

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	Abstract objects -Association & Security													
	SAP Assignment		17	0	0-0:41.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000290000FF	Get	(Get)	--	Get					
2	SAP_assignment_list	asslist_type			{{1, *}}	Get	(Get)	--	Get					One logical device (Management Logical Device), Server SAP 1 *: Logical Device Name
1	connect_logical_device					--	--	--	--					
	Current association		15	1	0-0:40.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000280000FF	Get	Get	--	Get					
2	object_list	object_list_type			list of visible COSEM objects within the given application association	Get	Get	--	Get					
3	associated_partners_id	associated_partners_type				Get	Get	--	Get					
4	application_context_name	application_context_name				Get	Get	--	Get					
5	xDLMS_context_info	xDLMS_context_type				Get	Get	--	Get					
6	authentication_mechanism_name	mechanism_name_structure			mechanism_name (5)/GMAC/HLS	Get	Get	--	Get					Optionally Set can be used to restrict the next association to a specific mechanism_name e.g. to mechnaism_name(5) after commisioning.
7	secret	octet_string				--	--	--	Set					Optional "Set, in case of using LLS to change the LLS PW. For HLS using GMAC secret is handled by Security setup COSEM object.
8	association_status	enum				Get	Get	--	Get					
9	security_setup_reference	octet_string[6]			00002B0000FF	Get	Get	--	Get					
1	reply_to_HLS_authentication					--	Action	--	Action					
2	change_HLS_secret					--	--	--	--					
3	add_object					--	--	--	--					
4	remove_object					--	--	--	--					
	Reading association		15	1	0-0:40.0.1.255					O	O	O	O	
1	logical_name	octet_string[6]			0000280001FF	(Get)	(Get)	--	Get					
2	object_list	object_list_type			list of visible COSEM objects within the given application association	(Get)	(Get)	--	Get					
3	associated_partners_id	associated_partners_type				(Get)	(Get)	--	(Get)					
4	application_context_name	application_context_name				(Get)	(Get)	--	(Get)					
5	xDLMS_context_info	xDLMS_context_type				(Get)	(Get)	--	(Get)					
6	authentication_mechanism_name	mechanism_name_structure			mechanism_name (5)/GMAC/HLS	(Get)	(Get)	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(2)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
7	secret	octet_string				--	--	--	Set					
8	association_status	enum				(Get)	(Get)	--	(Get)					
9	security_setup_reference	octet_string[6]				(Get)	(Get)	--	(Get)					
1	reply_to_HLS_authentication					--	--	--	--					
2	change_HLS_secret					--	--	--	--					
3	add_object					--	--	--	--					
4	remove_object					--	--	--	--					
☐	Security Setup (Management Client/Pre.Est.)		64	0	0-0:43.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			00002B0000FF	--	--	--	Get					
2	security_policy	enum			(0,1,2,3) default 3	--	--	--	Get, Set					The security policy after installation is "3" (all messages to be authenticated and encrypted). setting Security policy "0" after installation is forbidden.
3	security_suite	enum			0	--	--	--	Get, Set					0 = AES-GCM-128/AES-128
4	client_system_title	octet_string[8]				--	--	--	Get					
5	server_system_title	octet_string[8]				--	--	--	Get					
1	security_activate	enum				--	--	--	Action					
2	global_key_transfer	key_data				--	--	--	Action					using enum 3 for changing master key is mandatory
☐	Security Setup (Reading Client)		64	0	0-0:43.0.2.255					M	M	M	M	
1	logical_name	octet_string[6]			00002B0002FF	--	(Get)	--	Get					
2	security_policy	enum			(0,1,2,3) default 3	--	(Get)	--	Get, Set					The security policy after installation is "3" (all messages to be authenticated and encrypted). setting Security policy "0" after installation is forbidden.
3	security_suite	enum			0	--	(Get)	--	Get, Set					0 = AES-GCM-128/AES-128
4	client_system_title	octet_string[8]				--	(Get)	--	Get					
5	server_system_title	octet_string[8]				--	(Get)	--	Get					
1	security_activate	enum				--	--	--	Action					
2	global_key_transfer	key_data				--	--	--	Action					
	Security-Receive Frame Counter- unicast key (management Client)		1	0	0-0:43.1.0.255					M	M	M	M	
1	logical_name	octet_string[6]			00002B0100FF	Get	--	--	Get					
2	value	double_long_unsigned				Get	--	--	Get					
	Security-Receive Frame Counter- unicast key (Reading Client)		1	0	0-0:43.1.2.255					M	M	M	M	
1	logical_name	octet_string[6]			00002B0102FF	Get	Get	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading(2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
2	value	double_long_unsigned				Get	Get	--	Get					
2	Abstract objects -ID's & control information													
	COSEM logical device name		1	0	0-0:42.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			00002A0000FF	Get	Get	--	Get					
2	value	octet_string[16]				Get	Get	--	Get					unique identification of the logical device
	Device ID 1		1	0	0-0:96.1.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600100FF	--	--	--	Get					
2	value	octet_string[8]			E-meter Serial Number (ASCII Coded): Production Serial Number	--	--	--	Get					stored during manufacturing
	Device ID 2		1	0	0-0:96.1.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600101FF	--	--	--	Get					
2	value	octet_string[0..48]			E-meter Identifier	--	--	--	Get,Set					stored during manufacturing
	Device ID 3		1	0	0-0:96.1.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600102FF	--	--	--	Get					
2	value	octet_string[0..48]			Function Location	--	--	--	Get, Set					Stored during installation
	Device ID 4		1	0	0-0:96.1.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600103FF	--	--	--	Get					
2	value	octet_string[0..48]			Location Information (ASCII Coded): GPS Info.	--	--	--	Get, Set					Stored during installation
	Device ID 5		1	0	0-0:96.1.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600104FF	--	--	--	Get					
2	value	octet_string[0..48]			Consumer Unique Utility Number (ASCII coded): ("shenase ghabz")	--	--	--	Get, Set					Stored during installation
	Device ID 6		1	0	0-0:96.1.5.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600105FF	--	--	--	Get					
2	value	octet_string[0.. 22]			Serial Number of SimCard (ICCID)	--	--	--	Get					
	Device ID7		1	0	1-0:0.0.0.255					M	M	M	M	
	logical_name	octet_string[6]			0100000000FF	Get	Get	--	Get					
	value	octet_string[14]			Manufacturer Code + Meter/DeviceType + Production Year+ Production Serial Number	Get	Get	--	Get					stored during manufacturing
	Device ID8		1	0	0-0:96.1.6.255					O	O	O	O	
	logical_name	octet_string[6]			0000600106FF			--	Get					
	value	Octet- string [0..24]						--	Get					manufacturer

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
	Currently Active Energy Tariff		1	0	0-0:96.14.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600E00FF	--	--	--	Get					
2	value	octet_string[0..8]				--	--	--	Get					currently active tariff = active_mask of register activation object (mask_name of the 0-0:14.0.1.255) Empty octet string represents no tariff is active.
	Currently Active Maximum Demand Tariff		1	0	0-0:96.14.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600E01FF	--	--	--	Get					
2	value	octet_string[0..8]				--	--	--	Get					currently active tariff = active_mask of register activation object (mask_name of the 0-0:14.0.2.255) Empty octet string represents no tariff is active.
	Default Energy Tariff in case of invalid clock		1	0	0-0:96.14.9.255					M	M	M	M	
	logical_name	octet_string[6]			0000600E09FF	--	--	--	Get					
	value	octet_string[0..8]			default: based on utility configuration requirments	--	--	--	Get,Set					mask_name of the 0-0:14.0.1.255
	Default Max. Demand Tariff in case of invalid clock		1	0	0-0:96.14.10.255					M	M	M	M	
	logical_name	octet_string[6]			0000600E0AFF	--	--	--	Get					
	value	octet_string[0..8]			default: based on utility configuration requirments	--	--	--	Get,Set					mask_name of the 0-0:14.0.2.255
3	Abstract objects -Time related issues													
⌚	Clock		8	0	0-0:1.0.0.255					M	M	M	M	
⌚	logical_name	octet_string[6]			0000010000FF	--	Get	--	Get					
2	time	octet_string[12]				--	Get	--	Get, Set					current date and time as local time, With set deviation 0X8000 and status =0XFF should be used.
3	time_zone	long			-210	--	Get	--	Get, Set					
4	status	unsigned				--	Get	--	Get					
5	daylights_savings_begin	octet_string[12]			FFFF0102FF020000008000FF	--	Get	--	Get, Set					2 FARVARDIN, at 02:00
6	daylights_savings_end	octet_string[12]			FFFF061FFF020000008000FF	--	Get	--	Get, Set					31 SHAHRIVAR, at 02:00
7	daylights_savings_deviation	integer			60	--	Get	--	Get, Set					
8	daylights_savings_enabled	boolean			0	--	Get	--	Get, Set					
9	clock_base	enum			1	--	Get	--	Get					internal crystal (by default)
	Local Time		1	0	1-0:0.9.1.255					M	M	M	M	
⌚	logical_name	octet_string[6]			0100000901FF	--	--	--	(Get)					
2	value	octet_string[4]				--	--	--	(Get)					For display and readout purposes, not used for remote communication
	Local Date		1	0	1-0:0.9.2.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			0100000902FF	--	--	--	(Get)					
2	value	octet_string[5]				--	--	--	(Get)					For display and readout purposes, not used for remote communication
	Clock Time Shift Limit		3	0	1-0:0.9.11.255					M	M	M	M	
1	logical_name	octet_string[6]			010000090BFF	--	--	--	Get					
2	value	unsigned			60	--	--	--	Get, Set					Maximum allowed time shift without generating/logging "Clock Adjusted" events (event codes 4 and 5).
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Activity Calendar		20	0	0-0:13.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			00000D0000FF	--	--	--	Get					
2	calendar_name_active	octet_string[0..x] (ASCII coded)			default: based on utility configuration requirments	--	--	--	Get					The calendar_name_active has a size of 8 characters at least, i.e. [0..8] is mandatory but can be longer minimum x= 8
3	season_profile_active	array[1..x]			default: based on utility configuration requirments	--	--	--	Get					minimum x =12
4	week_profile_table_active	array[1..x]			default: based on utility configuration requirments	--	--	--	Get					minimum x=8
5	day_profile_table_active	array[1..x]			default: based on utility configuration requirments	--	--	--	Get					minimum x=8
6	calendar_name_passive	octet_string[0..x] (ASCII coded)				--	--	--	Get, Set					The calendar_name_active has a size of 8 characters at least, i.e. [0..8] is mandatory but can be longer
7	season_profile_passive	array[1..X]				--	--	--	Get, Set					minimum x =12
8	week_profile_table_passive	array[1..x]				--	--	--	Get, Set					minimum x=8
9	day_profile_table_passive	array[1..x]				--	--	--	Get, Set					minimum x=8
10	activate_passive_calendar_time	octet_string[12]				--	--	--	Get, Set					
1	activate_passive_calendar	integer			--	--	--	--	Action					
☐	Active Special Days Table		11	0	0-0:11.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			00000B0000FF	--	--	--	Get					
2	entries	array[0..50]			default: based on utility configuration requirments	--	--	--	Get, Set					
☐	Passive Special Days Table		11	0	0-0:11.0.1.255					M	M	M	M	
1	logical_name	octet_string[6]			00000B0001FF	--	--	--	Get					
2	entries	array[0..50]			default: based on utility configuration requirments	--	--	--	Get, Set					
	Register Activation- Energy		6	0	0-0:14.0.1.255					M	M	M	M	
1	logical_name	octet_string[6]			00000E0001FF	--	--	--	Get					
2	register_assignment	array[24..*]				--	--	--	Get, (Set)					Array size depends on the number of registers. The required number is mandatory.
3	mask_list	array[0..*]				--	--	--	Get, Set					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
4	active_mask	octet_string[0..8]				--	--	--	Get					
	Register Activation- Maximum Demand		6	0	0-0:14.0.2.255					M	M	M	M	
1	logical_name	octet_string [6]			00000E0002FF	--	--	--	Get					
2	register_assignment	array[20..*]				--	--	--	Get, (Set)					Array size depends on the number of registers. The required number according to FID2 is mandatory.
3	mask_list	array[0..*]				--	--	--	Get, Set					
4	active_mask	octet_string [0..8]				--	--	--	Get					
	Active Tariffication Script Table		9	0	0-0:10.0.100.255					M	M	M	M	
1	logical_name	octet_string[6]			00000A0064FF	--	--	--	Get					
2	scripts	scripts			default: based on utility configuration requirments	--	--	--	Get,Set					
	Passive Tariffication Script Table		9	0	0-0:10.1.100.255					M	M	M	M	
1	logical_name	octet_string[6]			00000A0164FF	--	--	--	Get					
2	scripts	scripts			default: based on utility configuration requirments	--	--	--	Get, Set					
4	Abstract Objects -Billing Period Reset													
	MDI Reset (Predefined Script)/ End of Billing Period		9	0	0-0:10.0.1.255					M	M	M	M	
1	logical_name	octet_string[6]			00000A0001FF	--	--	--	Get					
2	scripts	scripts				--	--	--	(Get)					
1	execute	long_unsigned			1	--	--	--	Action					
	End of Billing Period 1 (Monthly)		22	0	0-0:15.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			00000F0000FF	--	--	--	Get					
2	executed_script	script22			{0-0:10.0.1.255,1}	--	--	--	Get					
3	type	enum			1	--	--	--	Get, (Set)					Type "1" is mandatory (fixed time, wildcard in date). Other tyoe are optnal
4	execution_time	array[0..1]			default: based on utility configuration requirments	--	--	--	Get, Set					Any time of any day of every month. The default value is at 00:00 of the 25th day of month. The execution can be disabled with writing {"FFFFFFFF", "FFFFFFFFFFFF"}]
	Data of Billing Period 1 (Monthly)		7	1	0-0:98.1.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000620100FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range and entry

