

=====
 Tab. 1: Values I (object 24563)

Num = 13
 Len = 19 bytes
 Period = 100 ms

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Obj Name	Dim	Type	Len	Dec	Ofs	Min	Max	Group
8235 Bin Inputs	Binary#1	Binary	2	-	0	-	-	Controller I/O
8239 Bin Outputs	Binary#2	Binary	2	-	2	-	-	Controller I/O
8316 Led GCB Green		Unsigned	1	0	4	-	-	Invisible
8318 Led MCB Green		Unsigned	1	0	5	-	-	Invisible
8320 Led GEN Green		Unsigned	1	0	6	-	-	Invisible
8321 Led GEN Red		Unsigned	1	0	7	-	-	Invisible
8322 Led MAINSGreen		Unsigned	1	0	8	-	-	Invisible
8323 Led MAINS Red		Unsigned	1	0	9	-	-	Invisible
8330 Engine State		Unsigned	2	0	10	-	-	IL Info
8455 Breaker State		Unsigned	2	0	12	-	-	IL Info
8954 Timer Text		Unsigned	2	0	14	-	-	IL Info
8955 Timer Value	s	Unsigned	2	0	16	-	-	IL Info
11635 IL-NT-BIO8	Binary#3	Binary	1	-	18	-	-	Extension I/O

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 Tab. 2: Values II (object 24562)

Num = 39
 Len = 70 bytes
 Period = 500 ms

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Obj Name	Dim	Type	Len	Dec	Ofs	Min	Max	Group
8192 Gen V L1-N	V	Unsigned	2	0	0	-	-	Generator
8193 Gen V L2-N	V	Unsigned	2	0	2	-	-	Generator
8194 Gen V L3-N	V	Unsigned	2	0	4	-	-	Generator
8195 Mains V L1-N	V	Unsigned	2	0	6	-	-	Mains
8196 Mains V L2-N	V	Unsigned	2	0	8	-	-	Mains
8197 Mains V L3-N	V	Unsigned	2	0	10	-	-	Mains
8198 Gen A L1	A	Unsigned	2	0	12	-	-	Generator
8199 Gen A L2	A	Unsigned	2	0	14	-	-	Generator
8200 Gen A L3	A	Unsigned	2	0	16	-	-	Generator
8202 Gen kW	kW	Integer	2	0	18	-	-	Generator
8203 Gen kVAr	kVAr	Integer	2	0	20	-	-	Generator
8204 Gen PF		Integer	1	2	22	-	-	Generator
8209 RPM	RPM	Unsigned	2	0	23	-	-	Engine
8210 Gen Freq	Hz	Unsigned	2	1	25	-	-	Generator
8211 Mains Freq	Hz	Unsigned	2	1	27	-	-	Mains
8395 Gen Load Char	Char	Char	1	-	29	-	-	Generator
8524 Gen kW L1	kW	Integer	2	0	30	-	-	Generator

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8525	Gen kW L2	kW	Integer	2	0	32	-	-	Generator
8526	Gen kW L3	kW	Integer	2	0	34	-	-	Generator
8527	Gen kVAr L1	kVAr	Integer	2	0	36	-	-	Generator
8528	Gen kVAr L2	kVAr	Integer	2	0	38	-	-	Generator
8529	Gen kVAr L3	kVAr	Integer	2	0	40	-	-	Generator
8530	Gen kVA L1	kVA	Integer	2	0	42	-	-	Generator
8531	Gen kVA L2	kVA	Integer	2	0	44	-	-	Generator
8532	Gen kVA L3	kVA	Integer	2	0	46	-	-	Generator
8533	Gen PF L1		Integer	1	2	48	-	-	Generator
8534	Gen PF L2		Integer	1	2	49	-	-	Generator
8535	Gen PF L3		Integer	1	2	50	-	-	Generator
8565	Gen kVA	kVA	Integer	2	0	51	-	-	Generator
8626	Gen Ld Char L1	Char		1	-	53	-	-	Generator
8627	Gen Ld Char L2	Char		1	-	54	-	-	Generator
8628	Gen Ld Char L3	Char		1	-	55	-	-	Generator
9018	Nominal kVA	kVA	Integer	2	0	56	-	-	Invisible
9628	Gen V L1-L2	V	Unsigned	2	0	58	-	-	Generator
9629	Gen V L2-L3	V	Unsigned	2	0	60	-	-	Generator
9630	Gen V L3-L1	V	Unsigned	2	0	62	-	-	Generator
9631	Mains V L1-L2	V	Unsigned	2	0	64	-	-	Mains
9632	Mains V L2-L3	V	Unsigned	2	0	66	-	-	Mains
9633	Mains V L3-L1	V	Unsigned	2	0	68	-	-	Mains

