harm_43_avg	RMS current, phase A, harmonic component, component #43, average of 10/12-cycle intervals
a_AN_harm_44_avg	RMS current, phase A, harmonic component, component #44, average of 10/12-cycle intervals
a_AN_harm_45_avg	RMS current, phase A, harmonic component, component #45, average of 10/12-cycle intervals
a_AN_harm_46_avg	RMS current, phase A, harmonic component, component #46, average of 10/12-cycle intervals
a_AN_harm_47_avg	RMS current, phase A, harmonic component, component #47, average of 10/12-cycle intervals
a_AN_harm_48_avg	RMS current, phase A, harmonic component, component #48, average of 10/12-cycle intervals
a_AN_harm_49_avg	RMS current, phase A, harmonic component, component #49, average of 10/12-cycle intervals
a_AN_harm_50_avg	RMS current, phase A, harmonic component, component #50, average of 10/12-cycle

	intervals
a_BN_harm_0_avg	RMS current, phase B, harmonic component, component #0, average of 10/12-cycle intervals
a_BN_harm_1_avg	RMS current, phase B, harmonic component, component #1, average of 10/12-cycle intervals
a_BN_harm_2_avg	RMS current, phase B, harmonic component, component #2, average of 10/12-cycle intervals
a_BN_harm_3_avg	RMS current, phase B, harmonic component, component #3, average of 10/12-cycle intervals
a_BN_harm_4_avg	RMS current, phase B, harmonic component, component #4, average of 10/12-cycle intervals
a_BN_harm_5_avg	RMS current, phase B, harmonic component, component #5, average of 10/12-cycle intervals
a_BN_harm_6_avg	RMS current, phase B, harmonic component, component #6, average of 10/12-cycle intervals
a_BN_harm_7_avg	RMS current, phase B, harmonic component, component #7, average of 10/12-cycle intervals
a_BN_harm_8_avg	RMS current, phase B, harmonic component, component #8, average of 10/12-cycle intervals
a_BN_harm_9_avg	RMS current, phase B, harmonic component, component #9, average of 10/12-cycle intervals
a_BN_harm_10_avg	RMS current, phase B, harmonic component, component #10, average of 10/12-cycle intervals
a_BN_harm_11_avg	RMS current, phase B, harmonic component, component #11, average of 10/12-cycle intervals
a_BN_harm_12_avg	RMS current, phase B, harmonic component, component #12, average of 10/12-cycle intervals
a_BN_harm_13_avg	RMS current, phase B, harmonic component, component #13, average of 10/12-cycle intervals
a_BN_harm_14_avg	RMS current, phase B, harmonic component, component #14, average of 10/12-cycle intervals
a_BN_harm_15_avg	RMS current, phase B, harmonic component, component #15, average of 10/12-cycle intervals
a_BN_harm_16_avg	RMS current, phase B, harmonic component, component #16, average of 10/12-cycle intervals
a_BN_harm_17_avg	RMS current, phase B, harmonic component, component #17, average of 10/12-cycle intervals
a_BN_harm_18_avg	RMS current, phase B, harmonic component, component #18, average of 10/12-cycle intervals
a_BN_harm_19_avg	RMS current, phase B, harmonic component, component #19, average of 10/12-cycle intervals
a_BN_harm_20_avg	RMS current, phase B, harmonic component, component #20, average of 10/12-cycle intervals
a_BN_harm_21_avg	RMS current, phase B, harmonic component, component #21, average of 10/12-cycle intervals
a_BN_harm_22_avg	RMS current, phase B, harmonic component, component #22, average of 10/12-cycle intervals
a_BN_harm_23_avg	RMS current, phase B, harmonic component, component #23, average of 10/12-cycle intervals
a_BN_harm_24_avg	RMS current, phase B, harmonic component, component #24, average of 10/12-cycle intervals

a_BN_harm_25_avg	RMS current, phase B, harmonic component, component #25, average of 10/12-cycle intervals
a_BN_harm_26_avg	RMS current, phase B, harmonic component, component #26, average of 10/12-cycle intervals
a_BN_harm_27_avg	RMS current, phase B, harmonic component, component #27, average of 10/12-cycle intervals
a_BN_harm_28_avg	RMS current, phase B, harmonic component, component #28, average of 10/12-cycle intervals
a_BN_harm_29_avg	RMS current, phase B, harmonic component, component #29, average of 10/12-cycle intervals
a_BN_harm_30_avg	RMS current, phase B, harmonic component, component #30, average of 10/12-cycle intervals
a_BN_harm_31_avg	RMS current, phase B, harmonic component, component #31, average of 10/12-cycle intervals
a_BN_harm_32_avg	RMS current, phase B, harmonic component, component #32, average of 10/12-cycle intervals
a_BN_harm_33_avg	RMS current, phase B, harmonic component, component #33, average of 10/12-cycle intervals
a_BN_harm_34_avg	RMS current, phase B, harmonic component, component #34, average of 10/12-cycle intervals
a_BN_harm_35_avg	RMS current, phase B, harmonic component, component #35, average of 10/12-cycle intervals
a_BN_harm_36_avg	RMS current, phase B, harmonic component, component #36, average of 10/12-cycle intervals
a_BN_harm_37_avg	RMS current, phase B, harmonic component, component #37, average of 10/12-cycle intervals
a_BN_harm_38_avg	RMS current, phase B, harmonic component, component #38, average of 10/12-cycle intervals
a_BN_harm_39_avg	RMS current, phase B, harmonic component, component #39, average of 10/12-cycle intervals
a_BN_harm_40_avg	RMS current, phase B, harmonic component, component #40, average of 10/12-cycle intervals
a_BN_harm_41_avg	RMS current, phase B, harmonic component, component #41, average of 10/12-cycle intervals
a_BN_harm_42_avg	RMS current, phase B, harmonic component, component #42, average of 10/12-cycle intervals
a_BN_harm_43_avg	RMS current, phase B, harmonic component, component #43, average of 10/12-cycle intervals
a_BN_harm_44_avg	RMS current, phase B, harmonic component, component #44, average of 10/12-cycle intervals
a_BN_harm_45_avg	RMS current, phase B, harmonic component, component #45, average of 10/12-cycle intervals
a_BN_harm_46_avg	RMS current, phase B, harmonic component, component #46, average of 10/12-cycle intervals
a_BN_harm_47_avg	RMS current, phase B, harmonic component, component #47, average of 10/12-cycle intervals
a_BN_harm_48_avg	RMS current, phase B, harmonic component, component #48, average of 10/12-cycle intervals
a_BN_harm_49_avg	RMS current, phase B, harmonic component, component #49, average of 10/12-cycle intervals
a_BN_harm_50_avg	RMS current, phase B, harmonic component, component #50, average of 10/12-cycle

	intervals
a_CN_harm_0_avg	RMS current, phase C, harmonic component, component #0, average of 10/12-cycle intervals
a_CN_harm_1_avg	RMS current, phase C, harmonic component, component #1, average of 10/12-cycle intervals
a_CN_harm_2_avg	RMS current, phase C, harmonic component, component #2, average of 10/12-cycle intervals
a_CN_harm_3_avg	RMS current, phase C, harmonic component, component #3, average of 10/12-cycle intervals
a_CN_harm_4_avg	RMS current, phase C, harmonic component, component #4, average of 10/12-cycle intervals
a_CN_harm_5_avg	RMS current, phase C, harmonic component, component #5, average of 10/12-cycle intervals
a_CN_harm_6_avg	RMS current, phase C, harmonic component, component #6, average of 10/12-cycle intervals
a_CN_harm_7_avg	RMS current, phase C, harmonic component, component #7, average of 10/12-cycle intervals
a_CN_harm_8_avg	RMS current, phase C, harmonic component, component #8, average of 10/12-cycle intervals
a_CN_harm_9_avg	RMS current, phase C, harmonic component, component #9, average of 10/12-cycle intervals
a_CN_harm_10_avg	RMS current, phase C, harmonic component, component #10, average of 10/12-cycle intervals
a_CN_harm_11_avg	RMS current, phase C, harmonic component, component #11, average of 10/12-cycle intervals
a_CN_harm_12_avg	RMS current, phase C, harmonic component, component #12, average of 10/12-cycle intervals
a_CN_harm_13_avg	RMS current, phase C, harmonic component, component #13, average of 10/12-cycle intervals
a_CN_harm_14_avg	RMS current, phase C, harmonic component, component #14, average of 10/12-cycle intervals
a_CN_harm_15_avg	RMS current, phase C, harmonic component, component #15, average of 10/12-cycle intervals
a_CN_harm_16_avg	RMS current, phase C, harmonic component, component #16, average of 10/12-cycle intervals
a_CN_harm_17_avg	RMS current, phase C, harmonic component, component #17, average of 10/12-cycle intervals
a_CN_harm_18_avg	RMS current, phase C, harmonic component, component #18, average of 10/12-cycle intervals
a_CN_harm_19_avg	RMS current, phase C, harmonic component, component #19, average of 10/12-cycle intervals
a_CN_harm_20_avg	RMS current, phase C, harmonic component, component #20, average of 10/12-cycle intervals
a_CN_harm_21_avg	RMS current, phase C, harmonic component, component #21, average of 10/12-cycle intervals
a_CN_harm_22_avg	RMS current, phase C, harmonic component, component #22, average of 10/12-cycle intervals
a_CN_harm_23_avg	RMS current, phase C, harmonic component, component #23, average of 10/12-cycle intervals
a_CN_harm_24_avg	RMS current, phase C, harmonic component, component #24, average of 10/12-cycle intervals