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub(16)	Reading (2)	Pre-Est.(102)	Mng(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[1..*](capture_object_definition)			{ {8,0-0:1.0.0.255,2,0}, {3,1-0:1.8.0.255,2,0}, {3,1-0:2.8.0.255,2,0}, {3,1-0:3.8.0.255,2,0}, {3,1-0:4.8.0.255,2,0}, {3,1-0:5.8.0.255,2,0}, {3,1-0:6.8.0.255,2,0}, {3,1-0:7.8.0.255,2,0}, {3,1-0:8.8.0.255,2,0}, {3,1-0:15.8.0.255,2,0}, {3,1-0:16.8.0.255,2,0}, {3,1-0:1.8.1.255,2,0}, {3,1-0:1.8.2.255,2,0}, {3,1-0:1.8.3.255,2,0}, {3,1-0:1.8.4.255,2,0}, {3,1-0:2.8.1.255,2,0}, {3,1-0:2.8.2.255,2,0}, {3,1-0:2.8.3.255,2,0}, {3,1-0:2.8.4.255,2,0}, {3,1-0:3.8.1.255,2,0}, {3,1-0:3.8.2.255,2,0}, {3,1-0:3.8.3.255,2,0}, {3,1-0:3.8.4.255,2,0}, {3,1-0:4.8.1.255,2,0}, {3,1-0:4.8.2.255,2,0}, {3,1-0:4.8.3.255,2,0}, {3,1-0:4.8.4.255,2,0}, {3,1-0:15.8.1.255,2,0}, {3,1-0:15.8.2.255,2,0}, {3,1-0:15.8.3.255,2,0}, {3,1-0:15.8.4.255,2,0}, {3,1-0:16.8.1.255,2,0}, {3,1-0:16.8.2.255,2,0}, {3,1-0:16.8.3.255,2,0}, {3,1-0:16.8.4.255,2,0}, {4, 1-0:15.6.0.255,2,0}, {4, 1-0:15.6.0.255,5,0} {4,1-0:1.6.0.255,5,0}, {4,1-0:2.6.0.255,2,0}, {4,1-0:2.6.0.255,5,0}, {4,1-0:3.6.0.255,2,0}, {4,1-0:3.6.0.255,5,0}, {4,1-0:4.6.0.255,2,0}, {4,1-0:4.6.0.255,5,0} {1,0-0:94.98.54.255,2,0} {1,1-0:1.37.0.255,2,0}	--	Get	--	Get, Set					
4	capture_period	double_long_unsigned			0	--	Get	--	Get					
5	sort_method	enum			1	--	Get	--	Get					FIFO
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					Unsorted
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			suitable to store the values at least 13 months	--	Get	--	Get					≥ 13 months
1	reset	integer				--	--	--	Action					
5	Abstract objects - Disconnect, Load mgmt, Supervision													
	Reconnect Control Scheduler		22	0	0-0:15.0.1.255					M	M	M	M	
1	logical_name	octet_string[6]			00000F0001FF	--	--	--	Get					
2	executed_script	script22			{0-0:10.0.106.255,2}/{0-0:10.0.106.255,4} default script 4	--	--	--	Get, Set					2:local Connect script of disconnect script table (0-0:10.0.106.255) 4:remote Connect script of disconnect script table (0-0:10.0.106.255)
3	type	enum			1	--	--	--	Get, (Set)					Type "1" is mandatory (wildcard only in date allowed).
4	execution_time	array[0..1]			default: based on utility configuration requirments	--	--	--	Get, Set					Time of connection/disconnection. The execution can be disabled with writing {"FFFFFFFF", "FFFFFFFF"} days in both object (0-0:15.0.1.255, 0-0:15.1.1.255) must be the same
	Disconnect Control Scheduler		22	0	0-0:15.1.1.255					M	M	M	M	
1	logical_name	octet_string[6]			00000F0101FF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC Cl	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est (102)	Mng (1)	1p	3p-DC	3p-CT	3p-CTPT	Remarks
2	executed_script	script22			{0-0:10.0.106.255,1}{0-0:10.0.106.255,3} default script 3	--	--	--	Get, Set					1:ready_for_reconnection script of disconnector script table (0-0:10.0.106.255) 3:remote Disconnect script of disconnector script table (0-0:10.0.106.255)
3	type	enum			1	--	--	--	Get, (Set)					Type "1" is mandatory (wildcard only in date allowed).
4	execution_time	array[0..1]			default: based on utility configuration requirments	--	--	--	Get, Set					Time of connection/disconnection. The execution can be disabled with writing {"FFFFFFFF", "FFFFFFFF"}.
	Disconnecter Script Table		9	0	0-0:10.0.106.255					M	M	M	M	
1	logical_name	octet_string[6]			0000A006AFF	--	--	--	Get					
2	scripts	array[2] (script9)			{1,{{1,70,0-0:96.3.10.255,3,2}}}, //set to ready_for_reconnection {2,{{1,70,0-0:96.3.10.255,3,1}}}, //set to connected {3,{{2,70,0-0:96.3.10.255,1,0}}}, //execute remote disconnect {4,{{2,70,0-0:96.3.10.255,2,0}}}, //execute remote connect}	--	--	--	Get					1 and 2 model local disconnection and local reconnection, 3 and 4 model remote disconnection and connection
1	execute	long_unsigned				--	--	--	--					
	Disconnect Control		70	0	0-0:96.3.10.255					M	M	M	M	
1	logical_name	octet_string[6]			000060030AFF	--	--	--	Get					
2	output_state	boolean				--	--	--	Get					
3	control_state	enum				--	--	--	Get					(0) Disconnected, (1) connected, (2) ready_for_reconnection (3) always connected (if Enable/Disable relay switch is Disabled)
4	control_mode	enum			0	--	--	--	Get, Set					Meter shall support all modes (0 to 6). The default mode is 0.
1	remote_disconnect	integer				--	--	--	Action					
2	remote_connect	integer				--	--	--	Action					
	Event Object -Disconnector Control log		1	0	0-0:96.11.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B02FF	--	--	--	Get					
2	value	enum				--	--	--	Get					Event number (0 to 255). At first power up or if no events were yet generated the value should return 255.
	Disconnecter Control Log		7	1	0-0:99.98.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0000636202FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					Selective access per range is mandatory

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Set.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[2..3](capture_object_definition)			{{8, 0-0:1.0.0.255, 2, 0}, {1, 0-0:96.11.2.255, 2, 0}, {71, 0-0:17.0.0.255, 3, 0}}	--	Get	--	Get, (Set)					Clock; Event Code; Active Threshold Value of Limiter
4	capture_period	double_long_unsigned			0	--	Get	--	Get					asynchronously
5	sort_method	enum			1	--	Get	--	Get					FIFO
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					Unsorted
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			[100..*]	--	Get	--	Get					
1	reset	integer				--	--	--	Action					
	Limiter		71	0	0-0:17.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000110000FF	--	--	--	Get					
2	monitored_value	value_definition			3P Meter: choice({5,1-0:1.24.0.255, 2}, {5,1-0:16.24.0.255, 2}, {5,1-0:15.24.0.255, 2} 1P Meter: {5,1-0:31.4.0.255, 2} {5,1-0:15.24.0.255, 2}) default: based on utility configuration requirments	--	--	--	Get, Set					
3	threshold_active	threshold				--	--	--	Get					
4	threshold_normal	threshold				--	--	--	Get, Set					
5	threshold_emergency	threshold				--	--	--	Get, Set					
6	min_over_threshold_duration	double_long_unsigned			300	--	--	--	Get, Set					T1 in reclosing procedure
7	min_under_threshold_duration	double_long_unsigned			300	--	--	--	Get, Set					T2 in reclosing procedure
8	emergency_profile	emergency_profile_type				--	--	--	Get, Set					
9	emergency_profile_group_id_list	array				--	--	--	Get, Set					
10	emergency_profile_active	boolean				--	--	--	Get					
11	actions	action_set			{{0-0:10.0.106.255,1} , {0-0:10.0.106.255,2} , {0-0:10.0.106.255,3} , {0-0:10.0.106.255,4}} default: no action	--	--	--	Get, Set					Over Threshold: Set Ready for Reconnection or remote disconnected Under Threshold: Set Connected or remote connected 1:set to ready_for_reconnection script of disconnecter script table (0-0:10.0.106.255) 2:set to connected script of disconnecter script table (0-0:10.0.106.255) 3: Disconnect script of disconnecter script table (0-0:10.0.106.255) 4: Connect script of disconnecter script table (0-0:10.0.106.255) 0: no action is allowed
	Reclosing Configuration		1	0	0-0:94.98.28.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTP	Remarks
1	logical_name	octet_string[6]			00005E621CFF	--	--	--	Get					
2	value	structure { Number of Reclosing (Normal) unsigned Middle Timeout/Norm. (minutes) long_unsigned Final state (normal) enum Number of Reclosing Number (Emg.) unsigned Middle Timeout /Emg.(minutes) long_unsigned Final state (Emg.) enum End Timeout (minutes) long_unsigned }			structure { 3 times 60 min 1 (Disconnected) 3 times 60 min 1 (Disconnected) 180 minutes }	--	--	--	Get, Set					n1 T3 Normal Final state n2 T4 Emg. Final state T5 T1 and T2 is set via attribute "min_over_threshold_duration" and "min_under_threshold_duration" of COSEM object "Limiter" (71, 0- 0:17.0.0.255)
	Limiter Threshold Scheduler		22	0	0-0:94.98.18.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6212FF	--	--	--	Get					
2	executed_script	script22			{0-0:94.98.25.255, [1/2]}	--	--	--	Get, Set					1: Assigning Normal Threshold Value 2: Assigning Emg. Threshold
3	type	enum			1	--	--	--	Get, (Set)					Type "1" is mandatory (fixed time, wildcard in date).
4	execution_time	array[0..1](execution_time_date)				--	--	--	Get, Set					The schedule can be disabled with writing {"FFFFFFFF", "FFFFFFFF"}.
	Limiter Script Table		9	0	0-0:94.98.25.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6219FF	--	--	--	Get					
2	scripts	array[2](script9)			{1,{1,71,0-0:17.0.0.255,4,param.}}, //param.:normal threshold value {2,{1,71,0-0:17.0.0.255,5,param.}}, //param.: emg. threshold value	--	--	--	Get, Set					1: Assigning Normal Threshold Value 2: Assigning Emg. Threshold
1	execute	long_unsigned				--	--	--	Action					
	Fuse Supervision L1		21	0	1-0:31.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01001F0400FF	--	--	--	Get					
2	thresholds	array[1]			default: based on utility configuration requirments	--	--	--	Get, Set					Imax
3	monitored_value	value_definition			{5,1-0:31.4.0.255,2}	--	--	--	Get, (Set)					Sliding Average current L1
4	actions	array[1](action_set)			{{0-0:10.0.106.255,1} , {0-0:10.0.106.255,2} , {0- 0:10.0.106.255,3} , {0-0:10.0.106.255,4}}	--	--	--	Get, Set					Meter shall be able to support real actions (e.g. calling disconnecter scripts and so on). The default value is generating event. Event Code 70: Threshold exceeded Event Code 71: monitored value dropped below the threshold 0: no action is allowed
	Fuse Supervision L2		21	0	1-0:51.4.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100330400FF	--	--	--	Get					
2	thresholds	array[1]			default: based on utility configuration requirments	--	--	--	Get, Set					Imax
3	monitored_value	value_definition			{5,1-0:51.4.0.255,2}	--	--	--	Get, (Set)					Sliding Average current L2

Item	Object / Attribute Name	Object/Attribute Type	IC Cl	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTP T	Remarks
4	actions	array[1](action_set)			{{0-0:10.0.106.255,1} , {0-0:10.0.106.255,2} , {0-0:10.0.106.255,3} , {0-0:10.0.106.255,4}}	--	--	--	Get, Set					Meter shall be able to support real actions (e.g. calling disconnector scripts and so on). The default value is generating event. Event Code 72: Threshold exceeded Event Code 73: monitored value dropped below the threshold 0: no action is allowed
	Fuse Supervision L3		21	0	1-0:71.4.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100470400FF	--	--	--	Get					
2	thresholds	array[1]			default: based on utility configuration requirments	--	--	--	Get, Set					Imax
3	monitored_value	value_definition			{5,1-0:71.4.0.255,2}	--	--	--	Get, (Set)					Sliding Average current L3
4	actions	array[1](action_set)			{{0-0:10.0.106.255,1} , {0-0:10.0.106.255,2} , {0-0:10.0.106.255,3} , {0-0:10.0.106.255,4}}	--	--	--	Get, Set					Meter shall be able to support real actions (e.g. calling disconnector scripts and so on). The default value is generating event. Event Code 74: Threshold exceeded Event Code 75: monitored value dropped below the threshold 0: no action is allowed
6	Abstract objects -Errors & Alarms, Event logs													
	Error Register		1	0	0-0:97.97.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0000616100FF	--	Get	--	Get					
2	value	double_long_unsigned				--	Get	--	Get, Set					
	Unread_Log_Files_Status_Register		1	0	0-0:94.98.26.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E621AFF	--	Get	--	Get					
2	value	long_unsigned				--	Get	--	Get					
	Alarm Register 1		1	0	0-0:97.98.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000616200FF	--	Get	--	Get					
2	value	double_long_unsigned				--	Get	--	Get, Set					
	Alarm Filter 1		1	0	0-0:97.98.10.255					M	M	M	M	
1	logical_name	octet_string[6]			000061620AFF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get, Set					
	Alarm Descriptor 1		1	0	0-0:97.98.20.255					M	M	M	M	
1	logical_name	octet_string[6]			0000616214FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get, Set					
	Alarm Monitor 1		21	0	0-0:16.1.0.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC Cl	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Set.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			0000100100FF	--	--	--	Get					
2	thresholds	array[1](double_long_unsigned)			{0}	--	--	--	Get					Monitored value is Alarm descriptor 1. Value 0 in threshold means if any of the bits in monitor value is newly triggered the action of the monitor will be set.
3	monitored_value	value_definition			{1, 0-0:97.98.20.255, 2}	--	--	--	Get					
4	actions	array[1](action_set)			{{{0-0:10.0.108.255,4} , {0-0:10.0.108.255,0}}}	--	--	--	Get, Set					triggers push on alarm in case of occurrence, no action is triggered in case the alarm descriptor is cleared.
	Alarm Register 2		1	0	0-0:97.98.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000616201FF	--	Get	--	Get					
2	value	double_long_unsigned				--	Get	--	Get, Set					
	Alarm Filter 2		1	0	0-0:97.98.11.255					M	M	M	M	
1	logical_name	octet_string[6]			000061620BFF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get, Set					This filter defines, if an event is handled as an alarm when it appears
	Alarm Descriptor 2		1	0	0-0:97.98.21.255					M	M	M	M	
1	logical_name	octet_string[6]			0000616215FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get, Set					
	Alarm Monitor 2		21	0	0-0:16.1.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000100101FF	--	--	--	Get					
2	thresholds	array[1](double_long_unsigned)			{0}	--	--	--	Get					Monitored value is Alarm descriptor 1. Value 0 in threshold means if any of the bits in monitor value is newly triggered the action of the monitor will be set.
3	monitored_value	value_definition			{1, 0-0:97.98.21.255, 2}	--	--	--	Get					
4	actions	array[1](action_set)			{{{0-0:10.0.108.255,4} , {0-0:10.0.108.255,0}}}	--	--	--	Get, Set					triggers push on alarm in case of occurrence, no action is triggered in case the alarm descriptor is cleared. Details are presented in FID2.
	Event Object -Standard Event Log		1	0	0-0:96.11.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B00FF	--	--	--	Get					
2	value	enum				--	--	--	Get					event number (0 to 255); at first power up or if no events were yet generated the value should return 255
	Event Parameter-Standard event log		1	0	0-0:96.11.10.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B0AFF	--	--	--	Get					
2	value	enum				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTP	Remarks
	Standard Event Log		7	1	0-0:99.98.0.255					M	M	M	M	
0	logical_name	octet_string[6]			0000636200FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range
3	capture_objects	array[3]			{{8,0-0:1.0.0.255,2,0}, {1,0-0:96.11.0.255,2,0} {1,0-0:96.11.10.255,2,0}}	--	Get	--	Get, Set					Clock, Event Code, Event Parameter (Sub-events)
4	capture_period	double_long_unsigned			0	--	Get	--	Get					asynchronously
5	sort_method	enum			1	--	Get	--	Get					FIFO
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					Unsorted
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			[100..*]	--	Get	--	Get					
1	reset	integer				--	--	--	Action					
	Event Object -Fraud Detection Log		1	0	0-0:96.11.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B01FF	--	--	--	Get					
2	value	enum				--	--	--	Get					event number (0 to 255); at first power up or if no events were yet generated the value should return 255
	Fraud Detection Log		7	1	0-0:99.98.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000636201FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range
3	capture_objects	array[2](capture_object_definition)			{{8,0-0:1.0.0.255,2,0},{1,0-0:96.11.1.255,2,0}}	--	Get	--	Get, Set					Clock, Fraud (Security) Event Code
4	capture_period	double_long_unsigned			0	--	Get	--	Get					asynchronously
5	sort_method	enum			1	--	Get	--	Get					FIFO
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					Unsorted
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			[100..*]	--	Get	--	Get					
1	reset	integer				--	--	--	Action					
	Event Object - Communication Log		1	0	0-0:96.11.5.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B05FF	--	--	--	Get					
2	value	enum				--	--	--	Get					event number (0 to 255); at first power up or if no events were yet generated the value should return 255
	Communication Log		7	1	0-0:99.98.5.255					M	M	M	M	
1	logical_name	octet_string[6]			0000636205FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Ext.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[2](capture_object_definition)			{{8,0-0:1.0.0.255,2,0},{1,0-0:96.11.5.255,2,0}}	--	Get	--	Get, Set					Clock, Communication Event Code
4	capture_period	double_long_unsigned			0	--	Get	--	Get					asynchronously
5	sort_method	enum			1	--	Get	--	Get					FIFO
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					unsorted
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			[100..*]	--	Get	--	Get					
1	reset	integer				--	--	--	Action					
7	Abstract objects -User interface													
	Consumer Message Code		1	0	0-0:96.13.1.255					o	o	o	o	
1	logical_name	octet_string[6]			0000600D01FF	--	--	--	Get					
2	value	octet_string[0..64]				--	--	--	Get, Set					Message code to be shown on numeric display.
	Push action scheduler - Consumer Information		22	0	0-4:15.0.4.255					M	M	M	M	
1	logical_name	octet_string[6]			00040F0004FF	--	--	--	Get					
2	executed_script	script22			{0-0:10.0.108.255,7}	--	--	--	Get,set					
3	type	enum			5	--	--	--	Get, (Set)					n=4
4	execution_time	array[0..*](execution_time_date)			{ {"FFFF0000", "FFFFFFFF"}, {"FFFF0F00", "FFFFFFFF"}, {"FFFF1E00", "FFFFFFFF"}, {"FFFF2D00", "FFFFFFFF"}, }	--	--	--	Get, Set					By default push every 15 seconds
	Push setup - Consumer Information		40	0	0-6:25.9.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0006190900FF	--	--	--	Get					
2	push_object_list	array[0..*](capture_object_definition)				--	--	--	Get, Set					{40,0-6:25.9.0.255,1,0,7,1-0:99.136.0.255,2,4097}
3	send_destination_and_method	send_destination_and_method_type			{*,*,0}	--	--	--	Get, Set					*: transport type and destination depends on IHD interface
4	communication_window	array[0..*](window_element)				--	--	--	Get, Set					
5	randomisation_start_interval	long_unsigned			0	--	--	--	Get, Set					Randomization time in seconds, 0 = no randomization at start of the first window defined in calling_window
6	number_of_retries	unsigned				--	--	--	Get, Set					Max number of repetitions of unsuccessful push
7	repetition_delay	long_unsigned							Get, Set					Delay in seconds between repetitions
2	push	integer				--	--	--	Action					
	Security setup - Consumer Information		64	0	0-0:43.0.1.255					o	o	o	o	
1	logical_name	octet_string[6]			00002B0001FF	--	--	--	Get					
2	security_policy	enum			3	--	--	--	Get, Set					All messages to be authenticated and encrypted
3	security_suite	enum			0	--	--	--	Get, Set					0 = AES-GCM-128/AES-128

