Parameter Number	Parameter Name	Min	Default	Max	Unit	Options
P0	Model Type	0	0x45473532	999999		
P1	Engine Running Hours	0	0	999999	Hour	
P2	Erase Memory	0	0	1		0:Passive 1:Active
P3	Return to Factory Settings Level 1	0	0	1		0:Passive 1:Active
P4	Return to Factory Settings Level 2	0	0	1		0:Passive 1:Active
P5	Return to Factory Settings Level 3	0	0	1		0:Passive 1:Active
P6	Return to Factory Settings Level 4	0	0	1		0:Passive 1:Active
P7	Password Level 1	1	342425	999999		
P8	Password Level 2	1	473832	999999		
P9	Password Level 3	1	581541	999999		
P10	Password Level 4	1	825356	999999		
P11	Reset Failure Auto-delete Timers	0	0	1		0:Passive 1:Active
P12	Start-up Mode	0	0	4		0: Manual 1: Auto 2: Test 3: Off 4: Last used mode
P13	Generator Voltage Connections	0	0	3		0: 3 Phase + Neutral 1: Single Phase R 2: 2 Phase Delta R,S 3: 3 Phase
P14	Mains Voltage Connections	0	0	3		0: 3 Phase + Neutral 1: Single Phase R 2: 2 Phase Delta R,S 3: 3 Phase
P15	Mains Voltage Transformer Primer Ratio	50	230	65000		
P16	Mains Voltage Transformer Seconder Ratio	50	230	400		
P17	Generator Voltage Transformer Primer Ratio	50	230	65000		
P18	Generator Voltage Transformer Seconder Ratio	50	230	400		
P19	Current Transformer Primer Ratio	5	100	9900		
P20	Current Transformer Seconder Ratio	1	5	5		
P21	Position of Current Transformer	0	0	1		0: Alternator Output 1: Load Output
P22	Test Button Function	0	0	1		0: Off-load Test 1: On-load Test
P23	Failure Indication in Off Mode	0	1	1		0:Passive 1:Active
P24	Horn Duration	0	30	900	Second	
P25	Transfer Time from Mains to Generator	1	1	60	Second	
P26	Transfer Time from Generator to Mains	1	1	60	Second	
P27	Auto-exit from Off-load Test Mode when Mains Returns	0	0	1		0:Passive 1:Active
P28	Auto-exit from On-load Test Mode when Mains Returns	0	0	1		0:Passive 1:Active
P29	Screen saver timer	0	180	250		
P30	Reset All Periodic Maintenance Timers	0	0	1		0:Passive 1:Active
P31	Periodic Engine Maintenance Timer 1 Active	0	1	1		0:Passive 1:Active
P32	Periodic Engine Maintenance Timer 1 Elapsed Time	0	0	60000	Hour	
P33	Periodic Engine Maintenance Timer 1 Set	0	250	30000	Hour	
P34	Periodic Engine Maintenance Timer 1 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P35	Periodic Engine Maintenance Timer 2 Active	0	1	1		0:Passive 1:Active
P36	Periodic Engine Maintenance Timer 2 Elapsed Time	0	0	60000	Hour	
P37	Periodic Engine Maintenance Timer 2 Set	0	250	30000	Hour	
P38	Periodic Engine Maintenance Timer 2 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P39	Periodic Engine Maintenance Timer 3 Active	0	1	1		0:Passive 1:Active
P40	Periodic Engine Maintenance Timer 3 Elapsed Time	0	0	60000	Hour	
P41	Periodic Engine Maintenance Timer 3 Set	0	250	30000	Hour	
P42	Periodic Engine Maintenance Timer 3 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P43	Periodic Engine Maintenance Timer 4 Active	0	1	1		0:Passive 1:Active
P44	Periodic Engine Maintenance Timer 4 Elapsed Time	0	0	60000	Hour	
P45	Periodic Engine Maintenance Timer 4 Set	0	250	30000	Hour	
P46	Periodic Engine Maintenance Timer 4 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P47	Periodic Engine Maintenance Timer 5 Active	0	1	1		0:Passive 1:Active
P48	Periodic Engine Maintenance Timer 5 Elapsed Time	0	0	60000	Hour	
P49	Periodic Engine Maintenance Timer 5 Set	0	250	30000	Hour	
P50	Periodic Engine Maintenance Timer 5 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P51	Periodic Engine Maintenance Timer 6 Active	0	1	1		0:Passive 1:Active
P52	Periodic Engine Maintenance Timer 6 Elapsed Time	0	0	60000	Hour	
P53	Periodic Engine Maintenance Timer 6 Set	0	250	30000	Hour	
P54		1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip

	Periodic Engine Maintenance Timer 6 Class					4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P55	Periodic Maintenance Timer 1 Active	0	0	1		0:Passive 1:Active
P56	Periodic Maintenance Timer 1 Elapsed Time	0	0	9000	Day	
P57	Periodic Maintenance Timer 1 Set	0	180	1500	Day	
P58	Periodic Maintenance Timer 1 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P59	Periodic Maintenance Timer 2 Active	0	0	1		0:Passive 1:Active
P60	Periodic Maintenance Timer 2 Elapsed Time	0	0	9000	Day	
P61	Periodic Maintenance Timer 2 Set	0	180	1500	Day	
P62	Periodic Maintenance Timer 2 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P63	Periodic Maintenance Timer 3 Active	0	0	1		0:Passive 1:Active
P64	Periodic Maintenance Timer 3 Elapsed Time	0	0	9000	Day	
P65	Periodic Maintenance Timer 3 Set	0	180	1500	Day	
P66	Periodic Maintenance Timer 3 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P67	Periodic Maintenance Timer 4 Active	0	0	1		0:Passive 1:Active
P68	Periodic Maintenance Timer 4 Elapsed Time	0	0	9000	Day	
P69	Periodic Maintenance Timer 4 Set	0	180	1500	Day	
P70	Periodic Maintenance Timer 4 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P71	Periodic Maintenance Timer 5 Active	0	0	1		0:Passive 1:Active
P72	Periodic Maintenance Timer 5 Elapsed Time	0	0	9000	Day	
P73	Periodic Maintenance Timer 5 Set	0	180	1500	Day	
P74	Periodic Maintenance Timer 5 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P75	Periodic Maintenance Timer 6 Active	0	0	1		0:Passive 1:Active
P76	Periodic Maintenance Timer 6 Elapsed Time	0	0	9000	Day	
P77	Periodic Maintenance Timer 6 Set	0	180	1500	Day	
P78	Periodic Maintenance Timer 6 Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P79	Engine Timer Source	0	0	1		0: Elapses while the Generator voltage and frequency inputs are energized 1: Elapses while the AMF 5.2 runs the Generator
P80	Pre-crank Delay	0	0	3000	Second	
P81	Delay After Engine Stop	2	3	3000	Second	
P82	Sound Horn During Pre-crank Delay	0	0	1		0:Passive 1:Active
P83	Pre-heat Duration	0	0	3000	Second	
P84	Pre-heat Temperature Limit Active	0	0	1		0:Passive 1:Active
P85	Pre-heat Temperature Limit	-30	10	212	C / F	
P86	Magnetic Pick-up Active	0	1	1		0:Passive 1:Active
P87	Flywheel Teeth Count	2	190	500		
P88	Number of Poles	1	2	16		1: 2 Poles 2: 4 Poles 3: 6 Poles 4: 8 Poles 5: 10 Poles 6: 12 Poles 7: 14 Poles 8: 16 Poles 9: 18 Poles 10: 20 Poles 11: 22 Poles 12: 24 Poles 13: 26 Poles 14: 28 Poles 15: 30 Poles 16: 32 Poles
P89	Crank Attempts	1	3	9		
P90	Crank Time	1	7	60	Second	
P91	Delay Time Between Cranks	3	10	60	Second	
P92	Initial Start Failure Delay	2	10	60	Second	
P93	Initial Start Alternator Contactor Delay	0	5	90	Second	
P94	Load Transfer Engine Heat Limit Active	0	0	1		0:Passive 1:Active
P95	Load Transfer Engine Heat Limit	0	50	212	C / F	
P96	Cooldown Timer	0	120	3000	Second	
P97	Stop Solenoid Energize Period After Engine Stop	1	8	120		

P98	Maximum Stop Solenoid Energize Period	1	10	120	Second	
P99	Fuel System	0	1	3		0: Fuel Solenoid Type (Release During Crank) 1: Fuel Solenoid Type (Do NOT Release During Crank) 2: Stop Solenoid Type (Not Energized Between Cranks) 3: Stop Solenoid Type (Energized Between Cranks)
P100	Delay Time Between Fuel - Crank Output	0	5	9	Second	
P101	Generator Start from Battery Voltage	0	0	2		0: Passive 1: Panel Battery Measurement Input 2: AN2
P102	Generator Start from Battery Volage High Level	0	26	80	V	
P103	Generator Start from Battery Voltage Low Level	0	22	80	V	
P104	Generator start-up delay from battery voltage	1	10	3000	Second	
P105	Generator stopping delay from battery voltage	1	10	3000	Second	
P106	Thermostat 1 Type	0	0	2		0: Passive 1: Cooler 2: Heater
P107	Thermostat 1 Setting	-30	20	150	C / F	
P108	Thermostat 1 Activation Hystheresis Value	2	10	30	C / F	
P109	Thermostat 1 Activation Timer	1	4	3000	Second	
P110	Thermostat 1 De-activation Timer	1	4	3000	Second	
P111	Thermostat 1 Start-up Activation Delay Timer	1	600	3000	Second	
P112	Thermostat 1 De-activation after Activation Delay Timer	1	60	3000	Second	
P113	Thermostat 1 Activation after De-activation Delay Timer	1	60	3000	Second	
P114	Thermostat 2 Type	0	0	2		0: Passive 1: Cooler 2: Heater
P115	Thermostat 2 Setting	-30	20	150	C / F	
P116	Thermostat 2 Activation Hystheresis Value	2	10	30	C / F	
P117	Thermostat 2 Activation Timer	1	4	3000	Second	
P118	Thermostat 2 De-activation Timer	1	4	3000	Second	
P119	Thermostat 2 Start-up Activation Delay Timer	1	600	3000	Second	
P120	Thermostat 2 De-activation after Activation Delay Timer	1	60	3000	Second	
P121	Thermostat 2 Activation after De-activation Delay Timer	1	60	3000	Second	
P122	Crank Disconnect on Alternator Frequency Value	10	20	30	Hz	
P123	Crank Disconnect on Alternator Frequency Delay	0.1	0.4	25	Second	
P124	Alternator Frequency Running Feedback Limit	0	21	40	Hz	
P125	Alternator Voltage as Running Feedback	0	1	1		0:Passive 1:Active
P126	Alternator Voltage as Running Feedback Limit	5	166	250	V	
P127	Crank Disconnect on Atlernator Voltage	0	1	1		0:Passive 1:Active
P128	Crank Disconnect on Alternator Voltage Value	20	165	500	V	
P129	Crank Disconnect on Alternator Voltage Delay	0.1	1	25	Second	
P130	Engine RPM as Running Feedback	0	0	1		0:Passive 1:Active
P131	Engine RPM as Running Feedback Limit	10	601	9000	RPM	
P132	Crank Disconnect on Engine RPM	0	0	1		0:Passive 1:Active
P133	Crank Disconnect on Engine RPM Value	10	600	9000	RPM	
P134	Crank Disconnect on Engine RPM Delay	0.1	1	25	Second	
P135	Charge Alternator Voltage as Running Feedback	0	1	1		0:Passive 1:Active
P136	Charge Alternator Voltage as Running Feedback Limit	1	8.1	25.5	V	
P137	Crank Disconect on Charge Alternator Voltage	0	1	1		0:Passive 1:Active
P138	Crank Disconnect on Charge Alternator Voltage Value	0	8	25.5	V	
P139	Crank Disconnect on Charge Alternator Voltage Delay	0.1	2	25	Second	
P140	Oil Pressure as Running Feedback	0	1	1		0:Passive 1:Active
P141	Oil Pressure as Running Feedback Limit	0.1	1.6	25	Bar	
P142	Crank Disconnect on Oil Pressure	0	0	1		0:Passive 1:Active
P143	Crank Disconnect on Oil Pressure Value	0.1	1.5	25	Bar	
P144	Crank Disconnect on Oil Pressure Delay	0.1	3	25	Second	
P145	Oil Pressure Switch as Running Feedback	0	1	1		0:Passive 1:Active
P146	Crank Disconnect on Oil Pressure Switch	0	0	1		0:Passive