a_CN_harm_25_avg	RMS current, phase C, harmonic component, component #25, average of 10/12-cycle intervals
a_CN_harm_26_avg	RMS current, phase C, harmonic component, component #26, average of 10/12-cycle intervals
a_CN_harm_27_avg	RMS current, phase C, harmonic component, component #27, average of 10/12-cycle intervals
a_CN_harm_28_avg	RMS current, phase C, harmonic component, component #28, average of 10/12-cycle intervals
a_CN_harm_29_avg	RMS current, phase C, harmonic component, component #29, average of 10/12-cycle intervals
a_CN_harm_30_avg	RMS current, phase C, harmonic component, component #30, average of 10/12-cycle intervals
a_CN_harm_31_avg	RMS current, phase C, harmonic component, component #31, average of 10/12-cycle intervals
a_CN_harm_32_avg	RMS current, phase C, harmonic component, component #32, average of 10/12-cycle intervals
a_CN_harm_33_avg	RMS current, phase C, harmonic component, component #33, average of 10/12-cycle intervals
a_CN_harm_34_avg	RMS current, phase C, harmonic component, component #34, average of 10/12-cycle intervals
a_CN_harm_35_avg	RMS current, phase C, harmonic component, component #35, average of 10/12-cycle intervals
a_CN_harm_36_avg	RMS current, phase C, harmonic component, component #36, average of 10/12-cycle intervals
a_CN_harm_37_avg	RMS current, phase C, harmonic component, component #37, average of 10/12-cycle intervals
a_CN_harm_38_avg	RMS current, phase C, harmonic component, component #38, average of 10/12-cycle intervals
a_CN_harm_39_avg	RMS current, phase C, harmonic component, component #39, average of 10/12-cycle intervals
a_CN_harm_40_avg	RMS current, phase C, harmonic component, component #40, average of 10/12-cycle intervals
a_CN_harm_41_avg	RMS current, phase C, harmonic component, component #41, average of 10/12-cycle intervals
a_CN_harm_42_avg	RMS current, phase C, harmonic component, component #42, average of 10/12-cycle intervals
a_CN_harm_43_avg	RMS current, phase C, harmonic component, component #43, average of 10/12-cycle intervals
a_CN_harm_44_avg	RMS current, phase C, harmonic component, component #44, average of 10/12-cycle intervals
a_CN_harm_45_avg	RMS current, phase C, harmonic component, component #45, average of 10/12-cycle intervals
a_CN_harm_46_avg	RMS current, phase C, harmonic component, component #46, average of 10/12-cycle intervals
a_CN_harm_47_avg	RMS current, phase C, harmonic component, component #47, average of 10/12-cycle intervals
a_CN_harm_48_avg	RMS current, phase C, harmonic component, component #48, average of 10/12-cycle intervals
a_CN_harm_49_avg	RMS current, phase C, harmonic component, component #49, average of 10/12-cycle intervals
a_CN_harm_50_avg	RMS current, phase C, harmonic component, component #50, average of 10/12-cycle

	intervals
v_AN_THD_avg	RMS voltage, between phase A and NEUTRAL, total harmonic distortion, average of 10/12-cycle intervals
v_BN_THD_avg	RMS voltage, between phase B and NEUTRAL, total harmonic distortion, average of 10/12-cycle intervals
v_CN_THD_avg	RMS voltage, between phase C and NEUTRAL, total harmonic distortion, average of 10/12-cycle intervals
v_AB_THD_avg	RMS voltage, between phase A and B, total harmonic distortion, average of 10/12-cycle intervals
v_BC_THD_avg	RMS voltage, between phase B and C, total harmonic distortion, average of 10/12-cycle intervals
v_CA_THD_avg	RMS voltage, between phase C and A, total harmonic distortion, average of 10/12-cycle intervals
a_AN_THD_avg	RMS current, phase A, total harmonic distortion, average of 10/12-cycle intervals
a_BN_THD_avg	RMS current, phase B, total harmonic distortion, average of 10/12-cycle intervals
a_CN_THD_avg	RMS current, phase C, total harmonic distortion, average of 10/12-cycle intervals
v_zero_avg	RMS voltage, zero sequence component, average of 10/12-cycle intervals
v_neg_avg	RMS voltage, negative sequence component, average of 10/12-cycle intervals
freq_avg	frequency, average of 10/12-cycle intervals
v_AN_pst_avg	RMS voltage, between phase A and NEUTRAL, short term flicker, average of 10/12-cycle intervals
v_BN_pst_avg	RMS voltage, between phase B and NEUTRAL, short term flicker, average of 10/12-cycle intervals
v_CN_pst_avg	RMS voltage, between phase C and NEUTRAL, short term flicker, average of 10/12-cycle intervals
v_AN_plt_avg	RMS voltage, between phase A and NEUTRAL, long term flicker, average of 10/12-cycle intervals
v_BN_plt_avg	RMS voltage, between phase B and NEUTRAL, long term flicker, average of 10/12-cycle intervals
v_CN_plt_avg	RMS voltage, between phase C and NEUTRAL, long term flicker, average of 10/12-cycle intervals
v_AN_max	RMS voltage, between phase A and NEUTRAL, maximum of 10/12-cycle intervals
v_BN_max	RMS voltage, between phase B and NEUTRAL, maximum of 10/12-cycle intervals
v_CN_max	RMS voltage, between phase C and NEUTRAL, maximum of 10/12-cycle intervals
v_AB_max	RMS voltage, between phase A and B, maximum of 10/12-cycle intervals
v_BC_max	RMS voltage, between phase B and C, maximum of 10/12-cycle intervals
v_CA_max	RMS voltage, between phase C and A, maximum of 10/12-cycle intervals
a_AN_max	RMS current, phase A, maximum of 10/12-cycle intervals
a_BN_max	RMS current, phase B, maximum of 10/12-cycle intervals
a_CN_max	RMS current, phase C, maximum of 10/12-cycle intervals
p_AN_max	active power, between phase A and NEUTRAL, maximum of 10/12-cycle intervals
p_BN_max	active power, between phase B and NEUTRAL, maximum of 10/12-cycle intervals
p_CN_max	active power, between phase C and NEUTRAL, maximum of 10/12-cycle intervals
p_TOTAL_max	active power, AB+BC+CA, maximum of 10/12-cycle intervals
q_AN_max	reactive power, between phase A and NEUTRAL, maximum of 10/12-cycle intervals
q_BN_max	reactive power, between phase B and NEUTRAL, maximum of 10/12-cycle intervals

q_CN_max	reactive power, between phase C and NEUTRAL, maximum of 10/12-cycle intervals
q_TOTAL_max	reactive power, AB+BC+CA, maximum of 10/12-cycle intervals
v_AN_harm_0_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #0, maximum of 10/12-cycle intervals
v_AN_harm_1_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #1, maximum of 10/12-cycle intervals
v_AN_harm_2_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #2, maximum of 10/12-cycle intervals
v_AN_harm_3_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #3, maximum of 10/12-cycle intervals
v_AN_harm_4_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #4, maximum of 10/12-cycle intervals
v_AN_harm_5_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #5, maximum of 10/12-cycle intervals
v_AN_harm_6_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #6, maximum of 10/12-cycle intervals
v_AN_harm_7_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #7, maximum of 10/12-cycle intervals
v_AN_harm_8_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #8, maximum of 10/12-cycle intervals
v_AN_harm_9_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #9, maximum of 10/12-cycle intervals
v_AN_harm_10_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #10, maximum of 10/12-cycle intervals
v_AN_harm_11_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #11, maximum of 10/12-cycle intervals
v_AN_harm_12_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #12, maximum of 10/12-cycle intervals
v_AN_harm_13_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #13, maximum of 10/12-cycle intervals
v_AN_harm_14_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #14, maximum of 10/12-cycle intervals
v_AN_harm_15_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #15, maximum of 10/12-cycle intervals
v_AN_harm_16_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #16, maximum of 10/12-cycle intervals
v_AN_harm_17_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #17, maximum of 10/12-cycle intervals
v_AN_harm_18_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #18, maximum of 10/12-cycle intervals
v_AN_harm_19_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #19, maximum of 10/12-cycle intervals
v_AN_harm_20_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #20, maximum of 10/12-cycle intervals
v_AN_harm_21_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #21, maximum of 10/12-cycle intervals
v_AN_harm_22_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #22, maximum of 10/12-cycle intervals
v_AN_harm_23_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #23, maximum of 10/12-cycle intervals
v_AN_harm_24_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #24,