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 Tab. 3: Values III (object 24561)

Num = 30
 Len = 82 bytes
 Period = 2000 ms

Obj Name	Dim	Type	Len	Dec	Ofs	Min	Max	Group	
8206	Run Hours	h	Integer	4	1	0	-	-	Statistics
8207	Num Starts		Unsigned	2	0	4	-	-	Statistics
8213	Battery Volts	V	Integer	2	1	6	-	-	Controller I/O
8227	Oil Pressure	Bar	Integer	2	1	8	-	-	Controller I/O
8228	Engine Temp	□ C	Integer	2	0	10	-	-	Controller I/O
8229	Fuel Level	%	Integer	2	0	12	-	-	Controller I/O
8393	FW Version		Unsigned	1	1	14	-	-	IL Info
8450	IgMax		Unsigned	2	0	15	-	-	Invisible
8451	ST		Unsigned	2	0	17	-	-	Invisible
8452	ST		Unsigned	2	0	19	-	-	Invisible
8453	ST		Unsigned	2	0	21	-	-	Invisible
8454	ST		Unsigned	2	0	23	-	-	Invisible
8480	Application		Unsigned	1	0	25	-	-	IL Info
8707	FW Branch		Unsigned	1	0	26	-	-	IL Info
8728	NomAn1 CU		Unsigned	2	0	27	-	-	Invisible
8729	NomAn2 CU		Unsigned	2	0	29	-	-	Invisible
8730	NomAn3 CU		Unsigned	2	0	31	-	-	Invisible
9090	PasswordDecode		Unsigned	4	0	33	-	-	IL Info
9574	ControllerMode		Unsigned	1	0	37	-	-	Invisible

9648 Maintenance	h	Unsigned	2	0	38	-	-	Statistics
9651 ControllerMode		Unsigned	1	0	40	-	-	Invisible
9978 Ig Nom		Unsigned	2	0	41	-	-	Invisible
10050 DiagData		Unsigned	4	0	43	-	-	IL Info
10232 ECU FC		Unsigned	4	0	47	-	-	Invisible
10233 ECU FMI		Unsigned	1	0	51	-	-	Invisible
10603 D+	V	Integer	2	1	52	-	-	Controller I/O
11195 Num E-Stops		Unsigned	4	0	54	-	-	Statistics
11196 Shutdowns		Unsigned	4	0	58	-	-	Statistics
11388 ST		Binary	4	-	62	-	-	Invisible
11872 res		String0	16	-	66	-	-	Invisible

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 Tab. 4: Values OT

Num = 0
 Len = 0 bytes
 Period = N/A ms

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 Obj Name Dim Type Len Dec Ofs Min Max Group

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 Tab. 5: Setpoints P (object 24544)

Num = 95
 Len = 272 bytes

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 Obj Name Dim Type Len Dec Ofs Min Max Password Group