	Crank Disconnect on Oil Pressure Switch					1:Active
P147	Crank Disconnect on Oil Pressure Switch Delay	0.1	3	25	Second	
P148	Initial power mains failure status	0	0	1		0:Passive 1:Active
P149	Activated generator at mains failure	0	1	1		0:Passive 1:Active
P150	Mains Undervoltage Failure Active	0	1	1		0:Passive 1:Active
P151	Mains Undervoltage Failure Value	40	180	65500	V	
P152	Mains Undervoltage Failure Delay	0	4	120	Second	
P153	Mains Undervoltage Return Time	2	30	900	Second	
P154	Mains Undervoltage Hystheresis Value	2	10	250	V	
P155	Mains Over Voltage Failure Active	0	1	1		0:Passive 1:Active
P156	Mains Over Voltage Failure Value	40	260	65500	V	
P157	Mains Over Voltage Failure Delay	0	4	120	Second	
P158	Mains Over Voltage Failure Return Time	2	30	900	Second	
P159	Mains Over Voltage Hystheresis Value	2	10	250	V	
P160	Mains Under Frequency Failure Active	0	1	1		0:Passive 1:Active
P161	Mains Under Frequency Failure Value	20	45	95	Hz	
P162	Mains Under Frequency Failure Delay	0	4	120	Second	
P163	Mains Under Frequency Failure Return Time	2	30	900	Second	
P164	Mains Under Frequency Failure Hystheresis Value	0.2	2	25	Hz	
P165	Mains Over Frequency Failure Active	0	1	1		0:Passive 1:Active
P166	Mains Over Frequency Failure Value	20	55	95	Hz	
P167	Mains Over Frequency Failure Delay	0	4	120	Second	
P168	Mains Over Frequency Failure Return Time	2	30	900	Second	
P169	Mains Over Frequency Failure Hystheresis Value	0.2	2	25	Hz	
P170	Mains Protection in Manual, Auto, On-load and Off-load Test Modes	0	1	1		0:Passive 1:Active
P171	Mains Protection in Off Mode	0	1	1		0:Passive 1:Active
P172	Generator Under Voltage Level 1 Failure Alarm Active	0	1	1		0:Passive 1:Active
P173	Generator Under Voltage Level 1 Failure Value	40	180	500	V	
P174	Generator Under Voltage Level 1 Failure Delay	2	5	20	Second	
P175	Generator Under Voltage Level 1 Failure Return Time	2	10	20	Second	
P176	Generator Under Voltage Level 1 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P177	Generator Under Voltage Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P178	Generator Under Voltage Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P179	Generator Under Voltage Level 1 Failure Auto-acknowledge Number	2	5	99		
P180	Generator Under Voltage Level 1 Failure Hystheresis Value	1	10	50	V	
P181	Generator Under Voltage Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P182	Generator Under Voltage Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P183	Generator Under Voltage Level 2 Failure Alarm Active	0	1	1		0:Passive 1:Active
P184	Generator Under Voltage Level 2 Failure Value	40	170	500	V	
P185	Generator Under Voltage Level 2 Failure Delay	2	3	20	Second	
P186	Generator Under Voltage Level 2 Failure Return Time	2	10	20	Second	
P187	Generator Under Voltage Level 2 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P188	Generator Under Voltage Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P189	Generator Under Voltage Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P190	Generator Under Voltage Level 2 Failure Auto-acknowledge Number	2	5	99		
P191	Generator Under Voltage Level 2 Failure Hystheresis Value	1	10	50	V	
P192	Generator Under Voltage Level 2 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P193	Generator Under Voltage Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P194	Generator Over Voltage Level 1 Failure Alarm Active	0	1	1		0:Passive 1:Active
P195	Generator Over Voltage Level 1 Failure Value	40	260	500	V	
P196	Generator Over Voltage Level 1 Failure Delay	2	5	20	Second	

P197	Generator Over Voltage Level 1 Failure Return Time	2	10	20	Second	
P198	Generator Over Voltage Level 1 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P199	Generator Over Voltage Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P200	Generator Over Voltage Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P201	Generator Over Voltage Level 1 Failure Auto-acknowledge Number	2	5	99		
P202	Generator Over Voltage Level 1 Failure Hystheresis Value	1	10	50	V	
P203	Generator Over Voltage Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P204	Generator Over Voltage Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P205	Generator Over Voltage Level 2 Failure Alarm Active	0	0	1		0:Passive 1:Active
P206	Generator Over Voltage Level 2 Failure Value	40	270	500	V	
P207	Generator Over Voltage Level 2 Failure Delay	2	3	20	Second	
P208	Generator Over Voltage Level 2 Failure Return Time	2	3	20	Second	
P209	Generator Over Voltage Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P210	Generator Over Voltage Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P211	Generator Over Voltage Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P212	Generator Over Voltage Level 2 Failure Auto-acknowledge Number	2	5	99		
P213	Generator Over Voltage Level 2 Failure Hystheresis Value	1	10	50	V	
P214	Generator Over Voltage Level 2 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P215	Generator Over Voltage Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P216	Generator Under Frequency Level 1 Failure Alarm Active	0	1	1		0:Passive 1:Active
P217	Generator Under Frequency Level 1 Failure Value	10	47	75	Hz	
P218	Generator Under Frequency Level 1 Failure Delay	2	5	20	Second	
P219	Generator Under Frequency Level 1 Failure Return Time	2	5	20	Second	
P220	Generator Under Frequency Level 1 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P221	Generator Under Frequency Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P222	Generator Under Frequency Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P223	Generator Under Frequency Level 1 Failure Auto-acknowledge Number	2	3	99		
P224	Generator Under Frequency Level 1 Failure Hystheresis Value	0.1	1	20	Hz	
P225	Generator Under Frequency Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P226	Generator Under Frequency Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P227	Generator Under Frequency Level 2 Failure Alarm Active	0	0	1		0:Passive 1:Active
P228	Generator Under Frequency Level 2 Failure Value	10	45	75	Hz	
P229	Generator Under Frequency Level 2 Failure Delay	2	5	20	Second	
P230	Generator Under Frequency Level 2 Failure Return Time	2	5	20	Second	
P231	Generator Under Frequency Level 2 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P232	Generator Under Frequency Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P233	Generator Under Frequency Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P234	Generator Under Frequency Level 2 Failure Auto-acknowledge Number	2	3	99		
P235	Generator Under Frequency Level 2 Failure Hystheresis Value	0.1	1	20	Hz	
P236	Generator Under Frequency Level 2 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P237	Generator Under Frequency Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P238	Generator Over Frequency Level 1 Failure Alarm Active	0	1	1		0:Passive 1:Active

P239	Generator Over Frequency Level 1 Failure Value	10	53	75	Hz	
P240	Generator Over Frequency Level 1 Failure Delay	2	5	20	Second	
P241	Generator Over Frequency Level 1 Failure Return Time	2	5	20	Second	
P242	Generator Over Frequency Level 1 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P243	Generator Over Frequency Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P244	Generator Over Frequency Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P245	Generator Over Frequency Level 1 Failure Auto-acknowledge Number	2	3	99		
P246	Generator Over Frequency Level 1 Failure Hystheresis Value	0.1	1	20	Hz	
P247	Generator Over Frequency Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P248	Generator Over Frequency Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P249	Generator Over Frequency Level 2 Failure Alarm Active	0	1	1		0:Passive 1:Active
P250	Generator Over Frequency Level 2 Failure Value	10	55	75	Hz	
P251	Generator Over Frequency Level 2 Failure Delay	2	5	20	Second	
P252	Generator Over Frequency Level 2 Failure Return Time	2	5	20	Second	
P253	Generator Over Frequency Level 2 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P254	Generator Over Frequency Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P255	Generator Over Frequency Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P256	Generator Over Frequency Level 2 Failure Auto-acknowledge Number	2	3	99		
P257	Generator Over Frequency Level 2 Failure Hystheresis Value	0.1	1	20	Hz	
P258	Generator Over Frequency Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P259	Generator Over Frequency Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P260	Generator Under RPM Level 1 Failure Alarm Active	0	0	1		0:Passive 1:Active
P261	Generator Under RPM Level 1 Failure Value	10	1410	9000	RPM	
P262	Generator Under RPM Level 1 Failure Delay	2	5	20	Second	
P263	Generator Under RPM Level 1 Failure Return Time	2	5	20	Second	
P264	Generator Under RPM Level 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P265	Generator Under RPM Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P266	Generator Under RPM Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P267	Generator Under RPM Level 1 Failure Auto-acknowledge Number	2	3	99		
P268	Generator Under RPM Level 1 Failure Hystheresis Value	0	30	250	RPM	
P269	Generator Under RPM Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P270	Generator Under RPM Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P271	Generator Under RPM Level 2 Failure Alarm Active	0	0	1		0:Passive 1:Active
P272	Generator Under RPM Level 2 Failure Value	10	1350	9000	RPM	
P273	Generator Under RPM Level 2 Failure Delay	2	3	20	Second	
P274	Generator Under RPM Level 2 Failure Return Time	2	5	20	Second	
P275	Generator Under RPM Level 2 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P276	Generator Under RPM Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P277	Generator Under RPM Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P278	Generator Under RPM Level 2 Failure Auto-acknowledge Number	2	3	99		
P279	Generator Under RPM Level 2 Failure Hystheresis Value	0	30	250	RPM	