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
4	client_system_title	octet_string[8]				--	--	--	Get					
5	server_system_title	octet_string[8]				--	--	--	Get					
1	security_activate	enum				--	--	--	Action					
2	global_key_transfer	key_data				--	--	--	Action					
8	Abstract objects -Firmware Upgrade													
	Image transfer		18	0	0-0:44.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			00002C0000FF	--	--	--	Get					
2	image_block_size	double_long_unsigned				--	--	--	Get					block size in bytes atleast 512 bytes
3	image_transferred_block_status	bit_string				--	--	--	Get					The length of string is same as the number of image blocks. Each bit provides info about one individual image block as follow: 0 = not transferred 1 = transferred
4	image_first not_transferred_block_number	double_long_unsigned				--	--	--	Get					Provides block number of the first missing block
5	image_transfer_enabled	boolean				--	--	--	Get, Set					Enabled or not; detail information in image_transfer_status FALSE = disabled TRUE = enabled
6	image_transfer status	enum				--	--	--	Get					Detailed status of image transfer process 0 = transfer not initiated (not active; default state) 1 = transfer initiated 2 = verification initiated 3 = verification successful 4 = verification failed 5 = activation initiated 6 = activation successful 7 = activation failed
7	image_to_activate_info	array				--	--	--	Get					
1	image_transfer_initiate	structure			--	--	--	--	Action					initiates the transfer process; includes data in format { image_identifier image_size }
2	image_block_transfer	structure				--	--	--	Action					transfers one single block; includes data in format { image_block_number image_block_value }
3	image_verify	integer				--	--	--	Action					verifies the integrity before activation; result can be (0) success, if the verification could be completed; (2) temporary-failure if the verification has not been completed; (250) other-reason if the verification failed.

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
	Active firmware Identifier 2		1	0	1-2:0.2.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0102000200FF	--	--	--	Get					
Ø	value	octet_string				--	--	--	Get					GPRS Communication Module Firmware
	Active firmware signature 2		1	0	1-2:0.2.8.255					M	M	M	M	
1	logical_name	octet_string[6]			0102000208FF	--	--	--	Get					
2	value	octet_string				--	--	--	Get					
9	Electricity Related Objects -Totals													
	Active energy import (+A)		3	0	1-0:1.8.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010800FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy export (-A)		3	0	1-0:2.8.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020800FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy (+A + -A) Combined total		3	0	1-0:15.8.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0800FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy (+A + -A) Net total		3	0	1-0:16.8.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100100800FF	--	--	--	Get					
Ø	value	double_long				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Reactive energy QI (+Ri)		3	0	1-0:5.8.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100050800FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy QII (+Rc)		3	0	1-0:6.8.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100060800FF	--	--	--	Get					

[illegible]

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
	Ampere-hours in absence of voltage L2		3	0	1-0:51.8.0.255					NA	NA	M	M	
1	logical_name	octet_string[6]			0100330800FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,57}	--	--	--	Get					
	Ampere-hours in absence of voltage L3		3	0	1-0:71.8.0.255					NA	NA	M	M	
1	logical_name	octet_string[6]			0100470800FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,57}	--	--	--	Get					
10	Electricity Related Objects -Intervals													
	Active energy import (+A) (interval)		3	0	1-0:1.29.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100011D00FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy Export (-A) (interval)		3	0	1-0:2.29.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100021D00FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Reactive energy import (+R)(QI+QII) (interval)		3	0	1-0:3.29.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100031D00FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy export (-R)(QIII+QIV) (interval)		3	0	1-0:4.29.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100041D00FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
11	Electricity Related Objects -Rated Registers													
	Active energy import (+A) rate 1		3	0	1-0:1.8.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010801FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy import (+A) rate 2		3	0	1-0:1.8.2.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
1	logical_name	octet_string[6]			0100010802FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy import (+A) rate 3		3	0	1-0:1.8.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010803FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy import (+A) rate 4		3	0	1-0:1.8.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010804FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy export (-A) rate 1		3	0	1-0:2.8.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020801FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy export (-A) rate 2		3	0	1-0:2.8.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020802FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy export (-A) rate 3		3	0	1-0:2.8.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020803FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Active energy export (-A) rate 4		3	0	1-0:2.8.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020804FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,30} for CT/PT, other types {0,30}	--	--	--	Get					
	Reactive energy (+R) rate 1		3	0	1-0:3.8.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030801FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
	Reactive energy (+R) rate 2		3	0	1-0:3.8.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030802FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy (+R) rate 3		3	0	1-0:3.8.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030803FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy (+R) rate 4		3	0	1-0:3.8.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030804FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy (-R) rate 1		3	0	1-0:4.8.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040801FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy (-R) rate 2		3	0	1-0:4.8.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040802FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy (-R) rate 3		3	0	1-0:4.8.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040803FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Reactive energy (-R) rate 4		3	0	1-0:4.8.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040804FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,32} for CT/PT, other types {0,32}	--	--	--	Get					
	Active energy Combined total (+A + -A) rate 1		3	0	1-0:15.8.1.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0801FF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
12	Electricity related objects -Demand													
	Demand Register 1 -Active energy import (+A)		5	0	1-0:1.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					Att. 3 is captured in Load Profile 1
4	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
5	status	unsigned				--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			60	--	--	--	Get, Set					Changing period of one instance will change the period of all instances automatically.
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					Changing number_of_periods of one instance will change number_of_periods of all instances automatically
	Demand Register 2 -Active energy export (-A)		5	0	1-0:2.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					Att. 3 is captured in Load Profile 1
4	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			60	--	--	--	Get, Set					Changing period of one instance will change the period of all instances automatically.
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					Changing number_of_periods of one instance will change number_of_periods of all instances automatically
	Demand Register 3 -Reactive energy import (+R)		5	0	1-0:3.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1p	3p-DC	3p-CT	3p-CTPT	Remarks
8	period	double_long_unsigned			60	--	--	--	Get, Set					Changing period of one instance will change the period of all instances automatically.
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					Changing number_of_periods of one instance will change number_of_periods of all instances automatically
	Demand Register 4 -Reactive energy export (-R)		5	0	1-0:4.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			60	--	--	--	Get, Set					Changing period of one instance will change the period of all instances automatically.
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					Changing number_of_periods of one instance will change number_of_periods of all instances automatically
	Demand Register 5-Active energy Combined total (+A + -A)		5	0	1-0:15.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					Att. 3 is captured in Load Profile 1
4	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			60	--	--	--	Get, Set					Changing period of one instance will change the period of all instances automatically.
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					Changing number_of_periods of one instance will change number_of_periods of all instances automatically
13	Electricity related objects -Maximum Demand													
	Maximum Demand Register 1 -Active energy import (+A)		4	0	1-0:1.6.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTP	Remarks
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 2 -Active energy import (+A) - rate 1		4	0	1-0:1.6.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010601FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 3 -Active energy import (+A) - rate 2		4	0	1-0:1.6.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010602FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 4 -Active energy import (+A) - rate 3		4	0	1-0:1.6.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010603FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 5 -Active energy import (+A) - rate 4		4	0	1-0:1.6.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010604FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer			--	--	--	--	Action					
	Maximum Demand Register 6 -Active energy export (-A)		4	0	1-0:2.6.0.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
1	logical_name	octet_string[6]			0100020600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 7 -Active energy export (-A) - rate 1		4	0	1-0:2.6.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020601FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 8 -Active energy export (-A) - rate 2		4	0	1-0:2.6.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020602FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 9 -Active energy export (-A) - rate 3		4	0	1-0:2.6.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020603FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 10 -Active energy export (-A) - rate 4		4	0	1-0:2.6.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020604FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 11 -Reactive energy import (+R)		4	0	1-0:3.6.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 12 -Reactive energy import (+R) -rate 1		4	0	1-0:3.6.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030601FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 13 -Reactive energy import (+R) -rate 2		4	0	1-0:3.6.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030602FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 14 -Reactive energy import (+R) -rate 3		4	0	1-0:3.6.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030603FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 15 -Reactive energy import (+R) -rate 4		4	0	1-0:3.6.4.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			0100030604FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 16 -Reactive energy export (-R)		4	0	1-0:4.6.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 17 -Reactive energy export (-R) -rate 1		4	0	1-0:4.6.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040601FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 18 -Reactive energy export (-R) -rate 2		4	0	1-0:4.6.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040602FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 19 -Reactive energy export (-R) -rate 3		4	0	1-0:4.6.3.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040603FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(d6)	Reading (z)	Pre-Est.(10z)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 20 -Reactive energy export (-R) -rate 4		4	0	1-0:4.6.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040604FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 31 -Active energy Combined (+A + -A)		4	0	1-0:15.6.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 32 -Active energy Combined (+A + -A) -rate 1		4	0	1-0:15.6.1.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0601FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 33 -Active energy Combined (+A + -A) -rate 2		4	0	1-0:15.6.2.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0602FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 34 -Active energy Combined (+A + -A) -rate 3		4	0	1-0:15.6.3.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est (102)	Mng (1)	1p	3p-DC	3p-CT	3p-CT/PT	Remarks
1	logical_name	octet_string[6]			01000F0603FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 35 -Active energy Combined (+A + -A) -rate 4		4	0	1-0:15.6.4.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0604FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 36 -Active energy Combined (+A + -A) (recording interval 2)		4	0	1-0:15.54.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F3600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 37 -Active energy imort total (+A) (recording interval 2)		4	0	1-0:1.54.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100013600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					
5	capture_time	octet_string				--	--	--	Get					
1	reset	integer				--	--	--	Action					
	Maximum Demand Register 38 -Active energy export total (-A) (recording interval 2)		4	0	1-0:2.54.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100023600FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
4	status	unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub(16)	Reading (2)	Pre Est.(102)	Mng(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
5	capture_time	octet_string				--	-	--	Get					
1	reset	integer				--	-	--	Action					
14	Electricity related objects -Profiles													
	Profile Status 1 (Load profile with period 1)		1	0	0-0:96.10.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600A01FF	--	--	--	Get					
2	status	unsigned				--	--	--	Get					
	Load profile 1 (hourly)		7	1	1-0:99.1.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100630100FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range (entry is optional)
3	capture_objects	array[2..*](capture_object_definition)			{{8,0-0:1.0.0.255,2,0},{1,0-0:96.10.1.255,2,0},{3,1-0:1.8.0.255,2,0},{3,1-0:2.8.0.255,2,0},{3,1-0:3.8.0.255,2,0},{3,1-0:4.8.0.255,2,0},{5,1-0:15.4.0.255,3,0}}	--	Get	--	Get, Set					Clock, Profile Status, Regsitters,
4	capture_period	double_long_unsigned			Choice (60s, 300s, 900s, 1800s, 3600s)	--	Get	--	Get, Set					Default=900
5	sort_method	enum			Choice (1,4) default (FIFO)	--	Get	--	Get					In case of changing sorting method, the load profile will be reset.
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					unsorted or sorted by clock depending on choice in attr. sort_method i.e. if sort_method=sorted then sort_object=0-0:1.0.0.255
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			suitable to store (at least) 62 days	--	Get	--	Get					
1	reset					--	--	--	Action					
	Profile Status 2 (Load profile with period 2/Daily)		1	0	0-0:96.10.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600A02FF	--	--	--	Get					
2	status	unsigned				--	--	--	Get					
	Load profile 2 (Daily)		7	1	1-0:99.2.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100630200FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range (entry is optional)

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[2..*](capture_object_definition)			{{8,0-0:1.0.0.255,2,0}, {1,0-0:96.10.2.255,2,0},{3,1-0:1.8.0.255,2,0}, {3,1-0:2.8.0.255,2,0},{3,1-0:3.8.0.255,2,0},{3,1-0:4.8.0.255,2,0}, {3,1-0:15.8.0.255,2,0}, {3,1-0:16.8.0.255,2,0}, {3,1-0:1.8.1.255,2,0}, {3,1-0:1.8.2.255,2,0}, {3,1-0:1.8.3.255,2,0}, {3,1-0:1.8.4.255}, {3,1-0:2.8.1.255}, {3,1-0:2.8.2.255,2,0}, {3,1-0:2.8.3.255,2,0}, {3,1-0:2.8.4.255,2,0}, {3,1-0:3.8.1.255,2,0}, {3,1-0:3.8.2.255,2,0}, {3,1-0:3.8.3.255,2,0}, {3,1-0:3.8.4.255,2,0}, {3,1-0:4.8.1.255,2,0}, {3,1-0:4.8.2.255,2,0}, {3,1-0:4.8.3.255,2,0}, {3,1-0:4.8.4.255,2,0}, {3,1-0:15.8.1.255,2,0}, {3,1-0:15.8.2.255,2,0}, {3,1-0:15.8.3.255,2,0}, {3,1-0:15.8.4.255,2,0}, {3,1-0:16.8.1.255,2,0}, {3,1-0:16.8.2.255,2,0}, {3,1-0:16.8.3.255,2,0}, {3,1-0:16.8.4.255,2,0}, , {4,1-0:15.54.0.255, 2,0}, {4,1-0:15.54.0.255, 5,0}, {4,1-0:1.54.0.255, 2,0}, {4,1-0:1.54.0.255, 5,0},{4,1-0:2.54.0.255, 2,0}, {4,1-0:2.54.0.255, 5,0} {1,0-0:97.97.0.255,2,0}, {1,0-0:97.98.0.255,2,0}, {1,0-0:97.98.1.255,2,0}, }	--	Get	--	Get, Set				Clock, Profile Status, Regsitors,	
4	capture_period	double_long_unsigned			86400	--	Get	--	Get, Set					
5	sort_method	enum			Choice (1,4) default (FIFO)	--	Get	--	Get					In case of changing sorting method, the load profile will be reset.
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					unsorted or sorted by clock depending on choice in attr. sort_method i.e. if sort_method=sorted then sort_object=0-0:1.0.0.255
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			suitable to store (at least) 31 days	--	Get	--	Get					
1	reset					--	--	--	Action					
	Profile Status 3 (Harmonic Values)		1	0	0-0:96.10.9.255					NA	M	M	M	
1	logical_name	octet_string[6]			0000600A09FF	--	--	--	Get					
2	status	unsigned				--	--	--	Get					
	Profile Status 4 (Avg., Min., Max.)		1	0	0-0:96.10.10.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600A0AFF	--	--	--	Get					
2	status	unsigned				--	--	--	Get					
	Average Value Profile		7	1	1-0:99.133.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100638500FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range (entry is optional)