	maximum of 10/12-cycle intervals
v_AN_harm_25_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #25, maximum of 10/12-cycle intervals
v_AN_harm_26_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #26, maximum of 10/12-cycle intervals
v_AN_harm_27_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #27, maximum of 10/12-cycle intervals
v_AN_harm_28_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #28, maximum of 10/12-cycle intervals
v_AN_harm_29_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #29, maximum of 10/12-cycle intervals
v_AN_harm_30_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #30, maximum of 10/12-cycle intervals
v_AN_harm_31_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #31, maximum of 10/12-cycle intervals
v_AN_harm_32_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #32, maximum of 10/12-cycle intervals
v_AN_harm_33_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #33, maximum of 10/12-cycle intervals
v_AN_harm_34_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #34, maximum of 10/12-cycle intervals
v_AN_harm_35_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #35, maximum of 10/12-cycle intervals
v_AN_harm_36_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #36, maximum of 10/12-cycle intervals
v_AN_harm_37_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #37, maximum of 10/12-cycle intervals
v_AN_harm_38_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #38, maximum of 10/12-cycle intervals
v_AN_harm_39_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #39, maximum of 10/12-cycle intervals
v_AN_harm_40_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #40, maximum of 10/12-cycle intervals
v_AN_harm_41_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #41, maximum of 10/12-cycle intervals
v_AN_harm_42_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #42, maximum of 10/12-cycle intervals
v_AN_harm_43_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #43, maximum of 10/12-cycle intervals
v_AN_harm_44_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #44, maximum of 10/12-cycle intervals
v_AN_harm_45_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #45, maximum of 10/12-cycle intervals
v_AN_harm_46_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #46, maximum of 10/12-cycle intervals
v_AN_harm_47_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #47, maximum of 10/12-cycle intervals
v_AN_harm_48_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #48, maximum of 10/12-cycle intervals
v_AN_harm_49_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #49, maximum of 10/12-cycle intervals

v_AN_harm_50_max	RMS voltage, between phase A and NEUTRAL, harmonic component, component #50, maximum of 10/12-cycle intervals
v_BN_harm_0_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #0, maximum of 10/12-cycle intervals
v_BN_harm_1_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #1, maximum of 10/12-cycle intervals
v_BN_harm_2_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #2, maximum of 10/12-cycle intervals
v_BN_harm_3_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #3, maximum of 10/12-cycle intervals
v_BN_harm_4_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #4, maximum of 10/12-cycle intervals
v_BN_harm_5_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #5, maximum of 10/12-cycle intervals
v_BN_harm_6_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #6, maximum of 10/12-cycle intervals
v_BN_harm_7_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #7, maximum of 10/12-cycle intervals
v_BN_harm_8_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #8, maximum of 10/12-cycle intervals
v_BN_harm_9_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #9, maximum of 10/12-cycle intervals
v_BN_harm_10_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #10, maximum of 10/12-cycle intervals
v_BN_harm_11_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #11, maximum of 10/12-cycle intervals
v_BN_harm_12_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #12, maximum of 10/12-cycle intervals
v_BN_harm_13_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #13, maximum of 10/12-cycle intervals
v_BN_harm_14_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #14, maximum of 10/12-cycle intervals
v_BN_harm_15_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #15, maximum of 10/12-cycle intervals
v_BN_harm_16_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #16, maximum of 10/12-cycle intervals
v_BN_harm_17_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #17, maximum of 10/12-cycle intervals
v_BN_harm_18_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #18, maximum of 10/12-cycle intervals
v_BN_harm_19_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #19, maximum of 10/12-cycle intervals
v_BN_harm_20_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #20, maximum of 10/12-cycle intervals
v_BN_harm_21_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #21, maximum of 10/12-cycle intervals
v_BN_harm_22_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #22, maximum of 10/12-cycle intervals
v_BN_harm_23_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #23, maximum of 10/12-cycle intervals
v_BN_harm_24_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #24,

	maximum of 10/12-cycle intervals
v_BN_harm_25_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #25, maximum of 10/12-cycle intervals
v_BN_harm_26_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #26, maximum of 10/12-cycle intervals
v_BN_harm_27_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #27, maximum of 10/12-cycle intervals
v_BN_harm_28_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #28, maximum of 10/12-cycle intervals
v_BN_harm_29_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #29, maximum of 10/12-cycle intervals
v_BN_harm_30_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #30, maximum of 10/12-cycle intervals
v_BN_harm_31_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #31, maximum of 10/12-cycle intervals
v_BN_harm_32_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #32, maximum of 10/12-cycle intervals
v_BN_harm_33_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #33, maximum of 10/12-cycle intervals
v_BN_harm_34_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #34, maximum of 10/12-cycle intervals
v_BN_harm_35_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #35, maximum of 10/12-cycle intervals
v_BN_harm_36_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #36, maximum of 10/12-cycle intervals
v_BN_harm_37_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #37, maximum of 10/12-cycle intervals
v_BN_harm_38_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #38, maximum of 10/12-cycle intervals
v_BN_harm_39_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #39, maximum of 10/12-cycle intervals
v_BN_harm_40_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #40, maximum of 10/12-cycle intervals
v_BN_harm_41_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #41, maximum of 10/12-cycle intervals
v_BN_harm_42_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #42, maximum of 10/12-cycle intervals
v_BN_harm_43_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #43, maximum of 10/12-cycle intervals
v_BN_harm_44_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #44, maximum of 10/12-cycle intervals
v_BN_harm_45_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #45, maximum of 10/12-cycle intervals
v_BN_harm_46_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #46, maximum of 10/12-cycle intervals
v_BN_harm_47_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #47, maximum of 10/12-cycle intervals
v_BN_harm_48_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #48, maximum of 10/12-cycle intervals
v_BN_harm_49_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #49, maximum of 10/12-cycle intervals

v_BN_harm_50_max	RMS voltage, between phase B and NEUTRAL, harmonic component, component #50, maximum of 10/12-cycle intervals
v_CN_harm_0_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #0, maximum of 10/12-cycle intervals
v_CN_harm_1_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #1, maximum of 10/12-cycle intervals
v_CN_harm_2_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #2, maximum of 10/12-cycle intervals
v_CN_harm_3_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #3, maximum of 10/12-cycle intervals
v_CN_harm_4_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #4, maximum of 10/12-cycle intervals
v_CN_harm_5_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #5, maximum of 10/12-cycle intervals
v_CN_harm_6_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #6, maximum of 10/12-cycle intervals
v_CN_harm_7_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #7, maximum of 10/12-cycle intervals
v_CN_harm_8_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #8, maximum of 10/12-cycle intervals
v_CN_harm_9_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #9, maximum of 10/12-cycle intervals
v_CN_harm_10_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #10, maximum of 10/12-cycle intervals
v_CN_harm_11_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #11, maximum of 10/12-cycle intervals
v_CN_harm_12_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #12, maximum of 10/12-cycle intervals
v_CN_harm_13_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #13, maximum of 10/12-cycle intervals
v_CN_harm_14_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #14, maximum of 10/12-cycle intervals
v_CN_harm_15_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #15, maximum of 10/12-cycle intervals
v_CN_harm_16_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #16, maximum of 10/12-cycle intervals
v_CN_harm_17_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #17, maximum of 10/12-cycle intervals
v_CN_harm_18_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #18, maximum of 10/12-cycle intervals
v_CN_harm_19_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #19, maximum of 10/12-cycle intervals
v_CN_harm_20_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #20, maximum of 10/12-cycle intervals
v_CN_harm_21_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #21, maximum of 10/12-cycle intervals
v_CN_harm_22_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #22, maximum of 10/12-cycle intervals
v_CN_harm_23_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #23, maximum of 10/12-cycle intervals
v_CN_harm_24_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #24,