P280	Generator Under RPM Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P281	Generator Under RPM Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P282	Generator Over RPM Level 1 Failure Alarm Active	0	1	1		0:Passive 1:Active
P283	Generator Over RPM Level 1 Failure Value	10	1590	9000	RPM	
P284	Generator Over RPM Level 1 Failure Delay	2	5	20	Second	
P285	Generator Over RPM Level 1 Failure Return Time	2	5	20	Second	
P286	Generator Over RPM Level 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P287	Generator Over RPM Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P288	Generator Over RPM Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P289	Generator Over RPM Level 1 Failure Auto-acknowledge Number	2	3	99		
P290	Generator Over RPM Level 1 Failure Hystheresis Value	10	30	250	RPM	
P291	Generator Over RPM Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P292	Generator Over RPM Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P293	Generator Over RPM Level 2 Failure Alarm Active	0	0	1		0:Passive 1:Active
P294	Generator Over RPM Level 2 Failure Value	10	1650	9000	RPM	
P295	Generator Over RPM Level 2 Failure Delay	2	5	20	Second	
P296	Generator Over RPM Level 2 Failure Return Time	2	5	20	Second	
P297	Generator Over RPM Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P298	Generator Over RPM Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P299	Generator Over RPM Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P300	Generator Over RPM Level 2 Failure Auto-acknowledge Number	2	3	99		
P301	Generator Over RPM Level 2 Failure Hystheresis Value	10	30	250	RPM	
P302	Generator Over RPM Level 2 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P303	Generator Over RPM Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P304	Engine RPM Sensor Failure Active	0	0	1		0:Passive 1:Active
P305	Engine RPM Sensor Failure Delay	2	3	900	Second	
P306	Engine RPM Sensor Failure Auto-acknowledge Delay	2	5	900	Second	
P307	Engine RPM Sensor Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P308	Engine RPM Sensor Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P309	Engine RPM Sensor Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P310	Engine RPM Sensor Failure Auto-acknowledge Number	2	3	99		
P311	Engine RPM Sensor Failure Auto-acknowledge Counter	0	0	30000	Hour	
P312	Engine RPM Sensor Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P313	Charge Input	0	1	1		0:Passive 1:Active
P314	Charge Voltage Level 1 Failure Active	0	1	1		0:Passive 1:Active
P315	Charge Under Voltage Level 1 Failure Value	0	8	32	V	
P316	Charge Under Voltage Level 1 Failure Delay	2	10	20	Second	
P317	Charge Under Voltage Level 1 Failure Return Time	2	10	20	Second	
P318	Charge Under Voltage Level 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P319	Charge Under Voltage Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P320	Charge Under Voltage Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P321	Charge Under Voltage Level 1 Failure Auto-acknowledge Number	2	5	99		

P322	Charge Under Voltage Level 1 Failure Hystheresis Value	0.1	1	25	V	
P323	Charge Under Voltage Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P324	Charge Under Voltage Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P325	Charge Voltage Level 2 Failure Active	0	0	1		0:Passive 1:Active
P326	Charge Under Voltage Level 2 Failure Value	0	6	32	V	
P327	Charge Under Voltage Level 2 Failure Delay	2	10	20	Second	
P328	Charge Under Voltage Level 2 Failure Return Time	2	10	20	Second	
P329	Charge Under Voltage Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P330	Charge Under Voltage Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P331	Charge Under Voltage Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P332	Charge Under Voltage Level 2 Failure Auto-acknowledge Number	2	5	99		
P333	Charge Under Voltage Level 2 Failure Hystheresis Value	0.1	1	25	V	
P334	Charge Under Voltage Level 2 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P335	Charge Under Voltage Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P336	Battery Under Voltage Level 1 Failure Active	0	1	1		0:Passive 1:Active
P337	Battery Under Voltage Level 1 Failure Value	0	10	40	V	
P338	Battery Under Voltage Level 1 Failure Delay	2	5	20	Second	
P339	Battery Under Voltage Level 1 Failure Return Time	2	5	20	Second	
P340	Battery Under Voltage Level 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P341	Battery Under Voltage Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P342	Battery Under Voltage Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P343	Battery Under Voltage Level 1 Failure Auto-acknowledge Number	2	5	99		
P344	Battery Under Voltage Level 1 Failure Hystheresis Value	0	1	25	V	
P345	Battery Under Voltage Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P346	Battery Under Voltage Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P347	Battery Under Voltage Level 2 Failure Active	0	1	1		0:Passive 1:Active
P348	Battery Under Voltage Level 2 Failure Value	0	9	40	V	
P349	Battery Under Voltage Level 2 Failure Delay	2	5	20	Second	
P350	Battery Under Voltage Level 2 Failure Return Time	2	5	20	Second	
P351	Battery Under Voltage Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P352	Battery Under Voltage Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P353	Battery Under Voltage Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P354	Battery Under Voltage Level 2 Failure Auto-acknowledge Number	2	5	99		
P355	Battery Under Voltage Level 2 Failure Hystheresis Value	0	1	25	V	
P356	Battery Under Voltage Level 2 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P357	Battery Under Voltage Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P358	Battery Over Voltage Level 1 Failure Active	0	1	1		0:Passive 1:Active
P359	Battery Over Voltage Level 1 Failure Value	0	30	40	V	
P360	Battery Over Voltage Level 1 Failure Delay	2	5	20	Second	

P361	Battery Over Voltage Level 1 Failure Return Time	2	5	20	Second	
P362	Battery Over Voltage Level 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P363	Battery Under Over Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P364	Battery Over Voltage Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P365	Battery Over Voltage Level 1 Failure Auto-acknowledge Number	2	5	99		
P366	Battery Over Voltage Level 1 Failure Hystheresis Value	0	1	25	V	
P367	Battery Over Voltage Level 1 Failure Auto-acknowledge Counter	0	0	30000	Hour	
P368	Battery Over Voltage Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P369	Battery Over Voltage Level 2 Failure Active	0	1	1		0:Passive 1:Active
P370	Battery Over Voltage Level 2 Failure Value	0	32	40	V	
P371	Battery Over Voltage Level 2 Failure Delay	2	5	20	Second	
P372	Battery Over Voltage Level 2 Failure Return Time	2	5	20	Second	
P373	Battery Over Voltage Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P374	Battery Under Over Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P375	Battery Over Voltage Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P376	Battery Over Voltage Level 2 Failure Auto-acknowledge Number	2	5	99		
P377	Battery Over Voltage Level 2 Failure Hystheresis Value	0	1	25	V	
P378	Battery Over Voltage Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P379	Battery Over Voltage Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P380	Mains Contactor Fail to Open Active	0	1	1		0:Passive 1:Active
P381	Mains Contactor Fail to Open Delay	2	10	90	Second	
P382	Mains Contactor Fail to Open Return Time	2	30	90	Second	
P383	Mains Contactor Fail to Open Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P384	Mains Contactor Fail to Open Auto-acknowledge	0	0	1		0:Passive 1:Active
P385	Mains Contactor Fail to Open Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P386	Mains Contactor Fail to Open Auto-acknowledge Number	2	3	99		
P387	Mains Contactor Fail to Open Auto-acknowledge Counter	0	0	30000		
P388	Mains Contactor Fail to Open Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P389	Mains Contactor Fail to Close Active	0	1	1		0:Passive 1:Active
P390	Mains Contactor Fail to Close Delay	2	10	90	Second	
P391	Mains Contactor Fail to Close Return Time	2	30	90	Second	
P392	Mains Contactor Fail to Close Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P393	Mains Contactor Fail to Close Auto-acknowledge	0	0	1		0:Passive 1:Active
P394	Mains Contactor Fail to Close Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P395	Mains Contactor Fail to Close Auto-acknowledge Number	2	3	99		
P396	Mains Contactor Fail to Close Auto-acknowledge Counter	0	0	30000		
P397	Mains Contactor Fail to Close Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P398	Mains Contactor State Unknown Failure Active	0	1	1		0:Passive 1:Active
P399	Mains Contactor State Unknown Failure Delay	2	10	90	Second	
P400	Mains Contactor State Unknown Failure Return Time	2	30	90	Second	
P401	Mains Contactor State Unknown Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling

						6:Display + Horn + Shotdown without cooling + Mains Trip
P402	Mains Contactor State Unknown Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P403	Mains Contactor State Unknown Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P404	Mains Contactor State Unknown Failure Auto-acknowledge Number	2	3	99		
P405	Mains Contactor State Unknown Failure Auto-acknowledge Counter	0	0	30000		
P406	Mains Contactor State Unknown Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P407	Generator Contactor Fail to Open Active	0	1	1		0:Passive 1:Active
P408	Generator Contactor Fail to Open Delay	2	10	90	Second	
P409	Generator Contactor Fail to Open Return Time	2	30	90	Second	
P410	Generator Contactor Fail to Open Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P411	Generator Contactor Fail to Open Auto-acknowledge	0	0	1		0:Passive 1:Active
P412	Generator Contactor Fail to Open Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P413	Generator Contactor Fail to Open Auto-acknowledge Number	2	3	99		
P414	Generator Contactor Fail to Open Auto-acknowledge Counter	0	0	30000		
P415	Generator Contactor Fail to Open Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P416	Generator Contactor Fail to Close Active	0	1	1		0:Passive 1:Active
P417	Generator Contactor Fail to Close Delay	2	10	90	Second	
P418	Generator Contactor Fail to Close Return Time	2	30	90	Second	
P419	Generator Contactor Fail to Close Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P420	Generator Contactor Fail to Close Auto-acknowledge	0	0	1		0:Passive 1:Active
P421	Generator Contactor Fail to Close Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P422	Generator Contactor Fail to Close Auto-acknowledge Number	2	3	99		
P423	Generator Contactor Fail to Close Auto-acknowledge Counter	0	0	30000		
P424	Generator Contactor Fail to Close Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P425	Generator Contactor State Unknown Failure Active	0	1	1		0:Passive 1:Active
P426	Generator Contactor State Unknown Failure Delay	2	10	90	Second	
P427	Generator Contactor State Unknown Failure Return Time	2	30	90	Second	
P428	Generator Contactor State Unknown Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P429	Generator Contactor State Unknown Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P430	Generator Contactor State Unknown Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P431	Generator Contactor State Unknown Failure Auto-acknowledge Number	2	3	99		
P432	Generator Contactor State Unknown Failure Auto-acknowledge Counter	0	0	30000		
P433	Generator Contactor State Unknown Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P434	Over Current Level 1 Failure Active	0	1	1		0:Passive 1:Active
P435	Over Current Level 1 Failure Value	1	110	9900	Amp	
P436	Over Current Level 1 Failure Delay	1	5	200	Second	
P437	Over Current Level 1 Failure Return Time	1	5	200	Second	
P438	Over Current Level 1 Failure Class	1	3	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P439	Over Current Level 1 Failure Auto-acknowledge	0	1	1		0:Passive 1:Active
P440	Over Current Level 1 Failure Auto-acknowledge Type	0	1	1		0:Limited 1:Unlimited
P441	Over Current Level 1 Failure Auto-acknowledge Number	2	4	99		
P442	Over Current Level 1 Failure Hystheresis Value	1	10	9900		
P443	Over Current Level 1 Failure Auto-acknowledge Counter	0	0	30000		
P444	Over Current Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P445	Over Current Level 2 Failure Active	0	1	1		0:Passive 1:Active
P446	Over Current Level 2 Failure Value	1	120	9900	Amp	