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[2..*](capture_object_definition)			{{8,0-0:1.0.0.255,2,0}, {1,0-0:96.10.10.255,2,0},{3,1-0:32.25.0.255,2,0}, {3,1-0:52.25.0.255,2,0},{3,1-0:72.25.0.255,2,0},{3,1-0:31.25.0.255,2,0}, {3,1-0:51.25.0.255,2,0}, {3,1-0:71.25.0.255,2,0}, {3,1-0:33.25.0.255,2,0}, {3,1-0:53.25.0.255,2,0}, {3,1-0:73.25.0.255,2,0}, {3, 1-0: 13.25.0.255,2,0}, {3,1-0:1.25.0.255,2,0}, {3,1-0:2.25.0.255,2,0}, {3,1-0:3.25.0.255,2,0}, {3,1-0:4.25.0.255,2,0}}	--	Get	--	Get, Set					Clock, Profile Status, Registers,
4	capture_period	double_long_unsigned			Choice (60s, 300s, 900s, 1800s, 3600s, 86400)	--	Get	--	Get, Set					
5	sort_method	enum			Choice (1,4) default (FIFO)	--	Get	--	Get					In case of changing sorting method, the load profile will be reset.
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					unsorted or sorted by clock depending on choice in attr. sort_method i.e. if sort_method=sorted then sort_object=0:0:1.0.0.255
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			suitable to store (at least) 31 days	--	Get	--	Get					
9	reset					--	--	--	Action					
	Max.Values Profile		7	1	1-0:99.134.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100638600FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range (entry is optional)
3	capture_objects	array[2..*](capture_object_definition)			{{8,0-0:1.0.0.255,2,0}, {1,0-0:96.10.10.255,2,0},{3,1-0:32.226.0.255,2,0}, {3,1-0:52.226.0.255,2,0},{3,1-0:72.226.0.255,2,0},{3,1-0:31.226.0.255,2,0}, {3,1-0:51.226.0.255,2,0}, {3,1-0:71.226.0.255,2,0}, {3,1-0:33.226.0.255,2,0}, {3,1-0:53.226.0.255,2,0}, {3,1-0:73.226.0.255,2,0}, {3, 1-0: 13.226.0.255,2,0}, {3,1-0:1.226.0.255,2,0}, {3,1-0:2.226.0.255,2,0}, {3,1-0:3.226.0.255,2,0}, {3,1-0:4.226.0.255,2,0}}	--	Get	--	Get, Set					Clock, Profile Status, Registers,
4	capture_period	double_long_unsigned			Choice (60s, 300s, 900s, 1800s, 3600s, 86400)	--	Get	--	Get, Set					
5	sort_method	enum			Choice (1,4) default (FIFO)	--	Get	--	Get					In case of changing sorting method, the load profile will be reset.
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					unsorted or sorted by clock depending on choice in attr. sort_method i.e. if sort_method=sorted then sort_object=0:0:1.0.0.255
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			suitable to store (at least) 31 days	--	Get	--	Get					
9	reset					--	--	--	Action					
	Min. Values Profile		7	1	1-0:99.135.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100638700FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range (entry is optional)

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[2..*](capture_object_definition)			{{8,0-0:1.0.0.255,2,0},{1,0-0:96.10.10.255,2,0},{3,1-0:32.223.0.255,2,0},{3,1-0:52.223.0.255,2,0},{3,1-0:72.223.0.255,2,0},{3,1-0:31.223.0.255,2,0},{3,1-0:51.223.0.255,2,0},{3,1-0:71.223.0.255,2,0},{3,1-0:33.223.0.255,2,0},{3,1-0:53.223.0.255,2,0},{3,1-0:73.223.0.255,2,0},{3,1-0:13.223.0.255,2,0},{3,1-0:1.223.0.255,2,0},{3,1-0:2.2230.255,2,0},{3,1-0:3.223.0.255,2,0},{3,1-0:4.223.0.255,2,0}}	--	Get	--	Get, Set				Clock, Profile Status, Regsisters,	
4	capture_period	double_long_unsigned			Choice (60s, 300s, 900s, 1800s, 3600s, 86400)	--	Get	--	Get, Set					
5	sort_method	enum			Choice (1,4) default (FIFO)	--	Get	--	Get					In case of changing sorting method, the load profile will be reset.
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					unsorted or sorted by clock depending on choice in attr. sort_method i.e. if sort_method=sorted then sort_object=0:0:1.0.0.255
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			suitable to store (at least) 31 days	--	Get	--	Get					
9	reset					--	--	--	Action					
	Harmonics Profile		7	1	1-0:99.136.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100638800FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range (entry is optional)
3	capture_objects	array[2..*](capture_object_definition)			{{8,0-0:1.0.0.255,2,0},{1,0-0:96.10.9.255,2,0},{3,1-0:32.24.3.255,2,0},{3,1-0:52.24.3.255,2,0},{3,1-0:72.24.3.255,2,0},{3,1-0:52.24.5.255,2,0},{3,1-0:72.24.5.255,2,0},{3,1-0:32.24.7.255,2,0},{3,1-0:52.24.7.255,2,0},{3,1-0:72.24.7.255,2,0},{3,1-0:52.24.9.255,2,0},{3,1-0:72.24.9.255,2,0},{3,1-0:32.24.11.255,2,0},{3,1-0:52.24.11.255,2,0},{3,1-0:72.24.11.255,2,0},{3,1-0:52.24.13.255,2,0},{3,1-0:72.24.13.255,2,0},{3,1-0:32.24.124.255,2,0},{3,1-0:52.24.124.255,2,0},{3,1-0:72.24.124.255,2,0},{3,1-0:51.24.3.255,2,0},{3,1-0:71.24.3.255,2,0},{3,1-0:31.24.3.255,2,0},{3,1-0:51.24.5.255,2,0},{3,1-0:71.24.5.255,2,0},{3,1-0:31.24.5.255,2,0},{3,1-0:51.24.7.255,2,0},{3,1-0:71.24.7.255,2,0},{3,1-0:31.24.7.255,2,0},{3,1-0:51.24.9.255,2,0},{3,1-0:71.24.9.255,2,0},{3,1-0:31.24.9.255,2,0},{3,1-0:51.24.11.255,2,0},{3,1-0:71.24.11.255,2,0},{3,1-0:31.24.11.255,2,0},{3,1-0:51.24.13.255,2,0},{3,1-0:71.24.13.255,2,0},{3,1-0:31.24.13.255,2,0},{3,1-0:51.24.124.255,2,0},{3,1-0:71.24.124.255,2,0},{3,1-0:31.24.124.255,2,0},{3,1-0:51.7.1.255,2,0},{3,1-0:51.7.1.255,2,0},{3,1-0:71.7.1.255,2,0},{3,1-0:32.7.1.255,2,0},{3,1-0:52.7.1.255,2,0},{3,1-0:72.7.1.255,2,0}}	--	Get	--	Get, Set				Clock, Profile Status, Regsisters, fundamental objects are optional	
4	capture_period	double_long_unsigned			Choice (60s, 300s, 900s, 1800s, 3600s, 86400)	--	Get	--	Get, Set					
5	sort_method	enum			Choice (1,4) default (FIFO)	--	Get	--	Get					In case of changing sorting method, the load profile will be reset.
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0,0}	--	Get	--	Get					unsorted or sorted by clock depending on choice in attr. sort_method i.e. if sort_method=sorted then sort_object=0:0:1.0.0.255

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Ext.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			suitable to store (at least) 31 days	--	Get	--	Get					
1	reset					--	--	--	Action					
	Instantaneous Energy Values		7	1	0-0:21.0.6.255					M	M	M	M	
1	logical_name	octet_string[6]			0000150006FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					
3	capture_objects	array[*..50]			{8,0-0:1.0.0.255,2,0}; Clock {1,0-0:96.1.0.255,2,0}; Device ID1, manufacturing number {1,1-0:0.0.0.255,2,0}; Tavanir Definition (Utility Device ID) {3,1-0:1.8.X.255,2,0}; Active energy import (+A) X=0,1,2,3,4; {3,1-0:2.8.X.255,2,0}; Active energy export (-A) X=0,1,2,3,4; {3,1-0:3.8.0.255,2,0}; Reactive energy import (+R)(QI+QII) {3,1-0:4.8.0.255,2,0}; Reactive energy export (-R)(QIII+QIV) {3,1-0:5.8.0.255,2,0}; Reactive energy QI (+RI) {3,1-0:6.8.0.255,2,0}; Reactive energy QII (+Rc) {3,1-0:7.8.0.255,2,0}; Reactive energy QIII (-Ri) {3,1-0:8.8.0.255,2,0}; Reactive energy QIV (-Rc) {3,1-0:9.8.0.255,2,0}; Apparent energy import (+VA)(QI+QIV) {3,1-0:10.8.0.255,2,0}; Apparent energy export (-VA)(QII+QIII) {3,1-0:15.8.X.255,2,0}; Active energy Combined total (+A + -A) X=0,1,2,3,4; {3,1-0:16.8.X.255,2,0}; Active energy net total (+A - -A) X=0,1,2,3,4; {3,1-0:X.8.0.255,2,0}; Ampere-hours L1,L2,L3 X=31,51,71	--	Get	--	Get, Set					For single-phase meters, only one phase is active, so values connected with other phases (L2 and L3) have to be zero.
4	capture_period	double_long_unsigned			0	--	Get	--	Get					
5	sort_method	enum			1	--	Get	--	Get					
6	sort_object	capture_object_definition			none	--	Get	--	Get					
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			1	--	Get	--	Get					
1	reset					--	--	--	Action					
	Power Quality Instantaneous Values		7	1	0-0:21.0.5.255					M	M	M	M	
1	logical_name	octet_string[6]			0000150005FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng. (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[*..50]			{8,0-0:1.0.0.255,2}; Clock {1,1-0:0.0.0.255,2,0}; Device ID1, manufacturing number {1,1-0:0.0.0.255,2,0}; Tavanir Definition (Utility Device ID) {3,1-0:X.7.0.255,2}; Voltage L1,L2,L3 X=32,52,72; {3,1-0:X.7.0.255,2}; Current L1,L2,L3 X=31,51,71; {3,1-0:X.7.0.255,2}; Power factor L1,L2,L3 X=33,53,73; {3,1-0:X.7.0.255,2}; Active import power (+A) L1,L2,L3 X=21,41,61; {3,1-0:X.7.0.255,2}; Aactive export power (-A) L1,L2,L3 X=22,42,62; {3,1-0:X.7.0.255,2}; Reactive import power (+R) L1,L2,L3 X=23,43,63; {3,1-0:X.7.0.255,2}; Reactive export power (-R) L1,L2,L3 X=24,44,64; {3,1-0:90.7.0.255,2}; Current (sum over all phases) {3,1-0:15.7.0.255,2}; Active power (+A + -A) {3,1-0:1.7.0.255,2}; Active import power (+A) {3,1-0:2.7.0.255,2}; Active export power (-A) {3,1-0:3.7.0.255,2}; Reactive import power (+R) {3,1-0:4.7.0.255,2}; Reactive export power (-R) {3,1-0:9.7.0.255,2}; Apparent import power (+VA) {3,1-0:10.7.0.255,2}; apparent export power (-VA) {3,1-0:13.7.0.255,2}; Power factor (+A/+VA) {3,1-0:81.7.4.255,2}; Phase Angle from I(L1) to U(L1) {3,1-0:81.7.15.255,2}; Phase Angle from I(L2) to U(L2) {3,1-0:81.7.26.255,2}; Phase Angle from I(L3) to U(L3)	--	Get	--	Get, Set					For single-phase meters, only one phase is active, so values connected with other phases (L2 and L3) have to be zero.
4	capture_period	double_long_unsigned			0	--	Get	--	Get					
5	sort_method	enum			1	--	Get	--	Get					
6	sort_object	capture_object_definition			none	--	Get	--	Get					
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			1	--	Get	--	Get					
1	reset					--	--	--	Action					
15	Electricity related objects -PQ, monitored values													
	Time threshold for long power failure		3	0	0-0:96.7.20.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600714FF	--	--	--	Get					
2	value	long_unsigned			180	--	--	--	Get, Set					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Duration of last long power failure in any phase		3	0	0-0:96.7.19.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600713FF	--	--	--	Get					
2	value	{double_long_unsigend},				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Threshold for Under Voltage (sag)		3	0	1-0:12.31.0.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			01000C1F00FF	--	--	--	Get					
2	value	long_unsigned			-5% VREF to -20% VREF	--	--	--	Get, Set					
3	scaler_unit	scal_unit_type			{0,35}	--	--	--	Get					
	Time Threshold for Under Voltage (sag)		3	0	1-0:12.43.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000C2B00FF	--	--	--	Get					
2	value	long_unsigned			180	--	--	--	Get, Set					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Number of Under Voltages in phase L1		1	0	1-0:32.32.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100202000FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Number of Under Voltages (sag) in phase L2		1	0	1-0:52.32.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100342000FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Number of Under Voltages (sag) in phase L3		1	0	1-0:72.32.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100482000FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Duration of Under Voltage (sag) in phase L1		3	0	1-0:32.33.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100202100FF	--	--	--	Get					
2	value	double_long_unsigend				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Duration of Under Voltage (sag) in phase L2		3	0	1-0:52.33.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100342100FF	--	--	--	Get					
2	value	double_long_unsigend				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Duration of Under Voltage (sag) in phase L3		3	0	1-0:72.33.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100482100FF	--	--	--	Get					
2	value	double_long_unsigend				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Magnitude of Under Voltage (sag) in phase L1		3	0	1-0:32.34.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100202200FF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,35}	--	--	--	Get					
	Magnitude of Under Voltage (sag) in phase L2		3	0	1-0:52.34.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100342200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,35}	--	--	--	Get					
	Magnitude of Under Voltage (sag) in phase L3		3	0	1-0:72.34.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100482200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,35}	--	--	--	Get					
	Threshold for Over Voltage (swell)		3	0	1-0:12.35.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000C2300FF	--	--	--	Get					
2	value	long_unsigned			+5% VREF to +15% VREF	--	--	--	Get, Set					
3	scaler_unit	scal_unit_type			{0,35}	--	--	--	Get					
1	reset					--	--	--	--					
	Time threshold for Over Voltage (swell)		3	0	1-0:12.44.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000C2C00FF	--	--	--	Get					
2	value	long_unsigned			180	--	--	--	Get, Set					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
	Number of Over Voltage (swell) in phase L1		1	0	1-0:32.36.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100202400FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Number of Over Voltage (swell) in phase L2		1	0	1-0:52.36.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100342400FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Number of Over Voltage (swell) in phase L3		1	0	1-0:72.36.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100482400FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Duration of Over Voltage (swell) in phase L1		3	0	1-0:32.37.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100202500FF	--	--	--	Get					

[illegible]

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTP T	Remarks
	Event Object -Power Failure Log		1	0	0-0:96.11.6.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B06FF	--	--	--	Get					
2	value	enum				--	--	--	Get					event number (0 to 255); at first power up or if no events were yet generated the value should return 255
	Power Failure Event Log		7	1	1-0:99.97.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100636100FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access per range
3	capture_objects	array[2]			{{8,0-0:1.0.0.255,2,0},{1,0-0:96.11.6.255,2,0},{3,0-0:96.7.19.255,2,0}}	--	Get	--	Get, Set					Clock, Event Code, Duration of long power failures in any phase
4	capture_period	double_long_unsigned			0	--	Get	--	Get					asynchronously
5	sort_method	enum			1	--	Get	--	Get					FIFO
6	sort_object	capture_object_definition			{0,0-0.0.0.0,0,0}	--	Get	--	Get					Unsorted
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			50	--	Get	--	Get					
1	reset	integer				--	--	--	Action					
	Event Object -Power Quality Log		1	0	0-0:96.11.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B04FF	--	--	--	Get					
2	value	enum				--	--	--	Get					event number (0 to 255); at first power up or if no events were yet generated the value should return 255
	Event Parameter 1 (Power Quality Log)		1	0	0-0:96.11.11.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B08FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					Magnitude of Power Quality Event
	Event Parameter 2 (Power Quality Log)		1	0	0-0:96.11.12.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600B0CFF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					Duration/Number of Power Quality Event. Number at the start of event and duration at the end of event is recorded
	Power Quality Log		7	1	0-0:99.98.4.255					M	M	M	M	
1	logical_name	octet_string[6]			0000636204FF	--	Get	--	Get					
2	buffer	array				--	Get	--	Get					selective access perrange