8252 Gear Teeth		Unsigned	2	0	0	0	500	No	Basic Settings
8253 Nominal RPM	RPM	Unsigned	2	0	2	100	4000	No	Basic Settings
8254 Starting RPM	%	Unsigned	1	0	4	5	50	No	Engine Params
8255 Crank Attempts		Unsigned	1	0	5	1	10	No	Engine Params
8256 MaxCrank Time	s	Unsigned	1	0	6	1	60	No	Engine Params
8257 CrnkFail Pause	s	Unsigned	1	0	7	5	60	No	Engine Params
8258 Cooling Time	s	Unsigned	2	0	8	0	3600	No	Engine Params
8259 Min Stab Time	s	Unsigned	2	0	10	1	8313*	No	Engine Params
8262 ProtectHoldOff	s	Unsigned	2	0	12	0	300	No	Engine Protect
8263 Overspeed Sd	%	Unsigned	2	0	14	50	150	No	Engine Protect
8264 Horn Timeout	s	Unsigned	2	0	16	0	600	No	Engine Protect
8274 CT Ratio	/5A	Unsigned	2	0	18	1	5000	No	Basic Settings
8275 Nomin Current	A	Unsigned	2	0	20	1	10000	No	Basic Settings
8276 Nominal Power	kW	Unsigned	2	0	22	1	5000	No	Basic Settings
8277 NomVolts Ph-N	V	Unsigned	2	0	24	11638*	11639*	No	Basic Settings
8278 Nominal Freq	Hz	Unsigned	2	0	26	45	65	No	Basic Settings
8280 Overload Sd	%	Unsigned	2	0	28	0	200	No	Gener Protect
8281 Overload Del	s	Unsigned	2	1	30	0	6000	No	Gener Protect