P447	Over Current Level 2 Failure Delay	1	3	200	Second	
P448	Over Current Level 2 Failure Return Time	1	5	200	Second	
P449	Over Current Level 2 Failure Class	1	3	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P450	Over Current Level 2 Failure Auto-acknowledge	0	1	1		0:Passive 1:Active
P451	Over Current Level 2 Failure Auto-acknowledge Type	0	1	1		0:Limited 1:Unlimited
P452	Over Current Level 2 Failure Auto-acknowledge Number	2	4	99		
P453	Over Current Level 2 Failure Hystheresis Value	1	10	9900		
P454	Over Current Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P455	Over Current Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P456	IDMT Failure Active	0	1	1		0:Passive 1:Active
P457	IDMT Failure Value	1	100	9900	Amp	
P458	IDMT Failure Time Multiplier	1	36	200	Second	
P459	Reserved Parameter	-	-	-	-	
P460	IDMT Failure Class	1	3	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P461	IDMT Failure Auto-acknowledge	0	1	1		0:Passive 1:Active
P462	IDMT Failure Auto-acknowledge Type	0	1	1		0:Limited 1:Unlimited
P463	IDMT Failure Auto-acknowledge Number	2	4	99		
P464	IDMT Failure Hystheresis Value	1	28	200		
P465	IDMT Failure Auto-acknowledge Counter	0	0	30000		
P466	IDMT Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P467	KW Level 1 Failure Active	0	0	1		0:Passive 1:Active
P468	KW Level 1 Failure Value	1	18	9900	KW	
P469	KW Level 1 Failure Delay	1	5	990	Second	
P470	KW Level 1 Failure Return Time	1	5	990	Second	
P471	KW Level 1 Failure Class	1	4	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P472	KW Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P473	KW Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P474	KW Level 1 Failure Auto-acknowledge Number	2	4	99		
P475	KW Level 1 Failure Hystheresis Value	1	2	9900	KW	
P476	KW Level 1 Failure Auto-acknowledge Counter	0	0	30000		
P477	KW Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P478	KW Level 2 Failure Active	0	0	1		0:Passive 1:Active
P479	KW Level 2 Failure Value	1	21	9900	KW	
P480	KW Level 2 Failure Delay	1	3	990	Second	
P481	KW Level 2 Failure Return Time	1	3	990	Second	
P482	KW Level 2 Failure Class	1	4	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P483	KW Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P484	KW Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P485	KW Level 2 Failure Auto-acknowledge Number	2	4	99		
P486	KW Level 2 Failure Hystheresis Value	1	2	9900	KW	
P487	KW Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P488	KW Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P489	KVar Level 1 Failure Active	0	0	1		0:Passive 1:Active
P490	KVar Level 1 Failure Value	1	2	9900	KVAR	
P491	KVar Level 1 Failure Delay	1	5	990	Second	
P492	KVar Level 1 Failure Return Time	1	5	990	Second	
P493	KVar Level 1 Failure Class	1	4	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P494	KVar Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P495	KVar Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P496	KVar Level 1 Failure Auto-acknowledge Number	2	4	99		
P497	KVar Level 1 Failure Hystheresis Value	1	1	9900	KVAR	
P498	KVar Level 1 Failure Auto-acknowledge Counter	0	0	30000		

P499	KVar Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P500	KVar Level 2 Failure Active	0	0	1		0:Passive 1:Active
P501	KVar Level 2 Failure Value	1	4	9900	KVAR	
P502	KVar Level 2 Failure Delay	1	3	990	Second	
P503	KVar Level 2 Failure Return Time	1	3	990	Second	
P504	KVar Level 2 Failure Class	1	4	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P505	KVar Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P506	KVar Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P507	KVar Level 2 Failure Auto-acknowledge Number	2	4	99		
P508	KVar Level 2 Failure Hystheresis Value	1	1	9900	KVAR	
P509	KVar Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P510	KVar Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P511	KVA Level 1 Failure Active	0	0	1		0:Passive 1:Active
P512	KVA Level 1 Failure Value	1	18	9900	KVA	
P513	KVA Level 1 Failure Delay	1	5	990	Second	
P514	KVA Level 1 Failure Return Time	1	5	990	Second	
P515	KVA Level 1 Failure Class	1	4	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P516	KVA Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P517	KVA Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P518	KVA Level 1 Failure Auto-acknowledge Number	2	4	99		
P519	KVA Level 1 Failure Hystheresis Value	1	2	9900	KVA	
P520	KVA Level 1 Failure Auto-acknowledge Counter	0	0	30000		
P521	KVA Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P522	KVA Level 2 Failure Active	0	0	1		0:Passive 1:Active
P523	KVA Level 2 Failure Value	1	21	9900	KVA	
P524	KVA Level 2 Failure Delay	1	3	990	Second	
P525	KVA Level 2 Failure Return Time	1	3	990	Second	
P526	KVA Level 2 Failure Class	1	4	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P527	KVA Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P528	KVA Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P529	KVA Level 2 Failure Auto-acknowledge Number	2	4	99		
P530	KVA Level 2 Failure Hystheresis Value	1	2	9900	KVA	
P531	KVA Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P532	KVA Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P533	Cos φ Level 1 Failure Active	0	0	1		0:Passive 1:Active
P534	Cos φ Level 1 Failure Value	0.01	0.6	0.99	KVA	
P535	Cos φ Level 1 Failure Delay	1	5	990	Second	
P536	Cos φ Level 1 Failure Return Time	1	5	990	Second	
P537	Cos φ Level 1 Failure Class	1	4	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P538	Cos φ Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P539	Cos φ Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P540	Cos φ Level 1 Failure Auto-acknowledge Number	2	4	99		
P541	Cos φ Level 1 Failure Hystheresis Value	0	0.1	0.99		
P542	Cos φ Level 1 Failure Auto-acknowledge Counter	0	0	30000		
P543	Cos φ Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P544	Cos φ Level 2 Failure Active	0	0	1		0:Passive 1:Active
P545	Cos φ Level 2 Failure Value	0.01	0.4	0.99		
P546	Cos φ Level 2 Failure Delay	1	3	990	Second	
P547	Cos φ Level 2 Failure Return Time	1	3	990	Second	
P548		1	4	6		1:Only Display

	Cos φ Level 2 Failure Class					2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P549	Cos φ Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P550	Cos φ Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P551	Cos φ Level 2 Failure Auto-acknowledge Number	2	4	99		
P552	Cos φ Level 2 Failure Hystheresis Value	0.01	0.1	0.99		
P553	Cos φ Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P554	Cos φ Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P555	Pre-crank Engine Running Feedback Delay	1	2	20	Second	
P556	Pre-crank Engine Running Feedback Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P557	Pre-crank Engine Running Feedback Failure Return Time	2	10	20	Second	
P558	Pre-crank Engine Running Feedback Failure Auto-acknowledge Number	2	5	99		
P559	Pre-crank Engine Running Feedback Failure Auto-acknowledge Counter	0	0	30000		
P560	Pre-crank Engine Running Feedback Failure Counter Decrease Time	0.1	10	6500	Hour	
P561	Start Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P562	Start Failure Return Time	2	10	20	Second	
P563	Start Failure Auto-acknowledge Number	2	5	99		
P564	Start Failure Auto-acknowledge Counter	0	0	30000		
P565	Start Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P566	Stop Failure Time	4	30	600	Second	
P567	Stop Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P568	Stop Failure Return Time	2	10	20	Second	
P569	Stop Failure Auto-acknowledge Number	2	5	99		
P570	Stop Failure Auto-acknowledge Counter	0	0	30000		
P571	Stop Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P572	Oil Pressure Switch Input	0	1	1		0: Passive 1:Active
P573	Oil Pressure Switch Input Contact Type	0	1	1		0:Normally Closed 1: Normally Open
P574	Oil Pressure Switch Failure Active	0	1	1		0:Passive 1:Active
P575	Oil Pressure Switch Failure Delay	1	4	20	Second	
P576	Oil Pressure Switch Failure Return Time	1	1	20	Second	
P577	Oil Pressure Switch Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P578	Oil Pressure Switch Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P579	Oil Pressure Switch Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P580	Oil Pressure Switch Failure Auto-acknowledge Number	2	5	99		
P581	Oil Pressure Switch Failure Auto-acknowledge Counter	0	0	30000		
P582	Oil Pressure Switch Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P583	Coolant Temperature Switch Input	0	1	1		0: Giriş etkin değil 1: Giriş etkin
P584	Coolant Temperature Switch Input Contact Type	0	0	1		0: Normalde kapalı 1: Normalde açık
P585	Coolant Temperature Switch Failure Active	0	1	1		0:Passive 1:Active
P586	Coolant Temperature Switch Failure Delay	1	4	20	Second	
P587	Coolant Temperature Switch Failure Return Time	1	1	20	Second	
P588	Coolant Temperature Switch Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P589	Coolant Temperature Switch Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P590	Coolant Temperature Switch Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P591	Coolant Temperature Switch Failure Auto-acknowledge Number	2	5	99		
P592	Coolant Temperature Switch Failure Auto-acknowledge Counter	0	0	30000		

P593	Coolant Temperature Switch Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P594	Oil Pressure Display Unit of Measurement	0	0	1		0:Bar 1: PSI
P595	Analog Oil Pressure Sensor Type	0	2	2		0: No analog sensor 1: Table 2: Analog VDO 7 Bar type
P596	Low Oil Pressure Level 1 Failure Active	0	1	1		0:Passive 1:Active
P597	Low Oil Pressure Level 1 Failure Value	0.1	1.5	25	Bar	
P598	Low Oil Pressure Level 1 Failure Delay	1	4	20	Second	
P599	Low Oil Pressure Level 1 Failure Return Time	1	4	20	Second	
P600	Low Oil Pressure Level 1 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P601	Low Oil Pressure Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P602	Low Oil Pressure Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P603	Low Oil Pressure Level 1 Failure Auto-acknowledge Number	2	5	99		
P604	Low Oil Pressure Level 1 Failure Hystheresis Value	0.1	0.5	25	Bar	
P605	Low Oil Pressure Level 1 Failure Auto-acknowledge Counter	0	0	30000		
P606	Low Oil Pressure Level 1 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P607	Low Oil Pressure Level 2 Failure Active	0	0	1		0:Passive 1:Active
P608	Low Oil Pressure Level 2 Failure Value	0.1	1	25	Bar	
P609	Low Oil Pressure Level 2 Failure Delay	1	4	20	Second	
P610	Low Oil Pressure Level 2 Failure Return Time	1	4	20	Second	
P611	Low Oil Pressure Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P612	Low Oil Pressure Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P613	Low Oil Pressure Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P614	Low Oil Pressure Level 2 Failure Auto-acknowledge Number	2	5	99		
P615	Low Oil Pressure Level 2 Failure Hystheresis Value	0.1	0.5	25	Bar	
P616	Low Oil Pressure Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P617	Low Oil Pressure Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P618	Oil Pressure Sensor Failure Active	0	1	1		0:Passive 1:Active
P619	Oil Pressure Sensor Failure Type	0	0	2		0: Low Level 1: High Level 2: Low and High Level
P620	Oil Pressure Sensor Failure Delay	1	5	20	Second	
P621	Oil Pressure Sensor Failure Return Time	1	5	20	Second	
P622	Oil Pressure Sensor Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P623	Oil Pressure Sensor Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P624	Oil Pressure Sensor Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P625	Oil Pressure Sensor Failure Auto-acknowledge Number	2	5	99		
P626	Oil Pressure Sensor Failure Auto-acknowledge Counter	0	0	30000		
P627	Oil Pressure Sensor Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P628	Oil Pressure Sensor Table Minimum Value	0	0.5	999	Bar	
P629	Oil Pressure Sensor Table Maximum Value	0	7	999	Bar	
P630	Number of Points on Pressure Sensor Table	2	2	25		
P631	Oil Pressure 1st Point Pressure Value	0	0	999	Bar	