Item	Object / Attribute Name	Object/Attribute Type	IC Cl	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTP T	Remarks
3	capture_objects	array[2..4](capture_object_definition)			{{8,0-0:1.0.0.255,2,0},{1,0-0:96.11.4.255,2,0},{1,0-0:96.11.11.255,2,0},{1,0-0:96.11.12.255,2,0}}	--	Get	--	Get, (Set)					Clock, Event Code, Magnitude, Duration
4	capture_period	double_long_unsigned			0	--	Get	--	Get					asynchronously
5	sort_method	enum			1	--	Get	--	Get					FIFO
6	sort_object	capture_object_definition			{0,0-0:0.0.0.0,0}	--	Get	--	Get					Unsorted
7	entries_in_use	double_long_unsigned				--	Get	--	Get					
8	profile_entries	double_long_unsigned			200	--	Get	--	Get					
1	reset					--	--	--	Action					
	Number of short power failures in all phases		1	0	0-0:96.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600700FF	--	--	--	Get					Time Threshold for short Power Failure is as the same as Time Threshold of missing voltage
2	value	long_unsigned				--	--	--	Get					
	Number of short power failures phase L1		1	0	0-0:96.7.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600701FF	--	--	--	Get					Time Threshold for short Power Failure is as the same as Time Threshold of missing voltage
2	value	long_unsigned				--	--	--	Get					
	Number of short power failures phase L2		1	0	0-0:96.7.2.255					NA	M	M	M	
1	logical_name	octet_string[6]			0000600702FF	--	--	--	Get					Time Threshold for short Power Failure is as the same as Time Threshold of missing voltage
2	value	long_unsigned				--	--	--	Get					
	Number of short power failures phase L3		1	0	0-0:96.7.3.255					NA	M	M	M	
1	logical_name	octet_string[6]			0000600703FF	--	--	--	Get					Time Threshold for short Power Failure is as the same as Time Threshold of missing voltage
2	value	long_unsigned				--	--	--	Get					
	Number of long power failures in all phases		1	0	0-0:96.7.5.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600705FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Number of long power failures in phase L1		1	0	0-0:96.7.6.255					M	M	M	M	
1	logical_name	octet_string[6]			0000600706FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Number of long power failures in phase L2		1	0	0-0:96.7.7.255					NA	M	M	M	

[illegible]

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V ₁	OBIS code/ Default Value	Pub(16)	Reading (2)	Pre-Est.(102)	Mng(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
	Average voltage L1		3	0	1-0:32.24.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100201800FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					10 minutes average voltage
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Instantaneous current L1		3	0	1-0:31.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01001F0700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A, resolution: 0.00 A
	Sliding Average current L1 (for fuse supervision)		5	0	1-0:31.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01001F0400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A, resolution: 0.00 A
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			1	--	--	--	Get					
9	number_of_periods	long_unsigned			[1...90]	--	--	--	Get, Set					Default=90
	Instantaneous voltage L2		3	0	1-0:52.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100340700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Average voltage L2		3	0	1-0:52.24.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100341800FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					10 minutes average voltage
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Instantaneous current L2		3	0	1-0:51.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100330700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A, resolution: 0.00 A
	Sliding Average current L2 (for fuse supervision)		5	0	1-0:51.4.0.255					NA	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			0100330400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A, resolution: 0.00 A
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			1	--	--	--	Get					
9	number_of_periods	long_unsigned			[1...90]	--	--	--	Get, Set					Default=90
	Instantaneous voltage L3		3	0	1-0:72.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100480700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Average voltage L3		3	0	1-0:72.24.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100481800FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					10 minutes average voltage
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Instantaneous current L3		3	0	1-0:71.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100470700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A, resolution: 0.00 A
	Sliding Average current L3 (for fuse supervision)		5	0	1-0:71.4.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100470400FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A, resolution: 0.00 A
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			1	--	--	--	Get					
9	number_of_periods	long_unsigned			[1...90]	--	--	--	Get, Set					Default=90
	Instantaneous current(sum over all phases)		3	0	1-0:90.7.0.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			01005A0700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					total current (sum of all phases)
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A, resolution: 0.00 A
	Instantaneous net frequency		3	0	1-0:14.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000E0700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,44}	--	--	--	Get					scaler=-1, unit=Hz resolution: 0.0
	Instantaneous active power (+A + -A)		3	0	1-0:15.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F0700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					sum of all phases: QI+QIV + QII+QIII
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
	Instantaneous active import power (+A)		3	0	1-0:1.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100010700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
	Instantaneous active export power (-A)		3	0	1-0:2.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100020700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
	Instantaneous reactive import power (+R)		3	0	1-0:3.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100030700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
	Instantaneous reactive export power (-R)		3	0	1-0:4.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100040700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
	Instantaneous apparent import power (+VA)		3	0	1-0:9.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100090700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng. (1)	1p	3p-DC	3p-CT	3p-CTPT	Remarks
3	scaler_unit	scal_unit_type			{-1,28} for CT/PT, other types {0,28}	--	--	--	Get					
	Instantaneous apparent export power (-VA)		3	0	1-0:10.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000A0700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,28} for CT/PT, other types {0,28}	--	--	--	Get					
	Instantaneous active import power (+A) L1		3	0	1-0:21.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100150700FF	--	--	--	Get					
2	Value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous active export power (-A) L1		3	0	1-0:22.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100160700FF	--	--	--	Get					
2	Value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous reactive import power (+R) L1		3	0	1-0:23.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100170700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous reactive export power (-R) L1		3	0	1-0:24.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100180700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous power factor (PF) L1		3	0	1-0:33.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100210700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Instantaneous active import power (+A) L2		3	0	1-0:41.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100290700FF	--	--	--	Get					
2	Value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous active export power (-A) L2		3	0	1-0:42.7.0.255					NA	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est (102)	Mng (1)	1p	3p-DC	3p-CT	3p-CT/PT	Remarks
1	logical_name	octet_string[6]			01002A0700FF	--	--	--	Get					
2	Value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous reactive import power (+R) L2		3	0	1-0:43.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			01002B0700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous reactive export power (-R) L2		3	0	1-0:44.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			01002C0700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous power factor (PF) L2		3	0	1-0:53.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100350700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Instantaneous active import power (+A) L3		3	0	1-0:61.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			01003D0700FF	--	--	--	Get					
2	Value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous active export power (-A) L3		3	0	1-0:62.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			01003E0700FF	--	--	--	Get					
2	Value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous reactive import power (+R) L3		3	0	1-0:63.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			01003F0700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous reactive export power (-R) L3		3	0	1-0:64.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100400700FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(6)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Instantaneous power factor (PF) L3		3	0	1-0:73.7.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100490700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Average Import Power (+A)		5	0	1-0:1.24.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100011800FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			60	--	--	--	Get					
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					
	Average Net Power (+A - -A)		5	0	1-0:16.24.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100101800FF	--	--	--	Get					
2	current_average_value	double_long				--	--	--	Get					
3	last_average_value	double_long				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			60	--	--	--	Get					
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					
	Average Total Power (+A + -A)		5	0	1-0:15.24.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000F1800FF	--	--	--	Get					
2	current_average_value	double_long_unsigned				--	--	--	Get					
3	last_average_value	double_long_unsigned				--	--	--	Get					
4	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
5	status	unsigned			0	--	--	--	Get					
6	capture_time	octet_string				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
7	start_time_current	octet_string				--	--	--	Get					
8	period	double_long_unsigned			60	--	--	--	Get					
9	number_of_periods	long_unsigned			15	--	--	--	Get, Set					
	Instantaneous Power factor (+A/+VA)		3	0	1-0:13.7.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000D0700FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Phase Angle from I(L1) to U(L1)		3	0	1-0:81.7.4.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100510704FF	--	--	--	Get					
2	value	long				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,8}	--	--	--	Get					
	Phase Angle from I(L2) to U(L2)		3	0	1-0:81.7.15.255					NA	M	M	M	
1	logical_name	octet_string[6]			010051070FFF	--	--	--	Get					
2	value	long				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,8}	--	--	--	Get					
	Phase Angle from I(L3) to U(L3)		3	0	1-0:81.7.26.255					NA	M	M	M	
1	logical_name	octet_string[6]			010051071AFF	--	--	--	Get					
2	value	long				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,8}	--	--	--	Get					
	Measurement Period 3 for Instantaneous values		3	0	1-0:0.8.2.255					M	M	M	M	only for 3 objects: 1-0:32.24.0.255 1-0:52.24.0.255 1-0:72.24.0.255
1	logical_name	octet_string[6]			0100000802FF	--	--	--	Get					
2	value	double_long_unsigned			600	--	--	--	Get, Set					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	Get					
16	Average, Max and Min values (interval)													
	Last average value of voltage L1		3	0	1-0:32.25.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100201900FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V, resolution: 0.0 V
	Last average value of voltage L2		3	0	1-0:52.25.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100341900FF	--	--	--	Get					

[illegible]

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CT/PT	Remarks
	Last average value of power factor		3	0	1-0:13.25.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000D1900FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Last average value of import active power		3	0	1-0:1.25.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100011900FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Last average value of export active power		3	0	1-0:2.25.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100021900FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Last average value of import reactive power		3	0	1-0:3.25.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100031900FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Last average value of export reactive power		3	0	1-0:4.25.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100041900FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Maximum value of voltage L1		3	0	1-0:32.226.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010020E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Maximum value of voltage L2		3	0	1-0:52.226.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010034E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Maximum value of voltage L3		3	0	1-0:72.226.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010048E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=-1, unit=V resolution: 0.0 V
	Maximum value of current L1		3	0	1-0:31.226.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01001FE200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A resolution: 0.00 A
	Maximum value of current L2		3	0	1-0:51.226.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010033E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A resolution: 0.00 A
	Maximum value of current L3		3	0	1-0:71.226.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010047E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=-2, unit=A resolution: 0.00 A
	Maximum value of power factor L1		3	0	1-0:33.226.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010021E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Maximum value of power factor L2		3	0	1-0:53.226.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010035E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Maximum value of power factor L3		3	0	1-0:73.226.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010049E200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Maximum value of power factor		3	0	1-0:13.226.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000DE200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Maximum value of import active power		3	0	1-0:1.226.0.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			010001E200FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
	Maximum value of export active power		3	0	1-0:2.226.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010002E200FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					
	Maximum value of import reactive power		3	0	1-0:3.226.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010003E200FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
	Maximum value of export reactive power		3	0	1-0:4.226.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010004E200FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					
	Minimum value of voltage L1		3	0	1-0:32.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010020DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=0 or-1, unit=V resolution: 0 or 0.0 V
	Minimum value of voltage L2		3	0	1-0:52.223.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010034DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=0 or-1, unit=V resolution: 0 or 0.0 V
	Minimum value of voltage L3		3	0	1-0:72.223.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010048DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					scaler=0 or-1, unit=V resolution: 0 or 0.0 V
	Minimum value of current L1		3	0	1-0:31.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01001FDF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=0,-1 or-2, unit=A resolution: 0, 0.0 or 0.00 A

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
	Minimum value of current L2		3	0	1-0:51.223.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010033DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=0,-1 or-2, unit=A resolution: 0, 0.0 or 0.00 A
	Minimum value of current L3		3	0	1-0:71.223.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010047DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					scaler=0,-1 or-2, unit=A resolution: 0, 0.0 or 0.00 A
	Minimum value of power factor L1		3	0	1-0:33.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010021DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					
	Minimum value of power factor L2		3	0	1-0:53.223.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010035DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					
	Minimum value of power factor L3		3	0	1-0:73.223.0.255					NA	M	M	M	
1	logical_name	octet_string[6]			010049DF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					
	Minimum value of power factor		3	0	1-0:13.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			01000DDF00FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-3,255}	--	--	--	Get					resolution: 0.000
	Minimum value of import active power		3	0	1-0:1.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010001DF00FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Minimum value of export active power		3	0	1-0:2.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010002DF00FF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC Cl	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTP	Remarks
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,27} for CT/PT, other types {0,27}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Minimum value of import reactive power		3	0	1-0:3.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010003DF00FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
	Minimum value of export reactive power		3	0	1-0:4.223.0.255					M	M	M	M	
1	logical_name	octet_string[6]			010004DF00FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,29} for CT/PT, other types {0,29}	--	--	--	Get					resolution: 0.0 for CT/PT, 0 for other types
17	Harmonic Related Objects													
	Current Average value of 3rd harmonic Distortion voltage L1		3	0	1-0:32.24.3.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100201803FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 3rd harmonic Distortion voltage L2		3	0	1-0:52.24.3.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100341803FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 3rd harmonic Distortion voltage L3		3	0	1-0:72.24.3.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100481803FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 5th harmonic Distortion voltage L1		3	0	1-0:32.24.5.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100201805FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 5th harmonic Distortion voltage L2		3	0	1-0:52.24.5.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100341805FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					

[illegible]