	maximum of 10/12-cycle intervals
v_CN_harm_25_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #25, maximum of 10/12-cycle intervals
v_CN_harm_26_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #26, maximum of 10/12-cycle intervals
v_CN_harm_27_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #27, maximum of 10/12-cycle intervals
v_CN_harm_28_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #28, maximum of 10/12-cycle intervals
v_CN_harm_29_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #29, maximum of 10/12-cycle intervals
v_CN_harm_30_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #30, maximum of 10/12-cycle intervals
v_CN_harm_31_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #31, maximum of 10/12-cycle intervals
v_CN_harm_32_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #32, maximum of 10/12-cycle intervals
v_CN_harm_33_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #33, maximum of 10/12-cycle intervals
v_CN_harm_34_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #34, maximum of 10/12-cycle intervals
v_CN_harm_35_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #35, maximum of 10/12-cycle intervals
v_CN_harm_36_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #36, maximum of 10/12-cycle intervals
v_CN_harm_37_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #37, maximum of 10/12-cycle intervals
v_CN_harm_38_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #38, maximum of 10/12-cycle intervals
v_CN_harm_39_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #39, maximum of 10/12-cycle intervals
v_CN_harm_40_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #40, maximum of 10/12-cycle intervals
v_CN_harm_41_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #41, maximum of 10/12-cycle intervals
v_CN_harm_42_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #42, maximum of 10/12-cycle intervals
v_CN_harm_43_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #43, maximum of 10/12-cycle intervals
v_CN_harm_44_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #44, maximum of 10/12-cycle intervals
v_CN_harm_45_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #45, maximum of 10/12-cycle intervals
v_CN_harm_46_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #46, maximum of 10/12-cycle intervals
v_CN_harm_47_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #47, maximum of 10/12-cycle intervals
v_CN_harm_48_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #48, maximum of 10/12-cycle intervals
v_CN_harm_49_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #49, maximum of 10/12-cycle intervals

v_CN_harm_50_max	RMS voltage, between phase C and NEUTRAL, harmonic component, component #50, maximum of 10/12-cycle intervals
v_AB_harm_0_max	RMS voltage, between phase A and B, harmonic component, component #0, maximum of 10/12-cycle intervals
v_AB_harm_1_max	RMS voltage, between phase A and B, harmonic component, component #1, maximum of 10/12-cycle intervals
v_AB_harm_2_max	RMS voltage, between phase A and B, harmonic component, component #2, maximum of 10/12-cycle intervals
v_AB_harm_3_max	RMS voltage, between phase A and B, harmonic component, component #3, maximum of 10/12-cycle intervals
v_AB_harm_4_max	RMS voltage, between phase A and B, harmonic component, component #4, maximum of 10/12-cycle intervals
v_AB_harm_5_max	RMS voltage, between phase A and B, harmonic component, component #5, maximum of 10/12-cycle intervals
v_AB_harm_6_max	RMS voltage, between phase A and B, harmonic component, component #6, maximum of 10/12-cycle intervals
v_AB_harm_7_max	RMS voltage, between phase A and B, harmonic component, component #7, maximum of 10/12-cycle intervals
v_AB_harm_8_max	RMS voltage, between phase A and B, harmonic component, component #8, maximum of 10/12-cycle intervals
v_AB_harm_9_max	RMS voltage, between phase A and B, harmonic component, component #9, maximum of 10/12-cycle intervals
v_AB_harm_10_max	RMS voltage, between phase A and B, harmonic component, component #10, maximum of 10/12-cycle intervals
v_AB_harm_11_max	RMS voltage, between phase A and B, harmonic component, component #11, maximum of 10/12-cycle intervals
v_AB_harm_12_max	RMS voltage, between phase A and B, harmonic component, component #12, maximum of 10/12-cycle intervals
v_AB_harm_13_max	RMS voltage, between phase A and B, harmonic component, component #13, maximum of 10/12-cycle intervals
v_AB_harm_14_max	RMS voltage, between phase A and B, harmonic component, component #14, maximum of 10/12-cycle intervals
v_AB_harm_15_max	RMS voltage, between phase A and B, harmonic component, component #15, maximum of 10/12-cycle intervals
v_AB_harm_16_max	RMS voltage, between phase A and B, harmonic component, component #16, maximum of 10/12-cycle intervals
v_AB_harm_17_max	RMS voltage, between phase A and B, harmonic component, component #17, maximum of 10/12-cycle intervals
v_AB_harm_18_max	RMS voltage, between phase A and B, harmonic component, component #18, maximum of 10/12-cycle intervals
v_AB_harm_19_max	RMS voltage, between phase A and B, harmonic component, component #19, maximum of 10/12-cycle intervals
v_AB_harm_20_max	RMS voltage, between phase A and B, harmonic component, component #20, maximum of 10/12-cycle intervals
v_AB_harm_21_max	RMS voltage, between phase A and B, harmonic component, component #21, maximum of 10/12-cycle intervals
v_AB_harm_22_max	RMS voltage, between phase A and B, harmonic component, component #22, maximum of 10/12-cycle intervals
v_AB_harm_23_max	RMS voltage, between phase A and B, harmonic component, component #23, maximum of 10/12-cycle intervals
v_AB_harm_24_max	RMS voltage, between phase A and B, harmonic component, component #24,

	maximum of 10/12-cycle intervals
v_AB_harm_25_max	RMS voltage, between phase A and B, harmonic component, component #25, maximum of 10/12-cycle intervals
v_AB_harm_26_max	RMS voltage, between phase A and B, harmonic component, component #26, maximum of 10/12-cycle intervals
v_AB_harm_27_max	RMS voltage, between phase A and B, harmonic component, component #27, maximum of 10/12-cycle intervals
v_AB_harm_28_max	RMS voltage, between phase A and B, harmonic component, component #28, maximum of 10/12-cycle intervals
v_AB_harm_29_max	RMS voltage, between phase A and B, harmonic component, component #29, maximum of 10/12-cycle intervals
v_AB_harm_30_max	RMS voltage, between phase A and B, harmonic component, component #30, maximum of 10/12-cycle intervals
v_AB_harm_31_max	RMS voltage, between phase A and B, harmonic component, component #31, maximum of 10/12-cycle intervals
v_AB_harm_32_max	RMS voltage, between phase A and B, harmonic component, component #32, maximum of 10/12-cycle intervals
v_AB_harm_33_max	RMS voltage, between phase A and B, harmonic component, component #33, maximum of 10/12-cycle intervals
v_AB_harm_34_max	RMS voltage, between phase A and B, harmonic component, component #34, maximum of 10/12-cycle intervals
v_AB_harm_35_max	RMS voltage, between phase A and B, harmonic component, component #35, maximum of 10/12-cycle intervals
v_AB_harm_36_max	RMS voltage, between phase A and B, harmonic component, component #36, maximum of 10/12-cycle intervals
v_AB_harm_37_max	RMS voltage, between phase A and B, harmonic component, component #37, maximum of 10/12-cycle intervals
v_AB_harm_38_max	RMS voltage, between phase A and B, harmonic component, component #38, maximum of 10/12-cycle intervals
v_AB_harm_39_max	RMS voltage, between phase A and B, harmonic component, component #39, maximum of 10/12-cycle intervals
v_AB_harm_40_max	RMS voltage, between phase A and B, harmonic component, component #40, maximum of 10/12-cycle intervals
v_AB_harm_41_max	RMS voltage, between phase A and B, harmonic component, component #41, maximum of 10/12-cycle intervals
v_AB_harm_42_max	RMS voltage, between phase A and B, harmonic component, component #42, maximum of 10/12-cycle intervals
v_AB_harm_43_max	RMS voltage, between phase A and B, harmonic component, component #43, maximum of 10/12-cycle intervals
v_AB_harm_44_max	RMS voltage, between phase A and B, harmonic component, component #44, maximum of 10/12-cycle intervals
v_AB_harm_45_max	RMS voltage, between phase A and B, harmonic component, component #45, maximum of 10/12-cycle intervals
v_AB_harm_46_max	RMS voltage, between phase A and B, harmonic component, component #46, maximum of 10/12-cycle intervals
v_AB_harm_47_max	RMS voltage, between phase A and B, harmonic component, component #47, maximum of 10/12-cycle intervals
v_AB_harm_48_max	RMS voltage, between phase A and B, harmonic component, component #48, maximum of 10/12-cycle intervals
v_AB_harm_49_max	RMS voltage, between phase A and B, harmonic component, component #49, maximum of 10/12-cycle intervals