8282	Short Crct Sd %	Unsigned	2	0	32	100	500	No	Gener Protect
8284	Amps Unbal Sd %	Unsigned	2	0	34	1	200	No	Gener Protect
8285	Amps Unbal Del s	Unsigned	2	1	36	0	6000	No	Gener Protect
8288	Volt Unbal Sd %	Unsigned	2	0	38	1	200	No	Gener Protect
8289	Volt Unbal Del s	Unsigned	2	1	40	0	6000	No	Gener Protect
8291	Gen >V Sd %	Unsigned	2	0	42	8293*	200	No	Gener Protect
8292	Gen V Del s	Unsigned	2	1	44	0	6000	No	Gener Protect
8293	Gen <V Sd %	Unsigned	2	0	46	0	8291*	No	Gener Protect
8296	Gen >Freq Sd %	Unsigned	2	1	48	8298*	2000	No	Gener Protect
8297	Gen Freq Del s	Unsigned	2	1	50	0	6000	No	Gener Protect
8298	Gen <Freq Sd %	Unsigned	2	1	52	0	8296*	No	Gener Protect
8301	EmergStart Del s	Unsigned	2	0	54	0	6000	No	AMF Settings
8302	MainsReturnDel s	Unsigned	2	0	56	1	3600	No	AMF Settings
8303	Transfer Del s	Unsigned	2	1	58	0	6000	No	AMF Settings
8305	Mains >V %	Unsigned	2	0	60	8307*	150	No	AMF Settings
8306	Mains V Del s	Unsigned	2	1	62	0	6000	No	AMF Settings
8307	Mains <V %	Unsigned	2	0	64	50	8305*	No	AMF Settings
8310	Mains >Freq %	Unsigned	2	1	66	8312*	1500	No	AMF Settings
8311	Mains Freq Del s	Unsigned	2	1	68	0	600	No	AMF Settings
8312	Mains <Freq %	Unsigned	2	1	70	500	8310*	No	AMF Settings
8313	Max Stab Time s	Unsigned	2	0	72	8259*	300	No	Engine Params
8315	ControllerMode	List#1	1	-	74	65	68	No	Basic Settings
8365	A11 Del s	Unsigned	2	0	75	0	900	No	Engine Protect
8369	A11 Wrn Bar	Integer	2	1	77	-100	10000	No	Engine Protect
8370	A11 Sd Bar	Integer	2	1	79	-100	10000	No	Engine Protect
8371	A12 Del s	Unsigned	2	0	81	0	900	No	Engine Protect
8375	A12 Wrn □ C	Integer	2	0	83	-100	10000	No	Engine Protect
8376	A12 Sd □ C	Integer	2	0	85	-100	10000	No	Engine Protect
8377	A13 Del s	Unsigned	2	0	87	0	900	No	Engine Protect
8381	A13 Wrn %	Integer	2	0	89	-100	10000	No	Engine Protect
8382	A13 Sd %	Integer	2	0	91	-100	10000	No	Engine Protect
8383	Batt Volt Del s	Unsigned	2	0	93	0	600	No	Engine Protect
8387	Batt Undervolt V	Integer	2	1	95	80	400	No	Engine Protect
8389	MCB Close Del s	Unsigned	2	1	97	0	600	No	AMF Settings
8394	Prestart Time s	Unsigned	2	0	99	0	600	No	Engine Params
8407	A12Calibration □ C	Integer	2	0	101	-1000	1000	No	Sensors Spec
8431	A11Calibration Bar	Integer	2	1	103	-1000	1000	No	Sensors Spec
8444	MCB Logic	List#2	1	-	105	167	168	No	AMF Settings
8446	Mains V Unbal %	Unsigned	2	0	106	1	150	No	AMF Settings
8447	Mains VUnb Del s	Unsigned	2	1	108	0	600	No	AMF Settings
8467	A13Calibration %	Integer	2	0	110	-1000	1000	No	Sensors Spec
8482	Yel Alarm Msg	List#3	1	-	112	179	180	No	SMS/E-Mail
8484	Red Alarm Msg	List#3	1	-	113	179	180	No	SMS/E-Mail
8618	ReturnFromTEST	List#4	1	-	114	170	171	No	AMF Settings
8637	Gen-set Name	String0	16	-	115	-	-	No	Basic Settings
8688	TempSwitch ON -	Integer	2	0	131	-100	10000	No	Engine Params
8689	TempSwitch OFF -	Integer	2	0	133	-100	10000	No	Engine Params
9097	Idle Time s	Unsigned	2	0	135	0	600	No	Engine Params
9100	Fuel Solenoid	List#5	1	-	137	109	110	No	Engine Params
9579	PT Ratio /1	Unsigned	2	1	138	1	5000	No	Basic Settings
9580	Vm PT Ratio V/V	Unsigned	2	1	140	1	5000	No	Basic Settings
9587	Batt Overvolt V	Integer	2	1	142	8387*	400	No	Engine Protect
9590	RetFromIsland	List#6	1	-	144	152	153	No	AMF Settings
9597	TelNo/Addr Ch1	String0	32	-	145	-	-	No	SMS/E-Mail

9598	TelNo/Addr Ch2	String0	32	-	177	-	-	No	SMS/E-Mail
9681	Starting Oil P Bar	Integer	2	1	209	0	100	No	Engine Params
9683	D+ Function	List#7	1	-	211	112	114	No	Engine Params
9815	Stop Time s	Unsigned	2	0	212	0	240	No	Engine Params
9850	MCB Opens On	List#8	1	-	214	173	174	No	AMF Settings
9983	Reset To MAN	List#9	1	-	215	70	71	No	Basic Settings
9991	Short Crct Del s	Unsigned	2	2	216	0	1000	No	Gener Protect
10044	Test Period d	Unsigned	2	0	218	0	240	No	Date/Time
10046	Cooling Speed	List#10	1	-	220	104	105	No	Engine Params
10100	Fuel Pump ON %	Integer	2	0	221	-100	10101*	No	Engine Params
10101	Fuel Pump OFF %	Integer	2	0	223	10100*	10000	No	Engine Params
10201	Test Duration min	Unsigned	2	0	225	0	240	No	Date/Time
10343	User Mode	Unsigned	1	0	227	0	1	No	Invisible
11628	ConnectionType	List#11	1	-	228	90	93	No	Basic Settings
11638	Ph-N Min V	Unsigned	2	0	229	80	11639*	No	Invisible
11639	Ph-N Max V	Unsigned	2	0	231	11638*	20000	No	Invisible
11640	Ph-Ph Min V	Unsigned	2	0	233	130	11641*	No	Invisible
11641	Ph-Ph Max V	Unsigned	2	0	235	11640*	40000	No	Invisible
11657	NomVolts Ph-Ph V	Unsigned	2	0	237	11640*	11641*	No	Basic Settings
11658	PowerSwitch ON kW	Integer	2	0	239	0	32000	No	Engine Params
11659	PowerSwitchOFF kW	Integer	2	0	241	0	32000	No	Engine Params
11660	Timer1Function	List#12	1	-	243	185	189	No	Date/Time
24410	Passwords	DT28	28	-	244	-	-	3	Invisible