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
	Current Average value of 11th harmonic Distortion voltage L1		3	0	1-0:32.24.11.255					NA	M	M	M	
1	logical_name	octet_string[6]			010020180BFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 11th harmonic Distortion voltage L2		3	0	1-0:52.24.11.255					NA	M	M	M	
1	logical_name	octet_string[6]			010034180BFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 11th harmonic Distortion voltage L3		3	0	1-0:72.24.11.255					NA	M	M	M	
1	logical_name	octet_string[6]			010048180BFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 13th harmonic Distortion voltage L1		3	0	1-0:32.24.13.255					NA	M	M	M	
1	logical_name	octet_string[6]			010020180DFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 13th harmonic Distortion voltage L2		3	0	1-0:52.24.13.255					NA	M	M	M	
1	logical_name	octet_string[6]			010034180DFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 13th harmonic Distortion voltage L3		3	0	1-0:72.24.13.255					NA	M	M	M	
1	logical_name	octet_string[6]			010048180DFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of THD of voltage L1		3	0	1-0:32.24.124.255					NA	M	M	M	
1	logical_name	octet_string[6]			010020187CFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of THD of voltage L2		3	0	1-0:52.24.124.255					NA	M	M	M	
1	logical_name	octet_string[6]			010034187CFF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of THD of voltage L3		3	0	1-0:72.24.124.255					NA	M	M	M	
1	logical_name	octet_string[6]			010048187CFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 3rd harmonic Distortion current L1		3	0	1-0:31.24.3.255					NA	M	M	M	
1	logical_name	octet_string[6]			01001F1803FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 3rd harmonic Distortion current L2		3	0	1-0:51.24.3.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100331803FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 3rd harmonic Distortion current L3		3	0	1-0:71.24.3.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100471803FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 5th harmonic Distortion current L1		3	0	1-0:31.24.5.255					NA	M	M	M	
1	logical_name	octet_string[6]			01001F1805FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 5th harmonic Distortion current L2		3	0	1-0:51.24.5.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100331805FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 5th harmonic Distortion current L3		3	0	1-0:71.24.5.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100471805FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
	Current Average value of 7th harmonic Distortion current L1		3	0	1-0:31.24.7.255					NA	M	M	M	
1	logical_name	octet_string[6]			01001F1807FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	-	--	Get					resolution: 0.0
	Current Average value of 7th harmonic Distortion current L2		3	0	1-0:51.24.7.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100331807FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 7th harmonic Distortion current L3		3	0	1-0:71.24.7.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100471807FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 9th harmonic Distortion current L1		3	0	1-0:31.24.9.255					NA	M	M	M	
1	logical_name	octet_string[6]			01001F1809FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 9th harmonic Distortion current L2		3	0	1-0:51.24.9.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100331809FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 9th harmonic Distortion current L3		3	0	1-0:71.24.9.255					NA	M	M	M	
1	logical_name	octet_string[6]			0100471809FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 11th harmonic Distortion current L1		3	0	1-0:31.24.11.255					NA	M	M	M	
1	logical_name	octet_string[6]			01001F1808FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 11th harmonic Distortion current L2		3	0	1-0:51.24.11.255					NA	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			010033180BFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 11th harmonic Distortion current L3		3	0	1-0:71.24.11.255					NA	M	M	M	
1	logical_name	octet_string[6]			010047180BFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 13th harmonic Distortion current L1		3	0	1-0:31.24.13.255					NA	M	M	M	
1	logical_name	octet_string[6]			01001F180DFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 13th harmonic Distortion current L2		3	0	1-0:51.24.13.255					NA	M	M	M	
1	logical_name	octet_string[6]			010033180DFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of 13th harmonic Distortion current L3		3	0	1-0:71.24.13.255					NA	M	M	M	
1	logical_name	octet_string[6]			010047180DFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of THD of current L1		3	0	1-0:31.24.124.255					NA	M	M	M	
1	logical_name	octet_string[6]			01001F187CFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of THD of current L2		3	0	1-0:51.24.124.255					NA	M	M	M	
1	logical_name	octet_string[6]			010033187CFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Current Average value of THD of current L3		3	0	1-0:71.24.124.255					NA	M	M	M	
1	logical_name	octet_string[6]			010047187CFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTP1	Remarks
3	scaler_unit	scal_unit_type			{-1,56}	--	--	--	Get					resolution: 0.0
	Fundamental current of L1		3	0	1-0:31.7.1.255					NA	O	O	O	
1	logical_name	octet_string[6]			01001F0701FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					
	Fundamental current of L3		3	0	1-0:71.7.1.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100470701FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					
	Fundamental current of L2		3	0	1-0:51.7.1.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100330701FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,33}	--	--	--	Get					
	Fundamental voltage of L1		3	0	1-0:32.7.1.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100480701FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					
	Fundamental voltage of L2		3	0	1-0:52.7.1.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100340701FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					
	Fundamental voltage of L3		3	0	1-0:72.7.1.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100200701FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	Get					
	cumulative power off duration		3	0	0-0:96.7.131.255					M	M	M	M	
1	logical_name	octet_string [6]			0000600783FF	--	(Get)	--	Get					
2	value	Double-long_unsigned				--	(Get)	--	Get					
3	scaler_unit	scal_unit_type			{0,7}	--	(Get)	--	(Get)					
	Energy management - credit		1	0	0-0:94.98.51.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet-string			00005E6233FF	--	--	--	Get					
2	value	Structure (With 5 elements) { unsigned Mode: (default 0) 0-Credit management inactive 1-Credit management active, no action at the end; Once Credit and extension time expired, just event recorded/ captured data in billing profile. 2-Credit management active, disconnect relay at the end; Once Credit and extension time expired, As well as record event and captured data in billing profile, execute disconnect command (record related event) priority is the same as remote disconnect 3-Credit management active, Limiter activated with critical threshold Once Credit and extension time expired, as well as record event and captured data in billing profile, Limiter thresholds substitute with new Threshold until new credit assign or credit management deactivated. double_long_unsigned Extension Time(sec.): Once Credit management were activated after Credit expired customer has this dead line for payment (default 0) unsigned ended credit Critical threshold coefficient: in Mode=3 once Extension time expired Emergency and Normal threshold (in Limiter object class 71) will be substituted with multiplication of this value to Emergency threshold (default 100% Emergency threshold) unsigned low credit threshold (default 20% of assigned credit) char_unsigned reserve for future (default 0) }				--	(Get)	--	Get, Set					
	Tariffication rates		1	0	0-0:94.98.52.255					M	M	M	M	
1	logical_name	octet-string			00005E6234FF	--	--	--	Get					
2	rate factor for each tariff	Structure (with 4 elements) { long_unsigned Factor for rate1(default value 100%): long_unsigned Factor for rate2(default value 100%): long_unsigned Factor for rate3(default value 100%): long_unsigned Factor for rate4(default value 100%):				--	--	--	Get, Set					
	Credit amount		1	0	0-0:94.98.54.255					M	M	M	M	
1	logical_name	octet-string			00005E6236FF	--	Get	--	Get					
2	Credit	double_long				--	Get	--	Get, Set					unit = wh scaler is according to energ registers of each meter type
19	Local communication - IEC/HDLC Optical port													
	IEC HDLC setup -HDLC Optical port		23	1	0-0:22.0.0.255					M	M	M	M	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet_string[6]			0000160000FF	--	--	--	Get					
2	comm_speed	enum			choice (5 ,6) , Default 5	--	--	--	Get, Set					6 is optional
3	window_size_transmit	unsigned			[1..7], default 1	--	--	--	Get,(Set)					
4	window_size_receive	unsigned			[1..7], default 1	--	--	--	Get, (Set)					
5	max_info_field_lenght_transmit	long_unsigned			[256 ...]	--	--	--	Get					
6	max_info_field_lenght_receive	long_unsigned			[256 ...]	--	--	--	Get					
7	inter_octet_time_out	long_unsigned			[20..6000]	--	--	--	Get, Set					
8	inactivity_time_out	long_unsigned			180	--	--	--	Get, Set					
9	device_address	long_unsigned			17	--	--	--	Get					
	IEC Local port setup		19	1	0-0:20.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000140000FF	--	--	--	Get					
2	default_mod	enum			choice (0,1) , Default 0	--	--	--	Get, Set					MODE 0=MODE E MODE 1=HDLC
3	default_baud	enum			choice (0,9) , Default 0	--	--	--	Get, Set					300
4	prop_baud	enum			choice (5, 6) , Default 5	--	--	--	Get, Set					9600
5	response_time	enum			choice (0,1) , Default 1	--	--	--	Get, Set					
6	device_addr	octet_string				--	--	--	(Get), (Set)					null or device ID7
7	pass_p1	octet_string				--	--	--	(Set)					
8	pass_p2	octet_string				--	--	--	(Set)					
9	pass_w5	octet_string				--	--	--	(Set)					
	IEC HDLC setup -Consumer Information Interface		23	1	0-1:22.0.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0001160000FF	--	--	--	Get					
2	comm_speed	enum			choice(4,5,6)	--	--	--	Get, Set					4800,9 600,19200 baud
3	window_size_transmit	unsigned			[1..7], default 1	--	--	--	Get,(Set)					
4	window_size_receive	unsigned			[1..7], default 1	--	--	--	Get, (Set)					
5	max_info_field_lenght_transmit	long_unsigned			[32..2030]	--	--	--	Get, Set					
6	max_info_field_lenght_receive	long_unsigned			[32..2030]	--	--	--	Get, Set					
7	inter_octet_time_out	long_unsigned			[20..6000]	--	--	--	Get, Set					
8	inactivity_time_out	long_unsigned			180	--	--	--	Get, Set					
9	device_address	long_unsigned				--	--	--	Get, Set					
	IEC HDLC setup -HDLC electrical port (RS485)		23	1	0-2:22.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0002160000FF	--	--	--	Get					
2	comm_speed	enum			choice(4,5,6)	--	--	--	Get, Set					4800,9 600,19200 baud
3	window_size_transmit	unsigned			1	--	--	--	Get,(Set)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub(16)	Reading (2)	Pre-Est.(102)	Mng(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
4	window_size_receive	unsigned			1	--	--	--	Get, (Set)					
5	max_info_field_lenght_transmit	long_unsigned			[256 ...]	--	--	--	Get					
6	max_info_field_lenght_receive	long_unsigned			[256 ...]	--	--	--	Get					
7	inter_octet_time_out	long_unsigned			[20..6000]	--	--	--	Get, Set					
8	inactivity_time_out	long_unsigned			180	--	--	--	Get, Set					
9	device_address	long_unsigned				--	--	--	Get					4 digits to the right of the meter serial number + 1000.
20	Other Objects													
	Active Quadrant		1	0	1-0:94.98.10.255					M	M	M	M	
1	logical_name	octet_string[6]			01005E620AFF	--	--	--	Get					
2	value	unsigned				--	--	--	Get					
	Active Quadrant L1		1	0	1-0:94.98.11.255					NA	M	M	M	
1	logical_name	octet_string[6]			01005E620BFF	--	--	--	Get					
2	value	unsigned			0= creep or no Quadrant detected 1,2,3,4 =Active Quadrant (QI,QII,QIII,QIV)	--	--	--	Get					Active power quadrant indicator
	Active Quadrant L2		1	0	1-0:94.98.12.255					NA	M	M	M	
1	logical_name	octet_string[6]			01005E620CFF	--	--	--	Get					
2	value	unsigned			0= creep or no Quadrant detected 1,2,3,4 =Active Quadrant (QI,QII,QIII,QIV)	--	--	--	Get					Active power quadrant indicator
	Active Quadrant L3		1	0	1-0:94.98.13.255					NA	M	M	M	
1	logical_name	octet_string[6]			01005E620DFF	--	--	--	Get					
2	value	unsigned			0= creep or no Quadrant detected 1,2,3,4 =Active Quadrant (QI,QII,QIII,QIV)	--	--	--	Get					Active power quadrant indicator
	Phase Presence		1	0	1-0:94.98.14.255					NA	M	M	M	
1	logical_name	octet_string[6]			01005E620EFF	--	--	--	Get					
2	value	unsigned			Bit0: phase L1, Bit1:phase L2, Bit2:phase L3	--	--	--	Get					Phase presence indicator
	Unbalance Load Detection		1	0	0-0:94.98.15.255					NA	M	M	M	
1	logical_name	octet_string[6]			00005E620FFF	--	--	--	Get					
2	value	{ minimum current that activate unbalance task in meter long_unsigned Unbalance threshold (%) long_unsigned }				--	--	--	Get , Set					the scaler of minimum current for unbalance load detection threshold is Scaler=> -2

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng. (1)	1p	3p-DC	3p-CT	3p-CTPT	Remarks
	Transformer ratio – current (numerator)		1	0	1-0:0.4.2.255					NA	NA	M	M	
1	logical_name	octet_string[6]			0100000402FF	--	--	--	Get					
2	value	long-unsigned				--	--	--	Get, Set					set is not allowed in CT meters
	Transformer ratio – voltage (numerator)		1	0	1-0:0.4.3.255					NA	NA	NA	M	
1	logical_name	octet_string[6]			0100000403FF	--	--	--	Get					
2	value	long-unsigned				--	--	--	Get, Set					
	Transformer ratio – current (denominator)		1	0	1-0:0.4.5.255					NA	NA	M	M	
1	logical_name	octet_string[6]			0100000405FF	--	--	--	Get					
2	value	long-unsigned				--	--	--	Get, Set					set is not allowed in CT meters
	Transformer ratio – voltage (denominator)		1	0	1-0:0.4.6.255					NA	NA	NA	M	
1	logical_name	octet_string[6]			0100000406FF	--	--	--	Get					
2	value	long-unsigned				--	--	--	Get, Set					
	General Display readout List-Auto Scroll		7	1	0-0:21.0.1.255					M	M	M	M	
1	logical_name	octet_string[6]			0000150001FF	--	--	--	Get					
2	buffer	array				--	--	--	Get					
3	capture_objects	array[*..100]			Choice (energies, instant, demands, maximum demands values, device ID's, Error, alarms, Actual time, actual date, meter IP address, credit amount.....)	--	--	--	Get, Set					acc. to meter's data sheet
4	capture_period	double_long_unsigned			10 seconds	--	--	--	Get, Set					Auto scroll display retention time (10..60)seconds
5	sort_method	enum			1	--	--	--	Get					
6	sort_object	capture_object_definition			none	--	--	--	Get					
7	entries_in_use	double_long_unsigned				--	--	--	(Get)					
8	profile_entries	double_long_unsigned			1	--	--	--	(Get)					
1	reset					--	--	--	Action					
	Alternative Display readout List-Manual Scroll		7	1	0-0:21.0.2.255					M	M	M	M	
1	logical_name	octet_string[6]			0000150002FF	--	--	--	Get					
2	buffer	array				--	--	--	Get					
3	capture_objects	array[*..100]			Choice (energies, instant, demands, maximum demands values, device ID's, Error, alarms, Actual time, actual date, meter IP address, credit amount.....)	--	--	--	Get, Set					acc. to meter's data sheet
4	capture_period	double_long_unsigned			60 seconds	--	--	--	Get, Set					Manual scroll display timeout (60.. 3600)seconds

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
5	sort_method	enum			1	--	--	--	Get					
6	sort_object	capture_object_definition			none	--	--	--	Get					
7	entries_in_use	double_long_unsigned				--	--	--	(Get)					
8	profile_entries	double_long_unsigned			1	--	--	--	(Get)					
1	reset					--	--	--	Action					
	Alternative Display List 1-Manual Scroll		7	1	0-0:21.0.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0000150003FF	--	--	--	Get					
2	buffer	array				--	--	--	Get					
3	capture_objects	array[*..100]			Choice (energy registers, instant, demands, maximum demands, Power Failure,Fraud,... values) default: energy registers	--	--	--	Get, (Set)					acc. to meter's data sheet
4	capture_period	double_long_unsigned			60 seconds	--	--	--	Get					Manual scroll display timeout (60.. 3600)seconds
5	sort_method	enum			1	--	--	--	Get					
6	sort_object	capture_object_definition			none	--	--	--	Get					
7	entries_in_use	double_long_unsigned				--	--	--	(Get)					
8	profile_entries	double_long_unsigned			1	--	--	--	(Get)					
1	reset					--	--	--	Action					
	Alternative Display List 2-Manual Scroll		7	1	0-1:21.0.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0001150003FF	--	--	--	Get					
2	buffer	array				--	--	--	Get					
3	capture_objects	array[*..100]			Choice (energy registers, instant, demands, maximum demands, Power Failure,Fraud,... values) default: Instantaneous parameters	--	--	--	Get, (Set)					acc. to meter's data sheet
4	capture_period	double_long_unsigned			60 seconds	--	--	--	Get					Manual scroll display timeout (60.. 3600)seconds
5	sort_method	enum			1	--	--	--	Get					
6	sort_object	capture_object_definition			none	--	--	--	Get					
7	entries_in_use	double_long_unsigned				--	--	--	(Get)					
8	profile_entries	double_long_unsigned			1	--	--	--	(Get)					
1	reset					--	--	--	Action					
	Alternative Display List 3-Manual Scroll		7	1	0-2:21.0.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0002150003FF	--	--	--	Get					
2	buffer	array				--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	capture_objects	array[*..100]			Choice (energy registers, instant, demands, maximum demands, Power Failure,Fraud,... values) default: maximum demands	--	--	--	Get, (Set)					acc. to meter's data sheet
4	capture_period	double_long_unsigned			60 seconds	--	--	--	Get					Manual scroll display timeout (60.. 3600)seconds
5	sort_method	enum			1	--	--	--	Get					
6	sort_object	capture_object_definition			none	--	--	--	Get					
7	entries_in_use	double_long_unsigned				--	--	--	(Get)					
8	profile_entries	double_long_unsigned			1	--	--	--	(Get)					
1	reset					--	--	--	Action					
21	Abstract objects - TCP/IP profile setup													
	TCP-UDP setup		41	0	0-0:25.0.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0000190000FF	--	--	--	Get					
2	TCP-UDP_port	long-unsigned			4059	--	--	--	Get, Set					
3	IP_reference	octet-string			0-0:25.1.0.255	--	--	--	Get					
4	MSS	long-unsigned			1280	--	--	--	Get, Set					
5	nb_of_sim_conn	unsigned			5	--	--	--	Get, Set					including both TCP and UDP
6	inactivity_time_out	long_unsigned			180	--	--	--	Get, Set					
	IPv4 setup		42	0	0-0:25.1.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0000190100FF	--	--	--	Get					
2	DL_reference	octet-string[6]			Choice(0-0:25.3.0.255, 0-0:25.2.0.255)	--	--	--	Get, Set					
3	IP_address	double-long-unsigned				--	--	--	Get, Set					
4	multicast_IP_address	array[0..*]				--	--	--	Get, Set					
5	IP_options	array[0..*]				--	--	--	Get, Set					
6	subnet_mask	double-long-unsigned				--	--	--	Get, Set					
7	gateway_IP_address	double-long-unsigned				--	--	--	Get, Set					
8	use_DHCP_flag	boolean				--	--	--	Get, Set					
9	primary_DNS_address	double-long-unsigned				--	--	--	Get, Set					
10	secondary_DNS_address	double-long-unsigned				--	--	--	Get, Set					
1	add_mc_IP_address (data)	double-long-unsigned				--	--	--	--					
2	delete_mc_IP_address (data)	double-long-unsigned				--	--	--	--					
3	get_nbof_mc_IP_addresses (data)	unsigned				--	--	--	--					
	IPv6 setup		48	0	0-0:25.7.0.255					O	O	O	O	