v_AB_harm_50_max	RMS voltage, between phase A and B, harmonic component, component #50, maximum of 10/12-cycle intervals
v_BC_harm_0_max	RMS voltage, between phase B and C, harmonic component, component #0, maximum of 10/12-cycle intervals
v_BC_harm_1_max	RMS voltage, between phase B and C, harmonic component, component #1, maximum of 10/12-cycle intervals
v_BC_harm_2_max	RMS voltage, between phase B and C, harmonic component, component #2, maximum of 10/12-cycle intervals
v_BC_harm_3_max	RMS voltage, between phase B and C, harmonic component, component #3, maximum of 10/12-cycle intervals
v_BC_harm_4_max	RMS voltage, between phase B and C, harmonic component, component #4, maximum of 10/12-cycle intervals
v_BC_harm_5_max	RMS voltage, between phase B and C, harmonic component, component #5, maximum of 10/12-cycle intervals
v_BC_harm_6_max	RMS voltage, between phase B and C, harmonic component, component #6, maximum of 10/12-cycle intervals
v_BC_harm_7_max	RMS voltage, between phase B and C, harmonic component, component #7, maximum of 10/12-cycle intervals
v_BC_harm_8_max	RMS voltage, between phase B and C, harmonic component, component #8, maximum of 10/12-cycle intervals
v_BC_harm_9_max	RMS voltage, between phase B and C, harmonic component, component #9, maximum of 10/12-cycle intervals
v_BC_harm_10_max	RMS voltage, between phase B and C, harmonic component, component #10, maximum of 10/12-cycle intervals
v_BC_harm_11_max	RMS voltage, between phase B and C, harmonic component, component #11, maximum of 10/12-cycle intervals
v_BC_harm_12_max	RMS voltage, between phase B and C, harmonic component, component #12, maximum of 10/12-cycle intervals
v_BC_harm_13_max	RMS voltage, between phase B and C, harmonic component, component #13, maximum of 10/12-cycle intervals
v_BC_harm_14_max	RMS voltage, between phase B and C, harmonic component, component #14, maximum of 10/12-cycle intervals
v_BC_harm_15_max	RMS voltage, between phase B and C, harmonic component, component #15, maximum of 10/12-cycle intervals
v_BC_harm_16_max	RMS voltage, between phase B and C, harmonic component, component #16, maximum of 10/12-cycle intervals
v_BC_harm_17_max	RMS voltage, between phase B and C, harmonic component, component #17, maximum of 10/12-cycle intervals
v_BC_harm_18_max	RMS voltage, between phase B and C, harmonic component, component #18, maximum of 10/12-cycle intervals
v_BC_harm_19_max	RMS voltage, between phase B and C, harmonic component, component #19, maximum of 10/12-cycle intervals
v_BC_harm_20_max	RMS voltage, between phase B and C, harmonic component, component #20, maximum of 10/12-cycle intervals
v_BC_harm_21_max	RMS voltage, between phase B and C, harmonic component, component #21, maximum of 10/12-cycle intervals
v_BC_harm_22_max	RMS voltage, between phase B and C, harmonic component, component #22, maximum of 10/12-cycle intervals
v_BC_harm_23_max	RMS voltage, between phase B and C, harmonic component, component #23, maximum of 10/12-cycle intervals
v_BC_harm_24_max	RMS voltage, between phase B and C, harmonic component, component #24,

	maximum of 10/12-cycle intervals
v_BC_harm_25_max	RMS voltage, between phase B and C, harmonic component, component #25, maximum of 10/12-cycle intervals
v_BC_harm_26_max	RMS voltage, between phase B and C, harmonic component, component #26, maximum of 10/12-cycle intervals
v_BC_harm_27_max	RMS voltage, between phase B and C, harmonic component, component #27, maximum of 10/12-cycle intervals
v_BC_harm_28_max	RMS voltage, between phase B and C, harmonic component, component #28, maximum of 10/12-cycle intervals
v_BC_harm_29_max	RMS voltage, between phase B and C, harmonic component, component #29, maximum of 10/12-cycle intervals
v_BC_harm_30_max	RMS voltage, between phase B and C, harmonic component, component #30, maximum of 10/12-cycle intervals
v_BC_harm_31_max	RMS voltage, between phase B and C, harmonic component, component #31, maximum of 10/12-cycle intervals
v_BC_harm_32_max	RMS voltage, between phase B and C, harmonic component, component #32, maximum of 10/12-cycle intervals
v_BC_harm_33_max	RMS voltage, between phase B and C, harmonic component, component #33, maximum of 10/12-cycle intervals
v_BC_harm_34_max	RMS voltage, between phase B and C, harmonic component, component #34, maximum of 10/12-cycle intervals
v_BC_harm_35_max	RMS voltage, between phase B and C, harmonic component, component #35, maximum of 10/12-cycle intervals
v_BC_harm_36_max	RMS voltage, between phase B and C, harmonic component, component #36, maximum of 10/12-cycle intervals
v_BC_harm_37_max	RMS voltage, between phase B and C, harmonic component, component #37, maximum of 10/12-cycle intervals
v_BC_harm_38_max	RMS voltage, between phase B and C, harmonic component, component #38, maximum of 10/12-cycle intervals
v_BC_harm_39_max	RMS voltage, between phase B and C, harmonic component, component #39, maximum of 10/12-cycle intervals
v_BC_harm_40_max	RMS voltage, between phase B and C, harmonic component, component #40, maximum of 10/12-cycle intervals
v_BC_harm_41_max	RMS voltage, between phase B and C, harmonic component, component #41, maximum of 10/12-cycle intervals
v_BC_harm_42_max	RMS voltage, between phase B and C, harmonic component, component #42, maximum of 10/12-cycle intervals
v_BC_harm_43_max	RMS voltage, between phase B and C, harmonic component, component #43, maximum of 10/12-cycle intervals
v_BC_harm_44_max	RMS voltage, between phase B and C, harmonic component, component #44, maximum of 10/12-cycle intervals
v_BC_harm_45_max	RMS voltage, between phase B and C, harmonic component, component #45, maximum of 10/12-cycle intervals
v_BC_harm_46_max	RMS voltage, between phase B and C, harmonic component, component #46, maximum of 10/12-cycle intervals
v_BC_harm_47_max	RMS voltage, between phase B and C, harmonic component, component #47, maximum of 10/12-cycle intervals
v_BC_harm_48_max	RMS voltage, between phase B and C, harmonic component, component #48, maximum of 10/12-cycle intervals
v_BC_harm_49_max	RMS voltage, between phase B and C, harmonic component, component #49, maximum of 10/12-cycle intervals

v_BC_harm_50_max	RMS voltage, between phase B and C, harmonic component, component #50, maximum of 10/12-cycle intervals
v_CA_harm_0_max	RMS voltage, between phase C and A, harmonic component, component #0, maximum of 10/12-cycle intervals
v_CA_harm_1_max	RMS voltage, between phase C and A, harmonic component, component #1, maximum of 10/12-cycle intervals
v_CA_harm_2_max	RMS voltage, between phase C and A, harmonic component, component #2, maximum of 10/12-cycle intervals
v_CA_harm_3_max	RMS voltage, between phase C and A, harmonic component, component #3, maximum of 10/12-cycle intervals
v_CA_harm_4_max	RMS voltage, between phase C and A, harmonic component, component #4, maximum of 10/12-cycle intervals
v_CA_harm_5_max	RMS voltage, between phase C and A, harmonic component, component #5, maximum of 10/12-cycle intervals
v_CA_harm_6_max	RMS voltage, between phase C and A, harmonic component, component #6, maximum of 10/12-cycle intervals
v_CA_harm_7_max	RMS voltage, between phase C and A, harmonic component, component #7, maximum of 10/12-cycle intervals
v_CA_harm_8_max	RMS voltage, between phase C and A, harmonic component, component #8, maximum of 10/12-cycle intervals
v_CA_harm_9_max	RMS voltage, between phase C and A, harmonic component, component #9, maximum of 10/12-cycle intervals
v_CA_harm_10_max	RMS voltage, between phase C and A, harmonic component, component #10, maximum of 10/12-cycle intervals
v_CA_harm_11_max	RMS voltage, between phase C and A, harmonic component, component #11, maximum of 10/12-cycle intervals
v_CA_harm_12_max	RMS voltage, between phase C and A, harmonic component, component #12, maximum of 10/12-cycle intervals
v_CA_harm_13_max	RMS voltage, between phase C and A, harmonic component, component #13, maximum of 10/12-cycle intervals
v_CA_harm_14_max	RMS voltage, between phase C and A, harmonic component, component #14, maximum of 10/12-cycle intervals
v_CA_harm_15_max	RMS voltage, between phase C and A, harmonic component, component #15, maximum of 10/12-cycle intervals
v_CA_harm_16_max	RMS voltage, between phase C and A, harmonic component, component #16, maximum of 10/12-cycle intervals
v_CA_harm_17_max	RMS voltage, between phase C and A, harmonic component, component #17, maximum of 10/12-cycle intervals
v_CA_harm_18_max	RMS voltage, between phase C and A, harmonic component, component #18, maximum of 10/12-cycle intervals
v_CA_harm_19_max	RMS voltage, between phase C and A, harmonic component, component #19, maximum of 10/12-cycle intervals
v_CA_harm_20_max	RMS voltage, between phase C and A, harmonic component, component #20, maximum of 10/12-cycle intervals
v_CA_harm_21_max	RMS voltage, between phase C and A, harmonic component, component #21, maximum of 10/12-cycle intervals
v_CA_harm_22_max	RMS voltage, between phase C and A, harmonic component, component #22, maximum of 10/12-cycle intervals
v_CA_harm_23_max	RMS voltage, between phase C and A, harmonic component, component #23, maximum of 10/12-cycle intervals
v_CA_harm_24_max	RMS voltage, between phase C and A, harmonic component, component #24,