* - limit is defined by the value of the communication object of specified number

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 Tab. 6: Setpoints R (object 24543)

Num = 7
 Len = 39 bytes

Obj Name	Dim	Type	Len	Dec	Ofs	Min	Max	Password	Group		
9648	WrnMaintenance	h	Unsigned	2	0	0	0	10000	No	Engine Protect	
24436	ModemIniString	String0	String0	32	-	2	-	-	No	Basic Settings	
24451	COM2 Mode	List#13	List#13	1	-	34	81	82	3	Basic Settings	
24477	ModbusComSpeed	bps	List#14	List#14	1	-	35	85	88	No	Basic Settings
24486	Language	Unsigned	Unsigned	1	0	36	0	255	No	Invisible	
24522	COM1 Mode	List#15	List#15	1	-	37	77	79	3	Basic Settings	
24537	ControllerAddr	Unsigned	Unsigned	1	0	38	1	32	3	Basic Settings	

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 Tab. 7: History Record

Num = 3
 Len = 8 bytes

Name	Dim	Type	Len	Dec	Ofs	Obj
------	-----	------	-----	-----	-----	-----

Reason		HistEvent	2	-	0	-
Date		Date	3	-	2	-
Time		Time	3	-	5	-

Tab. 8: not applicable for this controller / archive

Tab. 9: Machine States

Value Name

16 Init
17 Not ready
18 Prestart
19 Cranking
20 Pause
21 Starting
22 Running
23 Loaded
24 Stop
25 Shutdown
26 Ready
27 Cooling
28 EmergMan
29 MainsOper
30 MainsFlt
31 MainsFlt
32 IslOper
33 MainsRet
34 Brks Off
35 No Timer
36 MCB Close
37 ReturnDel
38 Trans Del
39 Idle Run
40 MinStabTO
41 MaxStabTO
42 AfterCool
43 GCB Open
44 StopValve
45 Start Del
46 (1Ph)
47 (3PD)
48 (3PY)

Tab. 10: List# Types Meaning

List#1

Value Name

- 0 OFF
- 1 MAN
- 2 AUT
- 3 TEST

List#2

Value Name

- 0 CLOSE-ON
- 1 CLOSE-OFF

List#3

Value Name

- 0 OFF
- 1 ON

List#4

Value Name

- 0 MANUAL
- 1 AUTO

List#5

Value Name

- 0 DIESEL
- 1 GAS

List#6

Value Name

- 0 MANUAL

1 AUTO

List#7

Value Name

0 ENABLED
1 CHRGFAIL
2 DISABLED

List#8

Value Name

0 MAINSFAIL
1 GENRUN

List#9

Value Name

0 DISABLED
1 ENABLED

List#10

Value Name

0 IDLE
1 NOMINAL

List#11

Value Name

0 3Ph4Wire
1 3Ph3Wire
2 Split Ph
3 Mono Ph

List#12

Value Name

0 No Func
1 TEST
2 TEST OnLd
3 MFail Blk

4 Mode OFF

List#13

Value Name

- 0 DIRECT
- 1 MODBUS

List#14

Value Name

- 0 9600
- 1 19200
- 2 38400
- 3 57600

List#15

Value Name

- 0 DIRECT
- 1 MODEM
- 2 MODBUS

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=====
Tab. 11: Binary# Types Meaning
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Binary#1