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Set (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
1	logical_name	octet-string[6]			0000190700FF	--	--	--	Get					
2	DL_reference	octet-string[6]			Choice(0-0:25.3.0.255, 0-0:25.2.0.255)	--	--	--	Get, Set					
3	address_config_mode	enum			0	--	--	--	Get, Set					
4	unicast_IPv6_addresses	array[0..*](IPv6_address)				--	--	--	Get, Set					
5	multicast_IPv6_addresses	array[0..*](IPv6_address)				--	--	--	Get, Set					
6	gateway_IPv6_addresses	array[0..*](IPv6_address)				--	--	--	Get, Set					
7	primary_DNS_address	IPv6_address				--	--	--	Get, Set					
8	secondary_DNS_address	IPv6_address				--	--	--	Get, Set					
9	traffic_class	unsigned				--	--	--	Get, Set					
10	neighbor_discovery_setup	array[0..*](neighbour_discovery_setup_element)				--	--	--	Get, Set					
1	add_IPv6_address (data)	IPv6_address_entry				--	--	--	--					
2	remove_IPv6_address (data)	IPv6_address_entry				--	--	--	--					
	PPP setup		44	0	0-0:25.3.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0000190300FF	--	--	--	Get					
2	PHY_reference	octet-string[6]			0-0:25.4.0.255	--	--	--	Get, Set					
3	LCP_options	array[0..8](LCP_options_element)			{ {3, 4, 0xC023},... }	--	--	--	Get, Set					{ LCP-option-type := Auth-Prot, LCP-Option-Length := 2, LCP-option-data := PAP}
4	IPCP_options	array[0..5](LCP_options_element)			{ {2, 4, 0x0000},... }	--	--	--	Get, Set					{ IPCP-option-type := IP-comp-prot, IPCP-option-Length := 2, IPCP-option-data := No-IP-Compresion-is-used}
5	PPP_authentication	PPP_authentication_type			PAP	--	--	--	Get, Set					
22	Abstract objects - Push setup													
	Push Setup interval-01		40	0	0-1:25.9.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0001190900FF	--	--	--	Get					
2	push_object_list	array[0..*](capture_object_definition)				--	--	--	Get, Set					{40,0-1:25.9.0.255,1,0,7,1-0:99.1.0.255,2,4097}
3	send_destination_and_method	send_destination_and_method_type			{choice (0,1,4),*0}	--	--	--	Get, Set					
4	communication_window	array[0..*](window_element)				--	--	--	Get, Set					
5	randomisation_start_interval	long-unsigned			0	--	--	--	Get, Set					Randomiztion time in seconds, 0 = no randomization at start of the first window defined in calling window
6	number_of_retries	unsigned				--	--	--	Get, Set					Max number of repetitions of unsuccessful push
7	repetition_delay	long-unsigned				--	--	--	Get, Set					Delay in seconds between repetitions
1	push	integer				--	--	--	Action					
	Push Setup-interval-02		40	0	0-2:25.9.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0002190900FF	--	--	--	Get					
2	push_object_list	array[0..*](capture_object_definition)				--	--	--	Get, Set					{40,0-2:25.9.0.255,1,07,1-0:99.2.0.255,2,4097}

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng. (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	send_destination_and_method	send_destination_and_method_type			{0,*0}	--	--	--	Get, Set					
4	communication_window	array[0..*](window_element)				--	--	--	Get, Set					
5	randomisation_start_interval	long-unsigned			0	--	--	--	Get, Set					Randomization time in seconds, 0 = no randomization at start of the first window defined in calling_window
6	number_of_retries	unsigned				--	--	--	Get, Set					Max number of repetitions of unsuccessful push
7	repetition_delay	long-unsigned				--	--	--	Get, Set					Delay in seconds between repetitions
1	push	integer				--	--	--	Action					
	Push setup - Interval_03		40	0	0-3:25.9.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0003190900FF	--	--	--	Get					
2	push_object_list	array[0..*](capture_object_definition)				--	--	--	Get, Set					{40,0-3:25.9.0.255,1,0 7,1-0:99.133.0.255,2,4097}
3	send_destination_and_method	send_destination_and_method_type			{0,*0}	--	--	--	Get, Set					
4	communication_window	array[0..*](window_element)				--	--	--	Get, Set					
5	randomisation_start_interval	long-unsigned			0	--	--	--	Get, Set					Randomization time in seconds, 0 = no randomization at start of the first window defined in calling_window
6	number_of_retries	unsigned				--	--	--	Get, Set					Max number of repetitions of unsuccessful push
7	repetition_delay	long-unsigned				--	--	--	Get, Set					Delay in seconds between repetitions
1	push	integer				--	--	--	Action					
	Push setup -On Alarm		40	0	0-4:25.9.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0004190900FF	--	--	--	Get					
2	push_object_list	array[0..*](capture_object_definition)			{1,0-0:97.98.20.255,2,0}//Alarm Descriptor 1 Or {1,0-0:97.98.21.255,2,0}//Alarm Descriptor 2	--	--	--	Get, Set					
3	send_destination_and_method	send_destination_and_method_type			{0,*0}	--	--	--	Get, Set					
4	communication_window	array[0..*](window_element)				--	--	--	Get, Set					
5	randomisation_start_interval	long-unsigned			0	--	--	--	Get, Set					Randomization time in seconds, 0 = no randomization at start of the first window defined in calling_window
6	number_of_retries	unsigned				--	--	--	Get, Set					Max number of repetitions of unsuccessful push
7	repetition_delay	long-unsigned				--	--	--	Get, Set					Delay in seconds between repetitions
1	push	integer				--	--	--	Action					
	Push setup -On Connectivity		40	0	0-0:25.9.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0000190900FF	--	--	--	Get					
2	push_object_list	array[0..*](capture_object_definition)			{1, 0-0:96.1.5.255}	--	--	--	Get, Set					{40,0-0:25.9.0.255,1,0 1,0-0:42.0.0.255,2,0 1,0-0:96.1.5.255,2,0 1,1-0:0.0.0.255,2,0 1,0-0:94.98.60.255,2,0}

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	send_destination_and_method	send_destination_and_method_type			{0,*0}	--	--	--	Get, Set					
4	communication_window	array[0..*](window_element)				--	--	--	Get, Set					
5	randomisation_start_interval	long-unsigned			0	--	--	--	Get, Set					Randomization time in seconds, 0 = no randomization at start of the first window defined in calling_window
6	number_of_retries	unsigned				--	--	--	Get, Set					Max number of repetitions of unsuccessful push
7	repetition_delay	long-unsigned				--	--	--	Get, Set					Delay in seconds between repetitions
1	push	integer				--	--	--	Action					
	Push setup -On Installation		40	0	0-7:25.9.0.255					M	M	M	M	
1	logical_name	octet-string[6]			0007190900FF	--	--	--	Get					
2	push_object_list	array[0..*](capture_object_definition)				--	--	--	Get, Set					
3	send_destination_and_method	send_destination_and_method_type			{4,*0}	--	--	--	Get, Set					
4	communication_window	array[0..*](window_element)				--	--	--	Get, Set					
5	randomisation_start_interval	long-unsigned			0	--	--	--	Get, Set					Randomization time in seconds, 0 = no randomization at start of the first window defined in calling_window
6	number_of_retries	unsigned				--	--	--	Get, Set					Max number of repetitions of unsuccessful push
7	repetition_delay	long-unsigned				--	--	--	Get, Set					Delay in seconds between repetitions
1	push	integer				--	--	--	Action					
	Push script table		9	0	0-0:10.0.108.255					M	M	M	M	
1	logical_name	octet_string[6]			00000A006CFF	--	--	--	Get					
2	scripts	array[7](script9)			{ {1,{{2,40,0-1:25.9.0.255,1,0}}}, //Push Setup interval-01 {2,{{2,40,0-2:25.9.0.255,1,0}}}, //Push Setup interval-02 {3,{{2,40,0-3:25.9.0.255,1,0}}}, //Push Setup interval-03 {4,{{2,40,0-4:25.9.0.255,1,0}}}, //Push - On Alarm {5,{{2,40,0-0:25.9.0.255,1,0}}}, //Push - On Connectivity {6,{{2,40,0-7:25.9.0.255,1,0}}}, //Push - On Installation {7,{{2,40,0-6:25.9.0.255,1,0}}}, //Push- Consumer information }	--	--	--	Get, (Set)					
1	execute	long_unsigned				--	--	--	Action					
	Push action scheduler – Interval_01		22	0	0-1:15.0.4.255					M	M	M	M	
1	logical_name	octet_string[6]			00010F0004FF	--	--	--	Get					
2	executed_script	script22			{0-0:10.0.108.255,1}	--	--	--	Get, (Set)					
3	type	enum			5	--	--	--	Get, (Set)					n=4
4	execution_time	array[0..*](execution_time_date)				--	--	--	Get, Set					The schedule can be disabled with writing {"FFFFFFFF", "FFFFFFFFFFFF"}
	Push action scheduler - Interval_02		22	0	0-2:15.0.4.255					M	M	M	M	
1	logical_name	octet_string[6]			00020F0004FF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading(2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	executed_script	script22			{0-0:10.0.108.255,2}	--	--	--	Get, (Set)					
3	type	enum			5	--	--	--	Get, (Set)					n=4
4	execution_time	array[0..*](execution_time_date)				--	--	--	Get, Set					The schedule can be disabled with writing {"FFFFFFFF", "FFFFFFFFFFFF"}
	Push action scheduler - Interval_03		22	0	0-3:15.0.4.255					M	M	M	M	
1	logical_name	octet_string[6]			00030F0004FF	--	--	--	Get					
2	executed_script	script22			{0-0:10.0.108.255,3}	--	--	--	Get, (Set)					
3	type	enum			5	--	--	--	Get, (Set)					n=4
4	execution_time	array[0..*](execution_time_date)				--	--	--	Get, Set					
23	Remote communication - Abstract Objects for Network Mgmt													
	Auto connect		29	2	0-0:2.1.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000020100FF	--	--	--	Get					
2	mode	enum			101	--	--	--	Get, Set					meter shall support all modes (101,102,103 and 104)
3	repetitions	unsigned			0	--	--	--	Get, Set					
4	repetition_delay	long-unsigned			0	--	--	--	Get, Set					
5	calling_window	array[0..*](window_element)				--	--	--	Get, Set					
6	destination_list	array[0..*]				--	--	--	Get, Set					Head-end IP address in Always-on Mode
1	connect	integer				--	--	--	Action					
	MAC address setup		43	0	0-0:25.2.0.255									For PLC meter
1	logical_name	octet_string[6]			0000190200FF	--	--	--	Get					
2	MAC address	octet_string				--	--	--	Get					
24	Remote communication - GSM/GPRS Setup Objects													
	GPRS modem setup		45	0	0-0:25.4.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000190400FF	--	--	--	Get					
2	APN	octet_string[0..64]				--	--	--	Get, Set					An APN with a size of 64 bytes at least is supported, i.e. [0..64] is mandatory but can be longer
3	PIN_code	long-unsigned				--	--	--	Get, Set					
4	quality_of_service	quality_of_service_type				--	--	--	Get, Set					
	Modem Configuration		27	1	0-0:2.0.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000020000FF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	comm_speed	enum				--	--	--	Get, Set					
3	initialization_string	array				--	--	--	Get, Set					
4	modem_profile	array				--	--	--	Get, Set					
	Auto Answer		28	2	0-0:2.2.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000020200FF	--	--	--	Get					
2	mode	enum			0	--	--	--	Get, Set					
3	listening_window	array[0..*]				--	--	--	Get, Set					Array[0] equals always listening
4	status	enum				--	--	--	Get, Set					
5	number_of_calls	unsigned				--	--	--	Get, Set					
6	number_of_rings	nr_rings_type				--	--	--	Get, Set					
7	list_of_allowed_callers	array[5..*](list_of_allowed_callers_element)				--	--	--	Get, Set					phone number is an ASCII coded octet-string of phone number length
	GPRS Keep Alive Time Interval		1	0	0-0:94.98.19.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6213FF	--	--	--	Get					
2	value	structure { boolean:switch Long_unsigned: ideal_time Long_unsigned: Delay_retry_interval_value }			switch: enable/disable Ideal_time (30...1800)seconds, 60 Interval_value: (10...20) seconds, 10	--	--	--	Get, Set					Switch Functionality enable=1/disable=0 Ideal_time: How often is the TCP heart beat package sent Delay_retry_interval_value: Retry delay if sending heart beat package failed
1	reset					--	--	--	--					
	Local Authentication protection		1	0	0-0:94.98.20.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6214FF	--	--	--	Get					
2	value	structure { unsigned: failed attempts unsigned: lockout time }			failed attempts: (1..10) tmes lockout time: (1..180) minutes	--	--	--	Get, Set					failed attempts: number of authentication failures after which the communication port is disabled lockout time: time, in minutes, for which a locked out communication channel is disabled
	Disable/Enable Manual Demand Reset		1	0	0-0:94.98.27.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6218FF	--	--	--	Get					
2	value	unsigned			0,1	--	--	--	Get, Set					Manual Demand Reset button 0=disable,1=Enable
	International Mobile Station Equipment Identity (IMEI)		1	0	0-0:94.98.22.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6216FF	--	--	--	Get					
2	value	visible_string[0..16]: IMEI (ASCII digits)				--	--	--	Get					Holds the IMEI of the communication module (if inserted), empty otherwise.
	Profile compression type		1	0	0-0:94.98.21.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6215FF	--	--	--	Get					
2	value	long-unsigned				--	--	--	Get, Set					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
	fraud Lock Time		1	0	0-0:94.98.24.255					M	M	M	M	
1	logical_name	octet_string[6]			00005E6218FF	--	--	--	Get					this object indicates lock time duration for the same type fraud. It means the same type fraud will not be recorded repeatedly if the duration of occurrence is less than fraud lock time duration.
2	value	unsigned			Choice (1 min, 60 min) Defalt=15min	--	--	--	Get, Set					
	signal strength		1	0	0-4:96.12.5.255					O	O	O	O	
1	logical_name	octet_string[6]			0004600C05FF	--	--	--	Get					
2	value	unsigned				Get	--	--	Get					Range of Signal Strength between 1 to 31 by 1 step.
	Gateway mode (Master/slave)		1	0	0-0:128.6.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0000800600FF	--	--	--	Get					
2	value	enum				--	--	--	Get, Set					Value 0: for normal application rs485 Value 1:for Gateway application value2:both (optional)
	Relay Inverse mode		1	0	0-0-146.129.41.255					NA	NA	M	M	
1	logical_name	octet_string[6]			0000928129FF	--	--	--	Get					
2	value	Boolean				--	--	--	Get, Set					True: Reverse State is enable (NO=1) False: Reverse State is Disable (NC=0)
	Date of last Terminal Cover Removal		1	0	0-0:96.20.6.255					M	M	M	M	
1	logical_name	octet_string[6]			0000601406FF	--	--	--	Get					
2	value	octet_string[12..*]				--	--	--	Get					
	Duration of violation of Demand		1	0	1-0:1.37.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100012500FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					unit is second it should be captured and reset at the end of billing priode
	Maximum allowed Demand		3	0	1-0:1.35.0.255					M	M	M	M	
1	logical_name	octet_string[6]			0100012300FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get, Set					5,1-0:15.4.0.255,3,0
3	scaler_unit	scal_unit_type			{0,27}	--	--	--	(Get)					
	GSM diagnostic		1	0	0-0:94.98.60.255					M	M	M	M	
1	logical_name	octet-string			00005E623CFF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC Cl	IC V	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	value	gsm_diag_info structure { operator:visible-string(16) ps_status:enum cell_ID:double-long-unsigned, location_ID:long-unsigned, signal_strength:unsigned } Where: operator holds the name of the network operator e.g. "YourNetOp" ps_status The ps_status value field indicates the packet switched status of the modem. ps_status enum: (0) inactive, (1) GPRS, (2) EDGE, (3) UMTS, (4) HSPDA, (5) LTE, (6) CDMA, (7) LTE Cat M1, (8) LTE Cat NB1, (9) LTE Cat NB2, (10) ..(255) reserved. cell_IDFour-byte cell ID in hexadecimal format location_IDTwo-byte location area code (LAC) in the case of GSM networks or Tracking Area Code (TAC) in the case of UMTS, CDMA or LTE networks in hexadecimal format (e.g. "0x00C3" equals 195 in decimal) signal_strengthThe Received Signal Strength Indicator value (0) -113 dBm or less, (1) -111 dBm, (2)..(30) -109...-53 dBm, (31) -51 dBm or greater, (99) not known or not detectable, other reserved,				Get	--	--	Get					
	external Battery voltage		3	0	0-0:96.6.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0000600603FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,57}	--	--	--	(Get)					
	internal Battery voltage		3	0	0-1:96.6.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0001600603FF	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{-2,57}	--	--	--	(Get)					
	phone number		1	0	0-4:96.12.6.255					M	M	M	M	
1	logical_name	octet_string[6]			0004600C06FF	--	--	--	Get					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1p	3p-DC	3p-CT	3p-CTPT	Remarks
2	value	Visible string [0..16]				--	--	--	Get					
	calendar type		1	0	0-0:128.3.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0000800300FF	--	--	--	Get					
2	value	Enum 0: Gregorian 1: JALALI				--	--	--	Get					
	SIM IMSI		1	0	0-4:96.12.129.255					O	O	O	O	
1	logical_name	octet_string[6]			0004600C81FF	--	--	--	Get					
2	value	Octet-string [15..]				--	--	--	Get					
	Cumulative none consumption Active energy duration		3	0	0-0:97.7.131.255					O	O	O	O	
1	logical_name	octet_string[6]			"0000610783FF"	--	--	--	Get					
2	value	double_long_unsigned				--	--	--	Get					
3	scaler_unit	scal_unit_type			{0,7}	--	--	--	(Get)					
	number of strong magnetic field detection		1	0	0-0:96.20.15.255					M	M	M	M	
1	logical_name	octet_string[6]			000060140FFF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Hardware Identifier		1	0	0-20:0.2.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0014000200FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Date & time of last strong magnetic field detection		1	0	0-0:96.20.16.255					O	O	O	O	
1	logical_name	octet_string[6]			000060140FFF	--	--	--	Get					in read out list is optional too.
2	value	octet_string[12..*]				--	--	--	Get					
	Active energy out put pulse		1	0	1-0:0.3.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0100000303FF	--	--	--	Get					
2	value	long_unsigned				--	--	--	Get					
	Last average Demand Register 1 - Active energy import (+A)		4	0	1-0:1.5.0.255					O	O	O	O	for display purposes only
1	logical_name	octet_string[6]			0100010500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,27}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
	Last average Demand Register 2 - Active energyexport (-A)		4	0	1-0:2.5.0.255					O	O	O	O	for display purposes only