	maximum of 10/12-cycle intervals
v_CA_harm_25_max	RMS voltage, between phase C and A, harmonic component, component #25, maximum of 10/12-cycle intervals
v_CA_harm_26_max	RMS voltage, between phase C and A, harmonic component, component #26, maximum of 10/12-cycle intervals
v_CA_harm_27_max	RMS voltage, between phase C and A, harmonic component, component #27, maximum of 10/12-cycle intervals
v_CA_harm_28_max	RMS voltage, between phase C and A, harmonic component, component #28, maximum of 10/12-cycle intervals
v_CA_harm_29_max	RMS voltage, between phase C and A, harmonic component, component #29, maximum of 10/12-cycle intervals
v_CA_harm_30_max	RMS voltage, between phase C and A, harmonic component, component #30, maximum of 10/12-cycle intervals
v_CA_harm_31_max	RMS voltage, between phase C and A, harmonic component, component #31, maximum of 10/12-cycle intervals
v_CA_harm_32_max	RMS voltage, between phase C and A, harmonic component, component #32, maximum of 10/12-cycle intervals
v_CA_harm_33_max	RMS voltage, between phase C and A, harmonic component, component #33, maximum of 10/12-cycle intervals
v_CA_harm_34_max	RMS voltage, between phase C and A, harmonic component, component #34, maximum of 10/12-cycle intervals
v_CA_harm_35_max	RMS voltage, between phase C and A, harmonic component, component #35, maximum of 10/12-cycle intervals
v_CA_harm_36_max	RMS voltage, between phase C and A, harmonic component, component #36, maximum of 10/12-cycle intervals
v_CA_harm_37_max	RMS voltage, between phase C and A, harmonic component, component #37, maximum of 10/12-cycle intervals
v_CA_harm_38_max	RMS voltage, between phase C and A, harmonic component, component #38, maximum of 10/12-cycle intervals
v_CA_harm_39_max	RMS voltage, between phase C and A, harmonic component, component #39, maximum of 10/12-cycle intervals
v_CA_harm_40_max	RMS voltage, between phase C and A, harmonic component, component #40, maximum of 10/12-cycle intervals
v_CA_harm_41_max	RMS voltage, between phase C and A, harmonic component, component #41, maximum of 10/12-cycle intervals
v_CA_harm_42_max	RMS voltage, between phase C and A, harmonic component, component #42, maximum of 10/12-cycle intervals
v_CA_harm_43_max	RMS voltage, between phase C and A, harmonic component, component #43, maximum of 10/12-cycle intervals
v_CA_harm_44_max	RMS voltage, between phase C and A, harmonic component, component #44, maximum of 10/12-cycle intervals
v_CA_harm_45_max	RMS voltage, between phase C and A, harmonic component, component #45, maximum of 10/12-cycle intervals
v_CA_harm_46_max	RMS voltage, between phase C and A, harmonic component, component #46, maximum of 10/12-cycle intervals
v_CA_harm_47_max	RMS voltage, between phase C and A, harmonic component, component #47, maximum of 10/12-cycle intervals
v_CA_harm_48_max	RMS voltage, between phase C and A, harmonic component, component #48, maximum of 10/12-cycle intervals
v_CA_harm_49_max	RMS voltage, between phase C and A, harmonic component, component #49, maximum of 10/12-cycle intervals

v_CA_harm_50_max	RMS voltage, between phase C and A, harmonic component, component #50, maximum of 10/12-cycle intervals
a_AN_harm_0_max	RMS current, phase A, harmonic component, component #0, maximum of 10/12-cycle intervals
a_AN_harm_1_max	RMS current, phase A, harmonic component, component #1, maximum of 10/12-cycle intervals
a_AN_harm_2_max	RMS current, phase A, harmonic component, component #2, maximum of 10/12-cycle intervals
a_AN_harm_3_max	RMS current, phase A, harmonic component, component #3, maximum of 10/12-cycle intervals
a_AN_harm_4_max	RMS current, phase A, harmonic component, component #4, maximum of 10/12-cycle intervals
a_AN_harm_5_max	RMS current, phase A, harmonic component, component #5, maximum of 10/12-cycle intervals
a_AN_harm_6_max	RMS current, phase A, harmonic component, component #6, maximum of 10/12-cycle intervals
a_AN_harm_7_max	RMS current, phase A, harmonic component, component #7, maximum of 10/12-cycle intervals
a_AN_harm_8_max	RMS current, phase A, harmonic component, component #8, maximum of 10/12-cycle intervals
a_AN_harm_9_max	RMS current, phase A, harmonic component, component #9, maximum of 10/12-cycle intervals
a_AN_harm_10_max	RMS current, phase A, harmonic component, component #10, maximum of 10/12-cycle intervals
a_AN_harm_11_max	RMS current, phase A, harmonic component, component #11, maximum of 10/12-cycle intervals
a_AN_harm_12_max	RMS current, phase A, harmonic component, component #12, maximum of 10/12-cycle intervals
a_AN_harm_13_max	RMS current, phase A, harmonic component, component #13, maximum of 10/12-cycle intervals
a_AN_harm_14_max	RMS current, phase A, harmonic component, component #14, maximum of 10/12-cycle intervals
a_AN_harm_15_max	RMS current, phase A, harmonic component, component #15, maximum of 10/12-cycle intervals
a_AN_harm_16_max	RMS current, phase A, harmonic component, component #16, maximum of 10/12-cycle intervals
a_AN_harm_17_max	RMS current, phase A, harmonic component, component #17, maximum of 10/12-cycle intervals
a_AN_harm_18_max	RMS current, phase A, harmonic component, component #18, maximum of 10/12-cycle intervals
a_AN_harm_19_max	RMS current, phase A, harmonic component, component #19, maximum of 10/12-cycle intervals
a_AN_harm_20_max	RMS current, phase A, harmonic component, component #20, maximum of 10/12-cycle intervals
a_AN_harm_21_max	RMS current, phase A, harmonic component, component #21, maximum of 10/12-cycle intervals
a_AN_harm_22_max	RMS current, phase A, harmonic component, component #22, maximum of 10/12-cycle intervals
a_AN_harm_23_max	RMS current, phase A, harmonic component, component #23, maximum of 10/12-cycle intervals
a_AN_harm_24_max	RMS current, phase A, harmonic component, component #24, maximum of 10/12-cycle