Bit Name

- 0 Not Used
- 1 Not Used
- 2 Emergency Stop
- 3 Low Oil Press
- 4 High Temp
- 5 Low Water Leve
- 6 Rem Start/Stop

Binary#2

Bit Name

- 0 Starter

- 1 Fuel Solenoid
- 2 GCB Close/Open
- 3 MCB Close/Open
- 4 Prestart
- 5 Ready To Load
- 6 Alarm

Binary#3

Bit Name

- 0 Not Used
- 1 Not Used
- 2 Not Used
- 3 Not Used
- 4 Not Used
- 5 Not Used
- 6 Not Used
- 7 Not Used

Tab. 12: HistEvent Type Meaning (object 24570)

Bits 15-12 => Prefix (\$F = invalid record)
Bit 11 => ECU-Diag record flag (0-Standard, 1-ECU-Diag)
Bits 10- 0 => Base or ECU-Diag-Base

Name = Prefix Base or
Name = ECU-Prefix ECU-Diag-Base

e.g. Prefix = Wrn, Base = Oil Press => Name = Wrn Oil Press

Bits 15-13 Prefix, Bit12=0

- 0 (No prefix)
- 1 Wrn
- 2 Sd
- 3 Stp
- 4 Unl
- 5 Fls

Bit 11 ECU-diag record flag => ECU-Prefix

Oil Pressure

Bits 10- 0 Base

250 Oil Pressure
251 Engine Temp
252 Fuel Level
248 Battery Volts
254 Not Used
255 Not Used
256 Emergency Stop
257 Low Oil Press
258 High Temp
259 Low Water Leve
260 Rem Start/Stop
274 Not Used
275 Not Used
276 Not Used
277 Not Used
278 Not Used
279 Not Used
280 Not Used
281 Not Used
349 ActCallCH1-OK
350 ActCallCH2-OK
299 ActCallCH1Fail
300 ActCallCH2Fail
351 TimeModeChange
352 Password 1 Set
353 Password 2 Set
354 Password Set
355 Password1Chngd
356 Password2Chngd
357 PasswordChange
358 SetpointCS Err
359 Watchdog Reset
360 Config Loaded
361 FW Loaded
362 RemControlUART
363 RemControlMOD
364 RemControlSMS
365 RemControlCAN
366 Switched On
367 Fault Reset
368 Time Stamp
303 Sd Gen L1 >V
305 Sd Gen L2 >V
307 Sd Gen L3 >V
304 Sd Gen L1 <V
306 Sd Gen L2 <V
308 Sd Gen L3 <V
309 Sd Gen V Unbal
322 Mains V Unbal
315 Sd Amps Unbal
311 Sd Gen >Freq
312 Sd Gen <Freq
369 Wrn Gen L1 >V

370 Wrn Gen L2 >V
371 Wrn Gen L3 >V
372 Wrn Gen L1 <V
373 Wrn Gen L2 <V
374 Wrn Gen L3 <V
313 Wrn Gen >Freq
314 Wrn Gen <Freq
316 Mains L1 >V
318 Mains L2 >V
320 Mains L3 >V
317 Mains L1 <V
319 Mains L2 <V
321 Mains L3 <V
323 Mains >Freq
324 Mains <Freq
325 Sd Overload
375 Wrn Overload
376 Sd GCB Fail
377 Wrn MCB Fail
330 Sd Start Fail
378 GCB Closed
379 GCB Opened
380 MCB Closed
381 MCB Opened
326 Sd Overspeed
327 Sd Underspeed
336 Sd IOM Fail
382 RPM Meas Fail
339 Sd BatteryFlat
341 Sd Short Crct
342 Sd Amps IDMT
343 Sd Stop Fail
383 Wrn RA15 Fail
334 Wrn WaterTmpLo
384 Remote OFF Set
337 Sd Override
385 Manual Start
386 Manual Stop
387 Remote Start
388 Remote Stop
389 AMF Start
390 AMF Stop
391 Test Start
392 Gen-set Stop
298 res
298 res
298 res
298 res
393 Wrn MainsV Det