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading(2)	Pre-Est.(102)	Mng.(1)	1p	3p-DC	3p-CT	3p-CTPT	Remarks
1	logical_name	octet_string[6]			0100020500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,27}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
	Last average Demand Register 3 - Reactive energy import (+R)		4	0	1-0:3.5.0.255					O	O	O	O	for display purposes only
1	logical_name	octet_string[6]			0100030500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,29}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
	Last average Demand Register 4 - Reactive energyexport (-R)		4	0	1-0:4.5.0.255					O	O	O	O	for display purposes only
1	logical_name	octet_string[6]			0100040500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,29}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
	Last average Demand Register 5 - Apparent energy import (+VA)		4	0	1-0:9.5.0.255					O	O	O	O	for display purposes only
1	logical_name	octet_string[6]			0100090500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
	Last average Demand Register 6 - Apparent energy export (-VA)		4	0	1-0:10.5.0.255					O	O	O	O	for display purposes only
1	logical_name	octet_string[6]			01000A0500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
	Optional meteology Objects													
1	Reactive energy Lag Inductive (QI+QIII)		3	0	1-0:100.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100640800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	Reactive energy Lead Capacitive (QII+QIV)		3	0	1-0:104.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100680800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
3	Active energy (+A + -A) L1(Combined total)		3	0	1-0:35.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100230800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
4	Active energy (+A - -A) L1(Combined total)		3	0	1-0:36.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100240800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
5	Reactive energy Lag Inductive (QI+QIII) Phase L1		3	0	1-0:101.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100650800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
6	Reactive energy Lead Capacitive (QII+QIV) Phase L1		3	0	1-0:105.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100690800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
7	Active energy (+A + -A)(Combined total)L2		3	0	1-0:55.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100370800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
8	Active energy (+A - -A)(Combined total)L2		3	0	1-0:56.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100380800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
9	Reactive energy Lag Inductive (QI+QIII) L2		3	0	1-0:102.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100660800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
10	Reactive energy Lead Capacitive (QII+QIV) Phase L2		3	0	1-0:106.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01006A0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
11	Active energy (abs(QI+QIV)+(abs(QII+QIII)) L3		3	0	1-0:75.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01004B0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
12	Active energy (abs(QI+QIV)-(abs(QII+QIII)) L3		3	0	1-0:76.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01004C0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
13	Reactive energy Lag Inductive (QI+QIII) Phase L3		3	0	1-0:103.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100670800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
14	Reactive energy Lead Capacitive (QII+QIV) Phase L3		3	0	1-0:107.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01006B0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
15	Reactive energy (QI) rate 1		3	0	1-0:5.8.1.255					O	O	O	O	
1	logical_name	octet_string[6]			0100050801FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
16	Reactive energy (QI) rate 2		3	0	1-0:5.8.2.255					O	O	O	O	
1	logical_name	octet_string[6]			0100050802FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
17	Reactive energy (QI) rate 3		3	0	1-0:5.8.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0100050803FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
18	Reactive energy (QI) rate 4		3	0	1-0:5.8.4.255					O	O	O	O	
1	logical_name	octet_string[6]			0100050804FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
19	Reactive energy (QII) rate 1		3	0	1-0:6.8.1.255					O	O	O	O	
1	logical_name	octet_string[6]			0100060801FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
20	Reactive energy (QII) rate 2		3	0	1-0:6.8.2.255					O	O	O	O	
1	logical_name	octet_string[6]			0100060802FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
21	Reactive energy (QII) rate3		3	0	1-0:6.8.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0100060803FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
22	Reactive energy (QII) rate 4		3	0	1-0:6.8.4.255					O	O	O	O	
1	logical_name	octet_string[6]			0100060804FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
23	Reactive energy (QIII) rate 1		3	0	1-0:7.8.1.255					O	O	O	O	
1	logical_name	octet_string[6]			0100070801FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
24	Reactive energy (QIII) rate 2		3	0	1-0:7.8.2.255					O	O	O	O	
1	logical_name	octet_string[6]			0100070802FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
25	Reactive energy (QIII) rate 3		3	0	1-0:7.8.3.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100070803FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
26	Reactive energy (QIII) rate 4		3	0	1-0:7.8.4.255					O	O	O	O	
1	logical_name	octet_string[6]			0100070804FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
27	Reactive energy (QIV) rate 1		3	0	1-0:8.8.1.255					O	O	O	O	
1	logical_name	octet_string[6]			0100070801FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
28	Reactive energy (QIV) rate 2		3	0	1-0:8.8.2.255					O	O	O	O	
1	logical_name	octet_string[6]			0100070802FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
29	Reactive energy (QIV) rate 3		3	0	1-0:8.8.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0100070803FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
30	Reactive energy (QIV) rate 4		3	0	1-0:8.8.4.255					O	O	O	O	
1	logical_name	octet_string[6]			0100070804FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
31	Apparent energy import (+VA) rate 1		3	0	1-0:9.8.1.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090801FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
32	Apparent energy import (+VA) rate 2		3	0	1-0:9.8.2.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090802FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
33	Apparent energy import (+VA) rate 2		3	0	1-0:9.8.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090803FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
34	Apparent energy import (+VA) rate 4		3	0	1-0:9.8.4.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090804FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
35	Apparent energy export (-VA) rate 1		3	0	1-0:10.8.1.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0801FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
36	Apparent energy export (-VA) rate 2		3	0	1-0:10.8.2.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0802FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
37	Apparent energy export (-VA) rate 3		3	0	1-0:10.8.3.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0803FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CPT	Remarks
38	Apparent energy export (-VA) rate 4		3	0	1-0:10.8.4.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0804FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
39	Demand Register 5 - Apparent energy import (+VA)		5	0	1-0:9.4.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090400FF	--	--	--	(Get)					
2	current_average_value	double_long_unsigned				--	--	--	(Get)					
3	last_average_value	double_long_unsigned				--	--	--	(Get)					
4	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
5	status	unsigned			0	--	--	--	(Get)					
6	capture_time	octet_string				--	--	--	(Get)					
7	start_time_current	octet_string				--	--	--	(Get)					
8	period	double_long_unsigned			60	--	--	--	(Get)					
9	number_of_periods	long_unsigned			15	--	--	--	(Get)					
40	Demand Register 6 - Apparent energy export (-VA)		5	0	1-0:10.4.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0400FF	--	--	--	(Get)					
2	current_average_value	double_long_unsigned				--	--	--	(Get)					
3	last_average_value	double_long_unsigned				--	--	--	(Get)					
4	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
5	status	unsigned			0	--	--	--	(Get)					
6	capture_time	octet_string				--	--	--	(Get)					
7	start_time_current	octet_string				--	--	--	(Get)					
8	period	double_long_unsigned			60	--	--	--	(Get)					
9	number_of_periods	long_unsigned			15	--	--	--	(Get)					
41	Maximum Demand Register 21 - Apparent energy import (+VA)		4	0	1-0:9.6.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090600FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
42	Maximum Demand Register 22 - Apparent energy import (+VA) - rate 1		4	0	1-0:9.6.1.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090601FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading(2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
43	Maximum Demand Register 23 - Apparent energy import (+VA) - rate 2		4	0	1-0:9.6.2.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090602FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
44	Maximum Demand Register 24 - Apparent energy import (+VA) - rate 3		4	0	1-0:9.6.3.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090603FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
45	Maximum Demand Register 25 - Apparent energy import (+VA) - rate 4		4	0	1-0:9.6.4.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090604FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
46	Maximum Demand Register 26 - Apparent energy export (-VA)		4	0	1-0:10.6.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0600FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
47	Maximum Demand Register 27 - Apparent energy export (-VA)- rate 1		4	0	1-0:10.6.1.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0601FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CPT	Remarks
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
48	Maximum Demand Register 28 - Apparent energy export (-VA) - rate 2		4	0	1-0:10.6.2.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0602FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
49	Maximum Demand Register 29 - Apparent energy export (-VA) - rate 3		4	0	1-0:10.6.3.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0603FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
50	Maximum Demand Register 30 - Apparent energy export (-VA) - rate 4		4	0	1-0:10.6.4.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0604FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
51	Last Average Demand Register 5 - Apparent energy import (+VA)		4	0	1-0:9.5.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100090500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
52	Last Average Demand Register 6 - Apparent energy export (-VA)		4	0	1-0:10.5.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01000A0500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng. (2)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
53	Instantaneous voltage L2L3		3	0	1-0:125.7.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01007D0700FF	--	--	--	(Get)					
2	value	long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	(Get)					
54	Instantaneous voltage L3L1		3	0	1-0:126.7.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01007E0700FF	--	--	--	(Get)					
2	value	long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	(Get)					
55	Instantaneous voltage L1L2		3	0	1-0:124.7.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01007C0700FF	--	--	--	(Get)					
2	value	long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{-1,35}	--	--	--	(Get)					
56	Instantaneous apparent import power (+VA) L1		3	0	1-0:29.7.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01001D0700FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
57	Instantaneous apparent export power (-VA) L1		3	0	1-0:30.7.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01001E0700FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
58	Last Average Power factor (+A/+VA) Phase L1		4	0	1-0:33.5.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100210500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type				--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
59	Instantaneous apparent import power (+VA) L2		3	0	1-0:49.7.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100310700FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
60	Instantaneous apparent export power (-VA) L2		3	0	1-0:50.7.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100320700FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,28}	--	--	--	(Get)					
61	Last Average Power factor (+A/+VA) Phase L2		4	0	1-0:53.5.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100350500FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type				--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
62	Last Average Power factor (+A/+VA) Phase L3		4	0	1-0:73.5.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100490500FF	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est. (102)	Mng (1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type				--	--	--	(Get)					
4	status	unsigned				--	--	--	(Get)					
5	capture_time	octet_string				--	--	--	(Get)					
63	Import active energy (QI+QIV) L1		3	0	1-0:21.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100150800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
64	Export active energy (QII+QIII) L1		3	0	1-0:22.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100160800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
65	Import reactive energy (QI+QII) L1		3	0	1-0:23.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100170800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
66	Export reactive energy (QIII+QIV) L1		3	0	1-0:24.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100180800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
67	Reactive energy (QI) L1		3	0	1-0:25.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			0100190800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
68	Reactive energy (QII) L1		3	0	1-0:26.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01001A0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
69	Reactive energy (QIII) L1		3	0	1-0:27.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01001B0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
70	Reactive energy (QIV) L1		3	0	1-0:28.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01001C0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
71	Import apparent energy (+VA)(QI+QIV) L1		3	0	1-0:29.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01001D0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
72	Apparent energy export (-VA)(QII+QIII) L1		3	0	1-0:30.8.0.255					O	O	O	O	
1	logical_name	octet_string[6]			01001E0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
73	Import active energy (QI+QIV) L2		3	0	1-0:41.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100290800FF	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V	OBIS code/ Default Value	Pub (16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
74	Export active energy (QII+QIII) L2		3	0	1-0:42.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01002A0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
75	Import reactive energy (QI+QII) L2		3	0	1-0:43.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01002B0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
76	Export reactive energy (QIII+QIV) L2		3	0	1-0:44.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01002C0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
77	Reactive energy (QI) L2		3	0	1-0:45.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01002D0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
78	Reactive energy (QII) L2		3	0	1-0:46.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01002E0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
79	Reactive energy (QIII) L2		3	0	1-0:47.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01002F0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
80	Reactive energy (QIV) L2		3	0	1-0:48.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100300800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
81	Import apparent energy (+VA)(QI+QIV) L2		3	0	1-0:49.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100310800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
82	Apparent energy export (-VA)(QII+QIII) L2		3	0	1-0:50.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100320800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
83	Import active energy (QI+QIV) L3		3	0	1-0:61.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01003D0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
84	Export active energy (QII+QIII) L3		3	0	1-0:62.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01003E0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,30}	--	--	--	(Get)					
85	Import reactive energy (QI+QII) L3		3	0	1-0:63.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01003F0800FF	--	--	--	(Get)					

Item	Object / Attribute Name	Object/Attribute Type	IC CL	IC V.	OBIS code/ Default Value	Pub.(16)	Reading (2)	Pre-Est.(102)	Mng.(1)	1P	3P-DC	3P-CT	3P-CTPT	Remarks
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
86	Export reactive energy (QIII+QIV) L3		3	0	1-0:64.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			01004D0800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
87	Reactive energy (QI) L3		3	0	1-0:65.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100410800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
88	Reactive energy (QII) L3		3	0	1-0:66.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100420800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
89	Reactive energy (QIII) L3		3	0	1-0:67.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100430800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
90	Reactive energy (QIV) L3		3	0	1-0:68.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100440800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,32}	--	--	--	(Get)					
91	Import apparent energy (+VA)(QI+QIV) L3		3	0	1-0:69.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100450800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					
92	Apparent energy export (-VA)(QI+QIII) L3		3	0	1-0:70.8.0.255					NA	O	O	O	
1	logical_name	octet_string[6]			0100460800FF	--	--	--	(Get)					
2	value	double_long_unsigned				--	--	--	(Get)					
3	scaler_unit	scal_unit_type			{0,31}	--	--	--	(Get)					