P632	Oil Pressure 1st Point Resistance Value	0	0	3000	ohm	
P633	Oil Pressure 2nd Point Pressure Value	0	0	999	Bar	
P634	Oil Pressure 2nd Point Resistance Value	0	0	3000	ohm	
P635	Oil Pressure 3rd Point Pressure Value	0	0	999	Bar	
P636	Oil Pressure 3rd Point Resistance Value	0	0	3000	ohm	
P637	Oil Pressure 4th Point Pressure Value	0	0	999	Bar	
P638	Oil Pressure 4th Point Resistance Value	0	0	3000	ohm	
P639	Oil Pressure 5th Point Pressure Value	0	0	999	Bar	
P640	Oil Pressure 5th Point Resistance Value	0	0	3000	ohm	
P641	Oil Pressure 6th Point Pressure Value	0	0	999	Bar	
P642	Oil Pressure 6th Point Resistance Value	0	0	3000	ohm	
P643	Oil Pressure 7th Point Pressure Value	0	0	999	Bar	
P644	Oil Pressure 7th Point Resistance Value	0	0	3000	ohm	
P645	Oil Pressure 8th Point Pressure Value	0	0	999	Bar	
P646	Oil Pressure 8th Point Resistance Value	0	0	3000	ohm	
P647	Oil Pressure 9th Point Pressure Value	0	0	999	Bar	
P648	Oil Pressure 9th Point Resistance Value	0	0	3000	ohm	
P649	Oil Pressure 10th Point Pressure Value	0	0	999	Bar	
P650	Oil Pressure 10th Point Resistance Value	0	0	3000	ohm	
P651	Oil Pressure 11th Point Pressure Value	0	0	999	Bar	
P652	Oil Pressure 11th Point Resistance Value	0	0	3000	ohm	
P653	Oil Pressure 12th Point Pressure Value	0	0	999	Bar	
P654	Oil Pressure 12th Point Resistance Value	0	0	3000	ohm	
P655	Oil Pressure 13th Point Pressure Value	0	0	999	Bar	
P656	Oil Pressure 13th Point Resistance Value	0	0	3000	ohm	
P657	Oil Pressure 14th Point Pressure Value	0	0	999	Bar	
P658	Oil Pressure 14th Point Resistance Value	0	0	3000	ohm	
P659	Oil Pressure 15th Point Pressure Value	0	0	999	Bar	
P660	Oil Pressure 15th Point Resistance Value	0	0	3000	ohm	
P661	Oil Pressure 16th Point Pressure Value	0	0	999	Bar	
P662	Oil Pressure 16th Point Resistance Value	0	0	3000	ohm	
P663	Oil Pressure 17th Point Pressure Value	0	0	999	Bar	
P664	Oil Pressure 17th Point Resistance Value	0	0	3000	ohm	
P665	Oil Pressure 18th Point Pressure Value	0	0	999	Bar	
P666	Oil Pressure 18th Point Resistance Value	0	0	3000	ohm	
P667	Oil Pressure 19th Point Pressure Value	0	0	999	Bar	
P668	Oil Pressure 19th Point Resistance Value	0	0	3000	ohm	
P669	Oil Pressure 20th Point Pressure Value	0	0	999	Bar	
P670	Oil Pressure 20th Point Resistance Value	0	0	3000	ohm	
P671	Oil Pressure 21st Point Pressure Value	0	0	999	Bar	
P672	Oil Pressure 21st Point Resistance Value	0	0	3000	ohm	
P673	Oil Pressure 22nd Point Pressure Value	0	0	999	Bar	
P674	Oil Pressure 22nd Point Resistance Value	0	0	3000	ohm	

P675	Oil Pressure 23rd Point Pressure Value	0	0	999	Bar	
P676	Oil Pressure 23rd Point Resistance Value	0	0	3000	ohm	
P677	Oil Pressure 24th Point Pressure Value	0	0	999	Bar	
P678	Oil Pressure 24th Point Resistance Value	0	0	3000	ohm	
P679	Oil Pressure 25th Point Pressure Value	0	0	999	Bar	
P680	Oil Pressure 25th Point Resistance Value	0	0	3000	ohm	
P681	Coolant Temperature Display Unit of Measurement	0	0	1		0: Celcius 1: Fahreneit
P682	Analog Temperature Sensor Type	0	2	2		0: No analog sensor 1: Table 2: VDO 120C
P683	High Coolant Temperature Level 1 Failure Active	0	1	1		0:Passive 1:Active
P684	High Coolant Temperature Level 1 Failure Value	80	103	284		
P685	High Coolant Temperature Level 1 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P686	High Coolant Temperature Level 1 Failure Delay	1	4	20	Second	
P687	High Coolant Temperature Level 1 Failure Return Time	1	4	20	Second	
P688	High Coolant Temperature Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P689	High Coolant Temperature Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P690	High Coolant Temperature Level 1 Failure Auto-acknowledge Number	2	5	99		
P691	High Coolant Temperature Level 1 Failure Hystheresis Value	1	5	250		
P692	High Coolant Temperature Level 1 Failure Counter	0	0	30000		
P693	High Coolant Temperature Level 1 Failure Counter Decrease Timer	0.1	10	6500	Hour	
P694	High Coolant Temperature Level 2 Failure Active	0	1	1		0:Passive 1:Active
P695	High Coolant Temperature Level 2 Failure Value	80	110	284		
P696	High Coolant Temperature Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P697	High Coolant Temperature Level 2 Failure Delay	1	4	20	Second	
P698	High Coolant Temperature Level 2 Failure Return Time	1	4	20	Second	
P699	High Coolant Temperature Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P700	High Coolant Temperature Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P701	High Coolant Temperature Level 2 Failure Auto-acknowledge Number	2	5	99		
P702	High Coolant Temperature Level 2 Failure Hystheresis Value	1	5	250		
P703	High Coolant Temperature Level 2 Failure Counter	0	0	30000		
P704	High Coolant Temperature Level 2 Failure Counter Decrease Timer	0.1	10	6500	Hour	
P705	Low Coolant Temperature Level 1 Failure Active	0	1	1		0:Passive 1:Active
P706	Low Coolant Temperature Level 1 Failure Value	0	5	90		
P707	Low Coolant Temperature Level 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P708	Low Coolant Temperature Level 1 Failure Delay	1	4	20	Second	
P709	Low Coolant Temperature Level 1 Failure Return Time	1	4	20	Second	
P710	Low Coolant Temperature Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P711	Low Coolant Temperature Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P712	Low Coolant Temperature Level 1 Failure Auto-acknowledge Number	2	5	99		
P713	Low Coolant Temperature Level 1 Failure Hystheresis Value	1	5	70		
P714	Low Coolant Temperature Level 1 Failure Counter	0	0	30000		
P715	Low Coolant Temperature Level 1 Failure Counter Decrease Timer	0.1	10	6500	Hour	
P716	Low Coolant Temperature Level 2 Failure Active	0	1	1		0:Passive 1:Active
P717	Low Coolant Temperature Level 2 Failure Value	0	2	90		
P718		1	2	6		1:Only Display 2:Display + Horn

	Low Coolant Temperature Level 2 Failure Class					3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P719	Low Coolant Temperature Level 2 Failure Delay	1	4	20	Second	
P720	Low Coolant Temperature Level 2 Failure Return Time	1	4	20	Second	
P721	Low Coolant Temperature Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P722	Low Coolant Temperature Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P723	Low Coolant Temperature Level 2 Failure Auto-acknowledge Number	2	5	99		
P724	Low Coolant Temperature Level 2 Failure Hystheresis Value	1	5	70		
P725	Low Coolant Temperature Level 2 Failure Counter	0	0	30000		
P726	Low Coolant Temperature Level 2 Failure Counter Decrease Timer	0.1	10	6500	Hour	
P727	Coolant Temperature Sensor Failure Active	0	1	1		0:Passive 1:Active
P728	Coolant Temperature Sensor Failure Type	0	0	2		0: Low Level 1: High Level 2: Low and High Level
P729	Coolant Temperature Sensor Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P730	Coolant Temperature Sensor Failure Delay	1	5	20	Second	
P731	Coolant Temperature Sensor Failure Return Time	1	5	20	Second	
P732	Coolant Temperature Sensor Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P733	Coolant Temperature Sensor Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P734	Coolant Temperature Sensor Failure Auto-acknowledge Number	2	5	99		
P735	Coolant Temperature Sensor Failure Counter	0	0	30000		
P736	Coolant Temperature Sensor Failure Counter Decrease Timer	0.1	10	6500	Hour	
P737	Coolant Temperature Sensor Table Minimum Value	-50	50	300	C / F	
P738	Coolant Temperature Sensor Table Maximum Value	-50	100	300	C / F	
P739	Number of Points on Coolant Temperature Sensor Table	2	2	25		
P740	Coolant Temperature 1st Point Value	-50	0	284	C / F	
P741	Coolant Temperature 1st Point Resistance Value	0	0	3000	ohm	
P742	Coolant Temperature 2nd Point Value	-50	0	284	C / F	
P743	Coolant Temperature 2nd Point Resistance Value	0	0	3000	ohm	
P744	Coolant Temperature 3rd Point Value	-50	0	284	C / F	
P745	Coolant Temperature 3rd Point Resistance Value	0	0	3000	ohm	
P746	Coolant Temperature 4th Point Value	-50	0	284	C / F	
P747	Coolant Temperature 4th Point Resistance Value	0	0	3000	ohm	
P748	Coolant Temperature 5th Point Value	-50	0	284	C / F	
P749	Coolant Temperature 5th Point Resistance Value	0	0	30000	ohm	
P750	Coolant Temperature 6th Point Value	-50	0	284	C / F	
P751	Coolant Temperature 6th Point Resistance Value	0	0	3000	ohm	
P752	Coolant Temperature 7th Point Value	-50	0	284	C / F	
P753	Coolant Temperature 7th Point Resistance Value	0	0	3000	ohm	
P754	Coolant Temperature 8th Point Value	-50	0	284	C / F	
P755	Coolant Temperature 8th Point Resistance Value	0	0	3000	ohm	
P756	Coolant Temperature 9th Point Value	-50	0	284	C / F	
P757	Coolant Temperature 9th Point Resistance Value	0	0	3000	ohm	
P758	Coolant Temperature 10th Point Value	-50	0	284	C / F	
P759	Coolant Temperature 10th Point Resistance Value	0	0	3000	ohm	
P760	Coolant Temperature 11th Point Value	-50	0	284	C / F	
P761	Coolant Temperature 11th Point Resistance Value	0	0	3000	ohm	