	intervals
a_AN_harm_25_max	RMS current, phase A, harmonic component, component #25, maximum of 10/12-cycle intervals
a_AN_harm_26_max	RMS current, phase A, harmonic component, component #26, maximum of 10/12-cycle intervals
a_AN_harm_27_max	RMS current, phase A, harmonic component, component #27, maximum of 10/12-cycle intervals
a_AN_harm_28_max	RMS current, phase A, harmonic component, component #28, maximum of 10/12-cycle intervals
a_AN_harm_29_max	RMS current, phase A, harmonic component, component #29, maximum of 10/12-cycle intervals
a_AN_harm_30_max	RMS current, phase A, harmonic component, component #30, maximum of 10/12-cycle intervals
a_AN_harm_31_max	RMS current, phase A, harmonic component, component #31, maximum of 10/12-cycle intervals
a_AN_harm_32_max	RMS current, phase A, harmonic component, component #32, maximum of 10/12-cycle intervals
a_AN_harm_33_max	RMS current, phase A, harmonic component, component #33, maximum of 10/12-cycle intervals
a_AN_harm_34_max	RMS current, phase A, harmonic component, component #34, maximum of 10/12-cycle intervals
a_AN_harm_35_max	RMS current, phase A, harmonic component, component #35, maximum of 10/12-cycle intervals
a_AN_harm_36_max	RMS current, phase A, harmonic component, component #36, maximum of 10/12-cycle intervals
a_AN_harm_37_max	RMS current, phase A, harmonic component, component #37, maximum of 10/12-cycle intervals
a_AN_harm_38_max	RMS current, phase A, harmonic component, component #38, maximum of 10/12-cycle intervals
a_AN_harm_39_max	RMS current, phase A, harmonic component, component #39, maximum of 10/12-cycle intervals
a_AN_harm_40_max	RMS current, phase A, harmonic component, component #40, maximum of 10/12-cycle intervals
a_AN_harm_41_max	RMS current, phase A, harmonic component, component #41, maximum of 10/12-cycle intervals
a_AN_harm_42_max	RMS current, phase A, harmonic component, component #42, maximum of 10/12-cycle intervals
a_AN_harm_43_max	RMS current, phase A, harmonic component, component #43, maximum of 10/12-cycle intervals
a_AN_harm_44_max	RMS current, phase A, harmonic component, component #44, maximum of 10/12-cycle intervals
a_AN_harm_45_max	RMS current, phase A, harmonic component, component #45, maximum of 10/12-cycle intervals
a_AN_harm_46_max	RMS current, phase A, harmonic component, component #46, maximum of 10/12-cycle intervals
a_AN_harm_47_max	RMS current, phase A, harmonic component, component #47, maximum of 10/12-cycle intervals
a_AN_harm_48_max	RMS current, phase A, harmonic component, component #48, maximum of 10/12-cycle intervals
a_AN_harm_49_max	RMS current, phase A, harmonic component, component #49, maximum of 10/12-cycle intervals

a_AN_harm_50_max	RMS current, phase A, harmonic component, component #50, maximum of 10/12-cycle intervals
a_BN_harm_0_max	RMS current, phase B, harmonic component, component #0, maximum of 10/12-cycle intervals
a_BN_harm_1_max	RMS current, phase B, harmonic component, component #1, maximum of 10/12-cycle intervals
a_BN_harm_2_max	RMS current, phase B, harmonic component, component #2, maximum of 10/12-cycle intervals
a_BN_harm_3_max	RMS current, phase B, harmonic component, component #3, maximum of 10/12-cycle intervals
a_BN_harm_4_max	RMS current, phase B, harmonic component, component #4, maximum of 10/12-cycle intervals
a_BN_harm_5_max	RMS current, phase B, harmonic component, component #5, maximum of 10/12-cycle intervals
a_BN_harm_6_max	RMS current, phase B, harmonic component, component #6, maximum of 10/12-cycle intervals
a_BN_harm_7_max	RMS current, phase B, harmonic component, component #7, maximum of 10/12-cycle intervals
a_BN_harm_8_max	RMS current, phase B, harmonic component, component #8, maximum of 10/12-cycle intervals
a_BN_harm_9_max	RMS current, phase B, harmonic component, component #9, maximum of 10/12-cycle intervals
a_BN_harm_10_max	RMS current, phase B, harmonic component, component #10, maximum of 10/12-cycle intervals
a_BN_harm_11_max	RMS current, phase B, harmonic component, component #11, maximum of 10/12-cycle intervals
a_BN_harm_12_max	RMS current, phase B, harmonic component, component #12, maximum of 10/12-cycle intervals
a_BN_harm_13_max	RMS current, phase B, harmonic component, component #13, maximum of 10/12-cycle intervals
a_BN_harm_14_max	RMS current, phase B, harmonic component, component #14, maximum of 10/12-cycle intervals
a_BN_harm_15_max	RMS current, phase B, harmonic component, component #15, maximum of 10/12-cycle intervals
a_BN_harm_16_max	RMS current, phase B, harmonic component, component #16, maximum of 10/12-cycle intervals
a_BN_harm_17_max	RMS current, phase B, harmonic component, component #17, maximum of 10/12-cycle intervals
a_BN_harm_18_max	RMS current, phase B, harmonic component, component #18, maximum of 10/12-cycle intervals
a_BN_harm_19_max	RMS current, phase B, harmonic component, component #19, maximum of 10/12-cycle intervals
a_BN_harm_20_max	RMS current, phase B, harmonic component, component #20, maximum of 10/12-cycle intervals
a_BN_harm_21_max	RMS current, phase B, harmonic component, component #21, maximum of 10/12-cycle intervals
a_BN_harm_22_max	RMS current, phase B, harmonic component, component #22, maximum of 10/12-cycle intervals
a_BN_harm_23_max	RMS current, phase B, harmonic component, component #23, maximum of 10/12-cycle intervals
a_BN_harm_24_max	RMS current, phase B, harmonic component, component #24, maximum of 10/12-cycle

	intervals
a_BN_harm_25_max	RMS current, phase B, harmonic component, component #25, maximum of 10/12-cycle intervals
a_BN_harm_26_max	RMS current, phase B, harmonic component, component #26, maximum of 10/12-cycle intervals
a_BN_harm_27_max	RMS current, phase B, harmonic component, component #27, maximum of 10/12-cycle intervals
a_BN_harm_28_max	RMS current, phase B, harmonic component, component #28, maximum of 10/12-cycle intervals
a_BN_harm_29_max	RMS current, phase B, harmonic component, component #29, maximum of 10/12-cycle intervals
a_BN_harm_30_max	RMS current, phase B, harmonic component, component #30, maximum of 10/12-cycle intervals
a_BN_harm_31_max	RMS current, phase B, harmonic component, component #31, maximum of 10/12-cycle intervals
a_BN_harm_32_max	RMS current, phase B, harmonic component, component #32, maximum of 10/12-cycle intervals
a_BN_harm_33_max	RMS current, phase B, harmonic component, component #33, maximum of 10/12-cycle intervals
a_BN_harm_34_max	RMS current, phase B, harmonic component, component #34, maximum of 10/12-cycle intervals
a_BN_harm_35_max	RMS current, phase B, harmonic component, component #35, maximum of 10/12-cycle intervals
a_BN_harm_36_max	RMS current, phase B, harmonic component, component #36, maximum of 10/12-cycle intervals
a_BN_harm_37_max	RMS current, phase B, harmonic component, component #37, maximum of 10/12-cycle intervals
a_BN_harm_38_max	RMS current, phase B, harmonic component, component #38, maximum of 10/12-cycle intervals
a_BN_harm_39_max	RMS current, phase B, harmonic component, component #39, maximum of 10/12-cycle intervals
a_BN_harm_40_max	RMS current, phase B, harmonic component, component #40, maximum of 10/12-cycle intervals
a_BN_harm_41_max	RMS current, phase B, harmonic component, component #41, maximum of 10/12-cycle intervals
a_BN_harm_42_max	RMS current, phase B, harmonic component, component #42, maximum of 10/12-cycle intervals
a_BN_harm_43_max	RMS current, phase B, harmonic component, component #43, maximum of 10/12-cycle intervals
a_BN_harm_44_max	RMS current, phase B, harmonic component, component #44, maximum of 10/12-cycle intervals
a_BN_harm_45_max	RMS current, phase B, harmonic component, component #45, maximum of 10/12-cycle intervals
a_BN_harm_46_max	RMS current, phase B, harmonic component, component #46, maximum of 10/12-cycle intervals
a_BN_harm_47_max	RMS current, phase B, harmonic component, component #47, maximum of 10/12-cycle intervals
a_BN_harm_48_max	RMS current, phase B, harmonic component, component #48, maximum of 10/12-cycle intervals
a_BN_harm_49_max	RMS current, phase B, harmonic component, component #49, maximum of 10/12-cycle intervals