Bits 10- 0 ECU-Diag-Base

(N/A)

Tab. 13: AlarmEvent Type Meaning (object 24545)

Bits 15-13 => Prefix

Bits 10- 0 => Base

Bit 12 => Confirmed (1=confirmed)

Bit 11 => Active (1=active)

Bits 12-11: 00 => not inverted(white) with asterisk

Bits 12-11: 01 => inverted(red) with asterisk

Bits 12-11: 10 => N/A (reserved)

Bits 12-11: 11 => inverted(orange) without asterisk

Name = Prefix Base

e.g. Prefix = Fls, Base = Water Temp => Name = Fls Water Temp

Bits 15-13 Prefix

0 (No prefix)

1 Wrn

2 Sd

3 Stp

4 Unl

5 Fls

Bits 10- 0 Base

250 Oil Pressure

251 Engine Temp

252 Fuel Level

254 Not Used

255 Not Used

256 Emergency Stop

257 Low Oil Press

258 High Temp

259 Low Water Leve

260 Rem Start/Stop

298 res

298 res

274 Not Used

275 Not Used

276 Not Used

277 Not Used

278 Not Used

279 Not Used

280 Not Used
281 Not Used
299 ActCallCH1Fail
300 ActCallCH2Fail
301 Low BackupBatt
302 Wrn Batt Volt
248 Battery Volts
216 Gen V L1-N
219 Gen V L1-L2
303 Sd Gen L1 >V
304 Sd Gen L1 <V
217 Gen V L2-N
220 Gen V L2-L3
305 Sd Gen L2 >V
306 Sd Gen L2 <V
218 Gen V L3-N
221 Gen V L3-L1
307 Sd Gen L3 >V
308 Sd Gen L3 <V
309 Sd Gen V Unbal
310 GenParamsFail
215 Gen Freq
311 Sd Gen >Freq
312 Sd Gen <Freq
313 Wrn Gen >Freq
314 Wrn Gen <Freq
315 Sd Amps Unbal
225 Mains V L1-N
226 Mains V L2-N
227 Mains V L3-N
228 Mains V L1-L2
229 Mains V L2-L3
230 Mains V L3-L1
231 Mains Freq
316 Mains L1 >V
317 Mains L1 <V
318 Mains L2 >V
319 Mains L2 <V
320 Mains L3 >V
321 Mains L3 <V
322 Mains V Unbal
323 Mains >Freq
324 Mains <Freq
325 Sd Overload
193 RPM
326 Sd Overspeed
327 Sd Underspeed
328 GCB Fail
329 MCB Fail
330 Sd Start Fail
331 Gen CCW Rot
332 Mains CCW Rot
333 Emergency Stop
334 Wrn WaterTmpLo

335 ChargeAlt Fail
 336 Sd IOM Fail
 337 Sd Override
 338 Sd RPMMeasFail
 339 Sd BatteryFlat
 340 WrnMaintenance
 341 Sd Short Crct
 342 Sd Amps IDMT
 343 Sd Stop Fail
 344 Wrn RA Fail
 298 res
 298 res
 298 res
 345 DPF RegenInhib
 346 Regener Needed
 347 RegenerNeeded!
 348 HEST Lamp

Tab. 14: Value States I (object 24558)