a_BN_harm_50_max	RMS current, phase B, harmonic component, component #50, maximum of 10/12-cycle intervals
a_CN_harm_0_max	RMS current, phase C, harmonic component, component #0, maximum of 10/12-cycle intervals
a_CN_harm_1_max	RMS current, phase C, harmonic component, component #1, maximum of 10/12-cycle intervals
a_CN_harm_2_max	RMS current, phase C, harmonic component, component #2, maximum of 10/12-cycle intervals
a_CN_harm_3_max	RMS current, phase C, harmonic component, component #3, maximum of 10/12-cycle intervals
a_CN_harm_4_max	RMS current, phase C, harmonic component, component #4, maximum of 10/12-cycle intervals
a_CN_harm_5_max	RMS current, phase C, harmonic component, component #5, maximum of 10/12-cycle intervals
a_CN_harm_6_max	RMS current, phase C, harmonic component, component #6, maximum of 10/12-cycle intervals
a_CN_harm_7_max	RMS current, phase C, harmonic component, component #7, maximum of 10/12-cycle intervals
a_CN_harm_8_max	RMS current, phase C, harmonic component, component #8, maximum of 10/12-cycle intervals
a_CN_harm_9_max	RMS current, phase C, harmonic component, component #9, maximum of 10/12-cycle intervals
a_CN_harm_10_max	RMS current, phase C, harmonic component, component #10, maximum of 10/12-cycle intervals
a_CN_harm_11_max	RMS current, phase C, harmonic component, component #11, maximum of 10/12-cycle intervals
a_CN_harm_12_max	RMS current, phase C, harmonic component, component #12, maximum of 10/12-cycle intervals
a_CN_harm_13_max	RMS current, phase C, harmonic component, component #13, maximum of 10/12-cycle intervals
a_CN_harm_14_max	RMS current, phase C, harmonic component, component #14, maximum of 10/12-cycle intervals
a_CN_harm_15_max	RMS current, phase C, harmonic component, component #15, maximum of 10/12-cycle intervals
a_CN_harm_16_max	RMS current, phase C, harmonic component, component #16, maximum of 10/12-cycle intervals
a_CN_harm_17_max	RMS current, phase C, harmonic component, component #17, maximum of 10/12-cycle intervals
a_CN_harm_18_max	RMS current, phase C, harmonic component, component #18, maximum of 10/12-cycle intervals
a_CN_harm_19_max	RMS current, phase C, harmonic component, component #19, maximum of 10/12-cycle intervals
a_CN_harm_20_max	RMS current, phase C, harmonic component, component #20, maximum of 10/12-cycle intervals
a_CN_harm_21_max	RMS current, phase C, harmonic component, component #21, maximum of 10/12-cycle intervals
a_CN_harm_22_max	RMS current, phase C, harmonic component, component #22, maximum of 10/12-cycle intervals
a_CN_harm_23_max	RMS current, phase C, harmonic component, component #23, maximum of 10/12-cycle intervals
a_CN_harm_24_max	RMS current, phase C, harmonic component, component #24, maximum of 10/12-cycle

	intervals
a_CN_harm_25_max	RMS current, phase C, harmonic component, component #25, maximum of 10/12-cycle intervals
a_CN_harm_26_max	RMS current, phase C, harmonic component, component #26, maximum of 10/12-cycle intervals
a_CN_harm_27_max	RMS current, phase C, harmonic component, component #27, maximum of 10/12-cycle intervals
a_CN_harm_28_max	RMS current, phase C, harmonic component, component #28, maximum of 10/12-cycle intervals
a_CN_harm_29_max	RMS current, phase C, harmonic component, component #29, maximum of 10/12-cycle intervals
a_CN_harm_30_max	RMS current, phase C, harmonic component, component #30, maximum of 10/12-cycle intervals
a_CN_harm_31_max	RMS current, phase C, harmonic component, component #31, maximum of 10/12-cycle intervals
a_CN_harm_32_max	RMS current, phase C, harmonic component, component #32, maximum of 10/12-cycle intervals
a_CN_harm_33_max	RMS current, phase C, harmonic component, component #33, maximum of 10/12-cycle intervals
a_CN_harm_34_max	RMS current, phase C, harmonic component, component #34, maximum of 10/12-cycle intervals
a_CN_harm_35_max	RMS current, phase C, harmonic component, component #35, maximum of 10/12-cycle intervals
a_CN_harm_36_max	RMS current, phase C, harmonic component, component #36, maximum of 10/12-cycle intervals
a_CN_harm_37_max	RMS current, phase C, harmonic component, component #37, maximum of 10/12-cycle intervals
a_CN_harm_38_max	RMS current, phase C, harmonic component, component #38, maximum of 10/12-cycle intervals
a_CN_harm_39_max	RMS current, phase C, harmonic component, component #39, maximum of 10/12-cycle intervals
a_CN_harm_40_max	RMS current, phase C, harmonic component, component #40, maximum of 10/12-cycle intervals
a_CN_harm_41_max	RMS current, phase C, harmonic component, component #41, maximum of 10/12-cycle intervals
a_CN_harm_42_max	RMS current, phase C, harmonic component, component #42, maximum of 10/12-cycle intervals
a_CN_harm_43_max	RMS current, phase C, harmonic component, component #43, maximum of 10/12-cycle intervals
a_CN_harm_44_max	RMS current, phase C, harmonic component, component #44, maximum of 10/12-cycle intervals
a_CN_harm_45_max	RMS current, phase C, harmonic component, component #45, maximum of 10/12-cycle intervals
a_CN_harm_46_max	RMS current, phase C, harmonic component, component #46, maximum of 10/12-cycle intervals
a_CN_harm_47_max	RMS current, phase C, harmonic component, component #47, maximum of 10/12-cycle intervals
a_CN_harm_48_max	RMS current, phase C, harmonic component, component #48, maximum of 10/12-cycle intervals
a_CN_harm_49_max	RMS current, phase C, harmonic component, component #49, maximum of 10/12-cycle intervals

a_CN_harm_50_max	RMS current, phase C, harmonic component, component #50, maximum of 10/12-cycle intervals
v_AN_THD_max	RMS voltage, between phase A and NEUTRAL, total harmonic distortion, maximum of 10/12-cycle intervals
v_BN_THD_max	RMS voltage, between phase B and NEUTRAL, total harmonic distortion, maximum of 10/12-cycle intervals
v_CN_THD_max	RMS voltage, between phase C and NEUTRAL, total harmonic distortion, maximum of 10/12-cycle intervals
v_AB_THD_max	RMS voltage, between phase A and B, total harmonic distortion, maximum of 10/12-cycle intervals
v_BC_THD_max	RMS voltage, between phase B and C, total harmonic distortion, maximum of 10/12-cycle intervals
v_CA_THD_max	RMS voltage, between phase C and A, total harmonic distortion, maximum of 10/12-cycle intervals
a_AN_THD_max	RMS current, phase A, total harmonic distortion, maximum of 10/12-cycle intervals
a_BN_THD_max	RMS current, phase B, total harmonic distortion, maximum of 10/12-cycle intervals
a_CN_THD_max	RMS current, phase C, total harmonic distortion, maximum of 10/12-cycle intervals
v_zero_max	RMS voltage, zero sequence component, maximum of 10/12-cycle intervals
v_neg_max	RMS voltage, negative sequence component, maximum of 10/12-cycle intervals
freq_max	frequency, maximum of 10/12-cycle intervals
v_AN_pst_max	RMS voltage, between phase A and NEUTRAL, short term flicker, maximum of 10/12-cycle intervals
v_BN_pst_max	RMS voltage, between phase B and NEUTRAL, short term flicker, maximum of 10/12-cycle intervals
v_CN_pst_max	RMS voltage, between phase C and NEUTRAL, short term flicker, maximum of 10/12-cycle intervals
v_AN_plt_max	RMS voltage, between phase A and NEUTRAL, long term flicker, maximum of 10/12-cycle intervals
v_BN_plt_max	RMS voltage, between phase B and NEUTRAL, long term flicker, maximum of 10/12-cycle intervals
v_CN_plt_max	RMS voltage, between phase C and NEUTRAL, long term flicker, maximum of 10/12-cycle intervals
v_AN	voltage, between A and NEUTRAL, instantaneous
v_BN	voltage, between B and NEUTRAL, instantaneous
v_CN	voltage, between C and NEUTRAL, instantaneous
v_AB	voltage, between A and B, instantaneous
v_BC	voltage, between B and C, instantaneous
v_CA	voltage, between C and A, instantaneous
a_AN	current, phase A, instantaneous
a_BN	current, phase B, instantaneous
a_CN	current, phase C, instantaneous
p_AN	active power, between phase A and NEUTRAL, instantaneous
p_BN	active power, between phase B and NEUTRAL, instantaneous
p_CN	active power, between phase C and NEUTRAL, instantaneous
p_TOTAL	active power, total, instaneous
q_AN	reactive power, between phase A and NEUTRAL, instantaneous

q_BN	reactive power, between phase B and NEUTRAL, instantaneous
q_CN	reactive power, between phase C and NEUTRAL, instantaneous
q_TOTAL	reactive power, total, instantaneous
freq	frequency, instantaneous value (moving averaging window)