Bit 0 = 1 => ALARM 1 masked
 Bit 1 = 1 => Active ALARM 1
 Bit 2 = 1 => ALARM 1
 Bit 3 = 1 => ALARM 2 masked
 Bit 4 = 1 => Active ALARM 2
 Bit 5 = 1 => ALARM 2
 Bit 6 = 1 => Active sensor failure
 Bit 7 = 1 => Sensor failure

Num = 24
 Len = 24 bytes

Name	Bit	Bit name	Ofs	Obj
Bin Inputs	0	Not Used	0	8235
Bin Inputs	1	Not Used	1	8235
Bin Inputs	2	Emergency Stop	2	8235
Bin Inputs	3	Low Oil Press	3	8235
Bin Inputs	4	High Temp	4	8235
Bin Inputs	5	Low Water Leve	5	8235
Bin Inputs	6	Rem Start/Stop	6	8235
Bin Inputs	7	(N/A)	7	8235
Bin Inputs	8	(N/A)	8	8235
Bin Inputs	9	(N/A)	9	8235
Bin Inputs	10	(N/A)	10	8235
Bin Inputs	11	(N/A)	11	8235
Bin Inputs	12	(N/A)	12	8235
Bin Inputs	13	(N/A)	13	8235
Bin Inputs	14	(N/A)	14	8235
Bin Inputs	15	(N/A)	15	8235

IL-NT-BIO8	0 Not Used	16 11635
IL-NT-BIO8	1 Not Used	17 11635
IL-NT-BIO8	2 Not Used	18 11635
IL-NT-BIO8	3 Not Used	19 11635
IL-NT-BIO8	4 Not Used	20 11635
IL-NT-BIO8	5 Not Used	21 11635
IL-NT-BIO8	6 Not Used	22 11635
IL-NT-BIO8	7 Not Used	23 11635

=====
 Tab. 15: Value States II (object 24557)

Bit 0 = 1 => ALARM 1 masked
 Bit 1 = 1 => Active ALARM 1
 Bit 2 = 1 => ALARM 1
 Bit 3 = 1 => ALARM 2 masked
 Bit 4 = 1 => Active ALARM 2
 Bit 5 = 1 => ALARM 2
 Bit 6 = 1 => Active sensor failure
 Bit 7 = 1 => Sensor failure

Num = 15
 Len = 15 bytes

=====
 Name Bit Bit name Ofs Obj

Gen V L1-N	-		0	8192
Gen V L2-N	-		1	8193
Gen V L3-N	-		2	8194
Mains V L1-N	-		3	8195
Mains V L2-N	-		4	8196
Mains V L3-N	-		5	8197
RPM	-		6	8209
Gen Freq	-		7	8210
Mains Freq	-		8	8211
Gen V L1-L2	-		9	9628
Gen V L2-L3	-		10	9629
Gen V L3-L1	-		11	9630
Mains V L1-L2	-		12	9631
Mains V L2-L3	-		13	9632
Mains V L3-L1	-		14	9633

=====

=====
 Tab. 16: Value States III (object 24556)

Bit 0 = 1 => ALARM 1 masked
 Bit 1 = 1 => Active ALARM 1
 Bit 2 = 1 => ALARM 1
 Bit 3 = 1 => ALARM 2 masked

Bit 4 = 1 => Active ALARM 2
Bit 5 = 1 => ALARM 2
Bit 6 = 1 => Active sensor failure
Bit 7 = 1 => Sensor failure

Num = 4
Len = 4 bytes

Name	Bit	Bit name	Ofs	Obj
Battery Volts	-		0	8213
Oil Pressure	-		1	8227
Engine Temp	-		2	8228
Fuel Level	-		3	8229

Tab. 17: Used Commands

Num	Name	Password
0	No	
1	No	
2	No	
5	No	
7	No	
13	No	
14	No	
28	No	
42	No	
43	No	

Tab. 18: Force values

N/A

Tab. 19: LED status (object 24517)

N/A