P762	Coolant Temperature 12th Point Value	-50	0	284	C / F	
P763	Coolant Temperature 12th Point Resistance Value	0	0	3000	ohm	
P764	Coolant Temperature 13th Point Value	-50	0	284	C / F	
P765	Coolant Temperature 13th Point Resistance Value	0	0	3000	ohm	
P766	Coolant Temperature 14th Point Value	-50	0	284	C / F	
P767	Coolant Temperature 14th Point Resistance Value	0	0	3000	ohm	
P768	Coolant Temperature 15th Point Value	-50	0	284	C / F	
P769	Coolant Temperature 15th Point Resistance Value	0	0	3000	ohm	
P770	Coolant Temperature 16th Point Value	-50	0	284	C / F	
P771	Coolant Temperature 16th Point Resistance Value	0	0	3000	ohm	
P772	Coolant Temperature 17th Point Value	-50	0	284	C / F	
P773	Coolant Temperature 17th Point Resistance Value	0	0	3000	ohm	
P774	Coolant Temperature 18th Point Value	-50	0	284	C / F	
P775	Coolant Temperature 18th Point Resistance Value	0	0	3000	ohm	
P776	Coolant Temperature 19th Point Value	-50	0	284	C / F	
P777	Coolant Temperature 19th Point Resistance Value	0	0	3000	ohm	
P778	Coolant Temperature 20th Point Value	-50	0	284	C / F	
P779	Coolant Temperature 20th Point Resistance Value	0	0	3000	ohm	
P780	Coolant Temperature 21st Point Value	-50	0	284	C / F	
P781	Coolant Temperature 21st Point Resistance Value	0	0	3000	ohm	
P782	Coolant Temperature 22nd Point Value	-50	0	284	C / F	
P783	Coolant Temperature 22nd Point Resistance Value	0	0	3000	ohm	
P784	Coolant Temperature 23rd Point Value	-50	0	284	C / F	
P785	Coolant Temperature 23rd Point Resistance Value	0	0	3000	ohm	
P786	Coolant Temperature 24th Point Value	-50	0	284	C / F	
P787	Coolant Temperature 24th Point Resistance Value	0	0	3000	ohm	
P788	Coolant Temperature 25th Point Value	-50	0	284	C / F	
P789	Coolant Temperature 25th Point Resistance Value	0	0	3000	ohm	
P790	Fuel Level / AN3 Sensor Type	0	0	2		0: No analog Sensor 1: Table 2: VDO Olcusan 3-180ohm
P791	Low Fuel Level 1 / AN3 Failure Active	0	0	3		0:Passive 1: Low Fuel Level 1 Active 2: Low AN3 Active 3:High AN3 Active
P792	Low Fuel Level 1 / AN3 Failure Value	-9999	15	9999		
P793	Low Fuel Level 1 / AN3 Failure Delay	1	5	20	Second	
P794	Low Fuel Level 1 / AN3 Failure Return Time	1	5	20	Second	
P795	Low Fuel Level 1 / AN3 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P796	Low Fuel Level 1 / AN3 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P797	Low Fuel Level 1 / AN3 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P798	Low Fuel Level 1 / AN3 Failure Auto-acknowledge Number	2	5	99		
P799	Low Fuel Level 1 / AN3 Failure Hystheresis Value	-90	5	90		
P800	Low Fuel Level 1 / AN3 Failure Auto-acknowledge Counter	0	0	30000		

P801	Low Fuel Level 1 / AN3 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P802	Low Fuel Level 2 Failure Active	0	0	1		0:Passive 1:Active
P803	Low Fuel Level 2 Failure Value	0	5	100		
P804	Low Fuel Level 2 Failure Delay	1	5	20	Second	
P805	Low Fuel Level 2 Failure Return Time	1	5	20	Second	
P806	Low Fuel Level 2 Failure Class	1	5	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P807	Low Fuel Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P808	Low Fuel Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P809	Low Fuel Level 2 Failure Auto-acknowledge Number	2	5	99		
P810	Low Fuel Level 2 Failure Hystheresis Value	1	5	90		
P811	Low Fuel Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P812	Low Fuel Level 2 Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P813	Fuel Consumption While Stopped Failure Active	0	0	1		0:Passive 1:Active
P814	Fuel Consumption While Stopped Failure Value	0	15	100		
P815	Fuel Consumption While Stopped Failure Delay	1	5	20	Second	
P816	Fuel Consumption While Stopped Failure Return Time	1	5	20	Second	
P817	Fuel Consumption While Stopped Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P818	Fuel Consumption While Stopped Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P819	Fuel Consumption While Stopped Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P820	Fuel Consumption While Stopped Failure Auto-acknowledge Number	2	5	99		
P821	Fuel Consumption While Stopped Failure Hystheresis Value	1	5	90		
P822	Fuel Consumption While Stopped Failure Auto-acknowledge Counter	0	0	30000		
P823	Fuel Consumption While Stopped Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P824	Fuel Consumption While Running Failure Active	0	0	1		0:Passive 1:Active
P825	Fuel Consumption While Running Failure Value	0	15	100		
P826	Fuel Consumption While Running Failure Delay	1	5	20	Second	
P827	Fuel Consumption While Running Failure Return Time	1	5	20	Second	
P828	Fuel Consumption While Running Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P829	Fuel Consumption While Running Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P830	Fuel Consumption While Running Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P831	Fuel Consumption While Running Failure Auto-acknowledge Number	2	5	99		
P832	Fuel Consumption While Running Failure Hystheresis Value	1	5	90		
P833	Fuel Consumption While Running Failure Auto-acknowledge Counter	0	0	30000		
P834	Fuel Consumption While Running Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P835	Fuel Level Sensor Failure Active	0	0	1		0:Passive 1:Active
P836	Fuel Level Sensor Failure Type	0	0	2		0: Low Level 1: High Level 2: Low and High Level
P837	Fuel Level Sensor Failure Delay	1	5	20	Second	
P838	Fuel Level Sensor Failure Return Time	1	5	20	Second	
P839	Fuel Level Sensor Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P840	Fuel Level Sensor Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P841	Fuel Level Sensor Failure Auto-acknowledge Type	0	0	1		0:Limited

	Fuel Level Sensor Failure Auto-acknowledge Type					1:Unlimited
P842	Fuel Level Sensor Failure Auto-acknowledge Number	2	5	99		
P843	Fuel Level Sensor Failure Auto-acknowledge Counter	0	0	30000		
P844	Fuel Level Sensor Failure Auto-acknowledge Counter Decrease Time	0.1	10	6500	Hour	
P845	Fuel Pump Active	0	0	1		0:Passive 1:Active
P846	Fuel Pump Low Level	0	25	100		
P847	Fuel Pump High Level	0	75	100		
P848	Fuel Pump Activation Time	6	10	3000	Second	
P849	Fuel Pump Deactivation Time	6	10	3000	Second	
P850	Fuel Refill Level 1 Failure Active	0	0	1		0:Passive 1:Active
P851	Fuel Refill Level 1 Failure Change	1	6	90		
P852	Fuel Refill Level 1 Failure Delay	8	60	3000		
P853	Fuel Refill Level 1 Failure Return Time	0.1	10	6500	Hour	
P854	Fuel Refill Level 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P855	Fuel Refill Level 1 Failure Status	0	0	1		0:Passive 1:Active
P856	Fuel Refill Level 1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P857	Fuel Refill Level 1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P858	Fuel Refill Level 1 Failure Auto-acknowledge Number	2	5	99		
P859	Fuel Refill Level 1 Failure Auto-acknowledge Hystheresis Value	1	2	50		
P860	Fuel Refill Level 1 Failure Auto-acknowledge Counter	0	0	30000		
P861	Fuel Refill Level 1 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P862	Fuel Refill Level 2 Failure Active	0	0	1		0:Passive 1:Active
P863	Fuel Refill Level 2 Failure Change	1	4	90		
P864	Fuel Refill Level 2 Failure Delay	2	60	3000	Second	
P865	Fuel Refill Level 2 Failure Return Time	0.1	10	6500	Hour	
P866	Fuel Refill Level 2 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P867	Fuel Refill Level 2 Failure Status	0	0	1		0:Passive 1:Active
P868	Fuel Refill Level 2 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P869	Fuel Refill Level 2 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P870	Fuel Refill Level 2 Failure Auto-acknowledge Number	2	5	99		
P871	Fuel Refill Level 2 Failure Auto-acknowledge Hystheresis Value	1	2	50		
P872	Fuel Refill Level 2 Failure Auto-acknowledge Counter	0	0	30000		
P873	Fuel Refill Level 2 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P874	Fuel Level Sensor Table Minimum Value	-9999	5	9999		
P875	Fuel Level Sensor Table Maximum Value	-9999	100	9999		
P876	Number of Points on Fuel Level Sensor Table	2	2	25		
P877	Fuel Level 1st Point Value	-9999	0	9999	%	
P878	Fuel Level 1st Point Resistance Value	0	3	3000	ohm	
P879	Fuel Level 2nd Point Value	-9999	100	9999	%	
P880	Fuel Level 2nd Point Resistance Value	0	180	3000	ohm	
P881	Fuel Level 3rd Point Value	-9999	0	9999	%	
P882	Fuel Level 3rd Point Resistance Value	0	0	3000	ohm	
P883	Fuel Level 4th Point Value	-9999	0	9999	%	
P884	Fuel Level 4th Point Resistance Value	0	0	3000	ohm	
P885	Fuel Level 5th Point Value	-9999	0	9999	%	
P886	Fuel Level 5th Point Resistance Value	0	0	3000	ohm	
P887	Fuel Level 6th Point Value	-9999	0	9999	%	
P888	Fuel Level 6th Point Resistance Value	0	0	3000	ohm	
P889	Fuel Level 7th Point Value	-9999	0	9999	%	
P890	Fuel Level 7th Point Resistance Value	0	0	3000	ohm	
P891	Fuel Level 8th Point Value	-9999	0	9999	%	
P892	Fuel Level 8th Point Resistance Value	0	0	3000	ohm	
P893	Fuel Level 9th Point Value	-9999	0	9999	%	

P894	Fuel Level 9th Point Resistance Value	0	0	3000	ohm	
P895	Fuel Level 10th Point Value	-9999	0	9999	%	
P896	Fuel Level 10th Point Resistance Value	0	0	3000	ohm	
P897	Fuel Level 11th Point Value	-9999	0	9999	%	
P898	Fuel Level 11th Point Resistance Value	0	0	3000	ohm	
P899	Fuel Level 12th Point Value	-9999	0	9999	%	
P900	Fuel Level 12th Point Resistance Value	0	0	3000	ohm	
P901	Fuel Level 13th Point Value	-9999	0	9999	%	
P902	Fuel Level 13th Point Resistance Value	0	0	3000	ohm	
P903	Fuel Level 14th Point Value	-9999	0	9999	%	
P904	Fuel Level 14th Point Resistance Value	0	0	3000	ohm	
P905	Fuel Level 15th Point Value	-9999	0	9999	%	
P906	Fuel Level 15th Point Resistance Value	0	0	3000	ohm	
P907	Fuel Level 16th Point Value	-9999	0	9999	%	
P908	Fuel Level 16th Point Resistance Value	0	0	3000	ohm	
P909	Fuel Level 17th Point Value	-9999	0	9999	%	
P910	Fuel Level 17th Point Resistance Value	0	0	3000	ohm	
P911	Fuel Level 18th Point Value	-9999	0	9999	%	
P912	Fuel Level 18th Point Resistance Value	0	0	3000	ohm	
P913	Fuel Level 19th Point Value	-9999	0	9999	%	
P914	Fuel Level 19th Point Resistance Value	0	0	3000	ohm	
P915	Fuel Level 20th Point Value	-9999	0	9999	%	
P916	Fuel Level 20th Point Resistance Value	0	0	3000	ohm	
P917	Fuel Level 21st Point Value	-9999	0	9999	%	
P918	Fuel Level 21st Point Resistance Value	0	0	3000	ohm	
P919	Fuel Level 22nd Point Value	-9999	0	9999	%	
P920	Fuel Level 22nd Point Resistance Value	0	0	3000	ohm	
P921	Fuel Level 23rd Point Value	-9999	0	9999	%	
P922	Fuel Level 23rd Point Resistance Value	0	0	3000	ohm	
P923	Fuel Level 24th Point Value	-9999	0	9999	%	
P924	Fuel Level 24th Point Resistance Value	0	0	3000	ohm	
P925	Fuel Level 25th Point Value	-9999	0	9999	%	
P926	Fuel Level 25th Point Resistance Value	0	0	3000	ohm	
P927	Digital Input 1 Function	0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button 26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock 43: Pre-crank Delay Disabled 44: Load is not Transferred to Mains and Generator 45: Load is Not Transferred to Mains 46: Load is Not Transferred to Generator 47: Transfer Load to Generator 48: Transfer Load to Mains 49: Dual Mutual Standby Priority 50: Dual Mutual Standby Virtual Mains Input 51: All Failures Cancelled 52: Dual Mutual Standby Sync Success Input
P928	Digital Input 1 Failure Delay	0.2	2	999	Second	
P929	Digital Input 1 Failure Return Time	0.2	2	999	Second	
P930	Digital Input 1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling

						6:Display + Horn + Shotdown without cooling + Mains Trip
P931	Digital Input 1 Failure Auto-acknowledge	0	0	1		0:Passive
						1:Active
P932	Digital Input 1 Failure Auto-acknowledge Type	0	0	1		0:Limited
						1:Unlimited
P933	Digital Input 1 Failure Auto-acknowledge Number	2	5	99		
P934	Digital Input 1 Failure Contactor Type	0	1	1		0: Normally Closed
						0: Normally Open
P935	Digital Input 1 Failure Contactor Activation Time	0	2	3		0: Active All the Time
						1: Active when Engine Running
						2: Active After Failure Delay Timer
						3: Active when Alternator Energizes the Contactor
P936	Digital Input 1 Failure Auto-acknowledge Counter	0	0	30000		
P937	Digital Input 1 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P938	Digital Input 1 User Defined Failure Message 1		“AUX.IN”			
P939	Digital Input 1 User Defined Failure Message 2		“PUT 1 ”			
P940	Digital Input 1 User Defined Failure Message 3		“FAIL. ”			
P941	Digital Input 2 Function	0	0	52		0: Input Disabled
						1: User Defined Failure
						2: Mains Exists
						3: Mains Failure
						4: Auto Start Cancel
						5: Start Cancel
						6: Panel Key Lock
						7: Lamp Test
						8: Scheduled Tests Cancel
						9: Cancel Emergency Start Failures
						10: Emergency Stop
						11: Remote Start On-load
						12: Remote Start Off-load
						13: Generator Contactor Feedback 1
						14: Generator Contactor Feedback 2
						15: Mains Contactor Feedback 1
						16: Mains Contactor Feedback 2
						17: No Functionality
						18: No Functionality
						19: No Functionality
						20: Horn Silence Button
						21: Failure Acknowledge Button
						22: Horn Silence + Failure Acknowledge Button
						23: Start Button
						24: Stop Button
						25: Mains Contactor Open/Close Button
						26: Generator Contactor Open/Close Button
						27: Mains Contactor Open Button
						28: Mains Contacto Close Button
						29: Generator Contactor Open Button
						30: Generator Contactor Close Button
						31: Manual Operation Button
						32: Auto Operation Button
						33: Test On-Load Button
						34: Test Off-load Button
						35: Off Operation Button
						36: Start in Manual Operation
						37: Start in Auto Operation
						38: Start in On-load Test Operation
						39: Start in Off-load Test Operation
						40: Start in Off Operation
						41: On-load/Off-load Selection for Front Panel Test Button
						42: Program Mode Lock
						43: Pre-crank Delay Disabled
						44: Load is not Transferred to Mains and Generator
						45: Load is Not Transferred to Mains
						46: Load is Not Transferred to Generator
						47: Transfer Load to Generator
						48: Transfer Load to Mains
						49: Dual Mutual Standby Priority
						50: Dual Mutual Standby Virtual Mains Input
						51: All Failures Cancelled
						52: Dual Mutual Standby Sync Success Input
P942	Digital Input 2 Failure Delay	0.2	2	999		
P943	Digital Input 2 Failure Return Time	0.2	2	999		
P944	Digital Input 2 Failure Class	1	2	6		1:Only Display
						2:Display + Horn
						3:Display + Horn + Gen.Trip
						4:Display + Horn + Shotdown with Cooling
						5:Display + Horn + Shotdown without Cooling
						6:Display + Horn + Shotdown without cooling + Mains Trip
P945	Digital Input 2 Failure Auto-acknowledge	0	0	1		0:Passive
						1:Active
P946	Digital Input 2 Failure Auto-acknowledge Type	0	0	1		0:Limited
						1:Unlimited
P947	Digital Input 2 Failure Auto-acknowledge Number	2	5	99		
P948	Digital Input 2 Failure Contactor Type	0	1	1		0: Normally Closed
						0: Normally Open
P949	Digital Input 2 Failure Contactor Activation Time	0	2	3		0: Active All the Time
						1: Active when Engine Running
						2: Active After Failure Delay Timer
						3: Active when Alternator Energizes the Contactor
P950	Digital Input 2 Failure Auto-acknowledge Counter	0	0	30000		
P951	Digital Input 2 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P952	Digital Input 2 User Defined Failure Message 1		“AUX.IN”			
P953	Digital Input 2 User Defined Failure Message 2		“PUT 2 ”			
P954	Digital Input 2 User Defined Failure Message 3		“FAIL. ”			
P955		0	0	52		0: Input Disabled
						1: User Defined Failure
						2: Mains Exists
						3: Mains Failure
						4: Auto Start Cancel
						5: Start Cancel
						6: Panel Key Lock
						7: Lamp Test
						8: Scheduled Tests Cancel
						9: Cancel Emergency Start Failures
						10: Emergency Stop
						11: Remote Start On-load
						12: Remote Start Off-load
						13: Generator Contactor Feedback 1
						14: Generator Contactor Feedback 2
						15: Mains Contactor Feedback 1
						16: Mains Contactor Feedback 2
						17: No Functionality
						18: No Functionality
						19: No Functionality
						20: Horn Silence Button
						21: Failure Acknowledge Button
						22: Horn Silence + Failure Acknowledge Button
						23: Start Button
						24: Stop Button
						25: Mains Contactor Open/Close Button
						26: Generator Contactor Open/Close Button

	Digital Input 3 Function					27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock 43: Pre-crank Delay Disabled 44: Load is not Transferred to Mains and Generator 45: Load is Not Transferred to Mains 46: Load is Not Transferred to Generator 47: Transfer Load to Generator 48: Transfer Load to Mains 49: Dual Mutual Standby Priority 50: Dual Mutual Standby Virtual Mains Input 51: All Failures Cancelled 52: Dual Mutual Standby Sync Success Input
P956	Digital Input 3 Failure Delay	0.2	2	999		
P957	Digital Input 3 Failure Return Time	0.2	2	999		
P958	Digital Input 3 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P959	Digital Input 3 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P960	Digital Input 3 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P961	Digital Input 3 Failure Auto-acknowledge Number	2	5	99		
P962	Digital Input 3 Failure Contactor Type	0	1	1		0: Normally Closed 0: Normally Open
P963	Digital Input 3 Failure Contactor Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P964	Digital Input 3 Failure Auto-acknowledge Counter	0	0	30000		
P965	Digital Input 3 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P966	Digital Input 3 User Defined Failure Message 1		“AUX.IN”			
P967	Digital Input 3 User Defined Failure Message 2		“PUT 3 ”			
P968	Digital Input 3 User Defined Failure Message 3		“FAIL. ”			
P969	Digital Input 4 Function	0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button 26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock 43: Pre-crank Delay Disabled 44: Load is not Transferred to Mains and Generator 45: Load is Not Transferred to Mains 46: Load is Not Transferred to Generator 47: Transfer Load to Generator 48: Transfer Load to Mains 49: Dual Mutual Standby Priority 50: Dual Mutual Standby Virtual Mains Input 51: All Failures Cancelled 52: Dual Mutual Standby Sync Success Input
P970	Digital Input 4 Failure Delay	0.2	2	999		
P971	Digital Input 4 Failure Return Time	0.2	2	999		
P972	Digital Input 4 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P973	Digital Input 4 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P974	Digital Input 4 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P975	Digital Input 4 Failure Auto-acknowledge Number	2	5	99		
P976	Digital Input 4 Failure Contactor Type	0	1	1		0: Normally Closed 0: Normally Open
P977	Digital Input 4 Failure Contactor Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor

P978	Digital Input 4 Failure Auto-acknowledge Counter	0	0	30000		
P979	Digital Input 4 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P980	Digital Input 4 User Defined Failure Message 1		“AUX.IN”			
P981	Digital Input 4 User Defined Failure Message 2		“PUT 4 ”			
P982	Digital Input 4 User Defined Failure Message 3		“FAIL. ”			
P983	Digital Input 5 Function	0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button 26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock 43: Pre-crank Delay Disabled 44: Load is not Transferred to Mains and Generator 45: Load is Not Transferred to Mains 46: Load is Not Transferred to Generator 47: Transfer Load to Generator 48: Transfer Load to Mains 49: Dual Mutual Standby Priority 50: Dual Mutual Standby Virtual Mains Input 51: All Failures Cancelled 52: Dual Mutual Standby Sync Success Input
P984	Digital Input 5 Failure Delay	0.2	2	999		
P985	Digital Input 5 Failure Return Time	0.2	2	999		
P986	Digital Input 5 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P987	Digital Input 5 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P988	Digital Input 5 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P989	Digital Input 5 Failure Auto-acknowledge Number	2	5	99		
P990	Digital Input 5 Failure Contactor Type	0	1	1		0: Normally Closed 0: Normally Open
P991	Digital Input 5 Failure Contactor Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P992	Digital Input 5 Failure Auto-acknowledge Counter	0	0	30000		
P993	Digital Input 5 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P994	Digital Input 5 User Defined Failure Message 1		“AUX.IN”			
P995	Digital Input 5 User Defined Failure Message 2		“PUT 5 ”			
P996	Digital Input 5 User Defined Failure Message 3		“FAIL. ”			
P997	Digital Input 6 Function	0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button 26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock

						43: Pre-crank Delay Disabled
						44: Load is not Transferred to Mains and Generator
						45: Load is Not Transferred to Mains
						46: Load is Not Transferred to Generator
						47: Transfer Load to Generator
						48: Transfer Load to Mains
						49: Dual Mutual Standby Priority
						50: Dual Mutual Standby Virtual Mains Input
						51: All Failures Cancelled
						52: Dual Mutual Standby Sync Success Input
P998	Digital Input 6 Failure Delay	0.2	2	999		
P999	Digital Input 6 Failure Return Time	0.2	2	999		
P1000	Digital Input 6 Failure Class	1	2	6		1:Only Display
						2:Display + Horn
						3:Display + Horn + Gen.Trip
						4:Display + Horn + Shotdown with Cooling
						5:Display + Horn + Shotdown without Cooling
						6:Display + Horn + Shotdown without cooling + Mains Trip
P1001	Digital Input 6 Failure Auto-acknowledge	0	0	1		0:Passive
						1:Active
P1002	Digital Input 6 Failure Auto-acknowledge Type	0	0	1		0:Limited
						1:Unlimited
P1003	Digital Input 6 Failure Auto-acknowledge Number	2	5	99		
P1004	Digital Input 6 Failure Contactor Type	0	1	1		0: Normally Closed
						0: Normally Open
P1005	Digital Input 6 Failure Contactor Activation Time	0	2	3		0: Active All the Time
						1: Active when Engine Running
						2: Active After Failure Delay Timer
						3: Active when Alternator Energizes the Contactor
P1006	Digital Input 6 Failure Auto-acknowledge Counter	0	0	30000		
P1007	Digital Input 6 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1008	Digital Input 6 User Defined Failure Message 1		“AUX.IN”			
P1009	Digital Input 6 User Defined Failure Message 2		“PUT 6 ”			
P1010	Digital Input 6 User Defined Failure Message 3		“FAIL. ”			
P1011	I/O Expansion Module Active	0	0	1		0:Passive
						1:Active
P1012	ECU Module Active	0	0	1		0:Passive
						1:Active
P1013	ECU Engine Type	0	0	12		0 :Caterpillar
						1:Cummins CM850
						2:Detroit Diesel
						3:Deutz EMR2
						4:Iveco Vector
						5:John Deere
						6:Perkins 1300
						7:Volvo Penta EMS2
						8 :Genel J1939
						9:Deutz EMR3
						10:Perkins Adem3
						11:Perkins Adem4
						12:Scania S6
P1014	Canbus Baud Rate	0	1	1		0 :125 kBit/s
						1:250 kBit/s
P1015	Digital Input 7 Function	0	0	52		0: Input Disabled
						1: User Defined Failure
						2: Mains Exists
						3: Mains Failure
						4: Auto Start Cancel
						5: Start Cancel
						6: Panel Key Lock
						7: Lamp Test
						8: Scheduled Tests Cancel
						9: Cancel Emergency Start Failures
						10: Emergency Stop
						11: Remote Start On-load
						12: Remote Start Off-load
						13: Generator Contactor Feedback 1
						14: Generator Contactor Feedback 2
						15: Mains Contactor Feedback 1
						16: Mains Contactor Feedback 2
						17: No Functionality
						18: No Functionality
						19: No Functionality
						20: Horn Silence Button
						21: Failure Acknowledge Button
						22: Horn Silence + Failure Acknowledge Button
						23: Start Button
						24: Stop Button
						25: Mains Contactor Open/Close Button
						26: Generator Contactor Open/Close Button
						27: Mains Contactor Open Button
						28: Mains Contacto Close Button
						29: Generator Contactor Open Button
						30: Generator Contactor Close Button
						31: Manual Operation Button
						32: Auto Operation Button
						33: Test On-Load Button
						34: Test Off-load Button
						35: Off Operation Button
						36: Start in Manual Operation
						37: Start in Auto Operation
						38: Start in On-load Test Operation
						39: Start in Off-load Test Operation
						40: Start in Off Operation
						41: On-load/Off-load Selection for Front Panel Test Button
						42: Program Mode Lock
						43: Pre-crank Delay Disabled
						44: Load is not Transferred to Mains and Generator
						45: Load is Not Transferred to Mains
						46: Load is Not Transferred to Generator
						47: Transfer Load to Generator
						48: Transfer Load to Mains
						49: Dual Mutual Standby Priority
						50: Dual Mutual Standby Virtual Mains Input
						51: All Failures Cancelled
						52: Dual Mutual Standby Sync Success Input
P1016	Digital Input 7 Failure Delay	0.2	2	999		
P1017	Digital Input 7 Failure Return Time	0.2	2	999		
P1018	Digital Input 7 Failure Class	1	2	6		1:Only Display
						2:Display + Horn
						3:Display + Horn + Gen.Trip
						4:Display + Horn + Shotdown with Cooling
						5:Display + Horn + Shotdown without Cooling
						6:Display + Horn + Shotdown without cooling + Mains Trip
P1019	Digital Input 7 Failure Auto-acknowledge	0	0	1		0:Passive
						1:Active
P1020	Digital Input 7 Failure Auto-acknowledge Type	0	0	1		0:Limited
						1:Unlimited
P1021	Digital Input 7 Failure Auto-acknowledge Number	2	5	99		
P1022	Digital Input 7 Failure Contactor Type	0	1	1		0: Normally Closed
						0: Normally Open
P1023	Digital Input 7 Failure Contactor Activation Time	0	2	3		0: Active All the Time
						1: Active when Engine Running
						2: Active After Failure Delay Timer

						3: Active when Alternator Energizes the Contactor
P1024	Digital Input 7 Failure Auto-acknowledge Counter	0	0	30000		
P1025	Digital Input 7 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1026	Digital Input 7 User Defined Failure Message 1		“AUX.IN”			
P1027	Digital Input 7 User Defined Failure Message 2		“PUT 7 ”			
P1028	Digital Input 7 User Defined Failure Message 3		“FAIL. ”			
P1029	Digital Input 8 Function	0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button 26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock 43: Pre-crank Delay Disabled 44: Load is not Transferred to Mains and Generator 45: Load is Not Transferred to Mains 46: Load is Not Transferred to Generator 47: Transfer Load to Generator 48: Transfer Load to Mains 49: Dual Mutual Standby Priority 50: Dual Mutual Standby Virtual Mains Input 51: All Failures Cancelled 52: Dual Mutual Standby Sync Success Input
P1030	Digital Input 8 Failure Delay	0.2	2	999		
P1031	Digital Input 8 Failure Return Time	0.2	2	999		
P1032	Digital Input 8 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1033	Digital Input 8 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1034	Digital Input 8 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1035	Digital Input 8 Failure Auto-acknowledge Number	2	5	99		
P1036	Digital Input 8 Failure Contactor Type	0	1	1		0: Normally Closed 0: Normally Open
P1037	Digital Input 8 Failure Contactor Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1038	Digital Input 8 Failure Auto-acknowledge Counter	0	0	30000		
P1039	Digital Input 8 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1040	Digital Input 8 User Defined Failure Message 1		“AUX.IN”			
P1041	Digital Input 8 User Defined Failure Message 2		“PUT 8 ”			
P1042	Digital Input 8 User Defined Failure Message 3		“FAIL. ”			
P1043	Digital Input 9 Function	0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button 26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation

						41: On-load/Off-load Selection for Front Panel Test Button
						42: Program Mode Lock
						43: Pre-crank Delay Disabled
						44: Load is not Transferred to Mains and Generator
						45: Load is Not Transferred to Mains
						46: Load is Not Transferred to Generator
						47: Transfer Load to Generator
						48: Transfer Load to Mains
						49: Dual Mutual Standby Priority
						50: Dual Mutual Standby Virtual Mains Input
						51: All Failures Cancelled
						52: Dual Mutual Standby Sync Success Input
P1044	Digital Input 9 Failure Delay	0.2	2	999		
P1045	Digital Input 9 Failure Return Time	0.2	2	999		
P1046	Digital Input 9 Failure Class	1	2	6		1:Only Display
						2:Display + Horn
						3:Display + Horn + Gen.Trip
						4:Display + Horn + Shotdown with Cooling
						5:Display + Horn + Shotdown without Cooling
						6:Display + Horn + Shotdown without cooling + Mains Trip
P1047	Digital Input 9 Failure Auto-acknowledge	0	0	1		0:Passive
						1:Active
P1048	Digital Input 9 Failure Auto-acknowledge Type	0	0	1		0:Limited
						1:Unlimited
P1049	Digital Input 9 Failure Auto-acknowledge Number	2	5	99		
P1050	Digital Input 9 Failure Contactor Type	0	1	1		0: Normally Closed
						0: Normally Open
P1051	Digital Input 9 Failure Contactor Activation Time	0	2	3		0: Active All the Time
						1: Active when Engine Running
						2: Active After Failure Delay Timer
						3: Active when Alternator Energizes the Contactor
P1052	Digital Input 9 Failure Auto-acknowledge Counter	0	0	30000		
P1053	Digital Input 9 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1054	Digital Input 9 User Defined Failure Message 1		“AUX.IN”			
P1055	Digital Input 9 User Defined Failure Message 2		“PUT 9 ”			
P1056	Digital Input 9 User Defined Failure Message 3		“FAIL. ”			
P1057	Digital Input 10 Function	0	0	52		0: Input Disabled
						1: User Defined Failure
						2: Mains Exists
						3: Mains Failure
						4: Auto Start Cancel
						5: Start Cancel
						6: Panel Key Lock
						7: Lamp Test
						8: Scheduled Tests Cancel
						9: Cancel Emergency Start Failures
						10: Emergency Stop
						11: Remote Start On-load
						12: Remote Start Off-load
						13: Generator Contactor Feedback 1
						14: Generator Contactor Feedback 2
						15: Mains Contactor Feedback 1
						16: Mains Contactor Feedback 2
						17: No Functionality
						18: No Functionality
						19: No Functionality
						20: Horn Silence Button
						21: Failure Acknowledge Button
						22: Horn Silence + Failure Acknowledge Button
						23: Start Button
						24: Stop Button
						25: Mains Contactor Open/Close Button
						26: Generator Contactor Open/Close Button
						27: Mains Contactor Open Button
						28: Mains Contacto Close Button
						29: Generator Contactor Open Button
						30: Generator Contactor Close Button
						31: Manual Operation Button
						32: Auto Operation Button
						33: Test On-Load Button
						34: Test Off-load Button
						35: Off Operation Button
						36: Start in Manual Operation
						37: Start in Auto Operation
						38: Start in On-load Test Operation
						39: Start in Off-load Test Operation
						40: Start in Off Operation
						41: On-load/Off-load Selection for Front Panel Test Button
						42: Program Mode Lock
						43: Pre-crank Delay Disabled
						44: Load is not Transferred to Mains and Generator
						45: Load is Not Transferred to Mains
						46: Load is Not Transferred to Generator
						47: Transfer Load to Generator
						48: Transfer Load to Mains
						49: Dual Mutual Standby Priority
						50: Dual Mutual Standby Virtual Mains Input
						51: All Failures Cancelled
						52: Dual Mutual Standby Sync Success Input
P1058	Digital Input 10 Failure Delay	0.2	2	999		
P1059	Digital Input 10 Failure Return Time	0.2	2	999		
P1060	Digital Input 10 Failure Class	1	2	6		1:Only Display
						2:Display + Horn
						3:Display + Horn + Gen.Trip
						4:Display + Horn + Shotdown with Cooling
						5:Display + Horn + Shotdown without Cooling
						6:Display + Horn + Shotdown without cooling + Mains Trip
P1061	Digital Input 10 Failure Auto-acknowledge	0	0	1		0:Passive
						1:Active
P1062	Digital Input 10 Failure Auto-acknowledge Type	0	0	1		0:Limited
						1:Unlimited
P1063	Digital Input 10 Failure Auto-acknowledge Number	2	5	99		
P1064	Digital Input 10 Failure Contactor Type	0	1	1		0: Normally Closed
						0: Normally Open
P1065	Digital Input 10 Failure Contactor Activation Time	0	2	3		0: Active All the Time
						1: Active when Engine Running
						2: Active After Failure Delay Timer
						3: Active when Alternator Energizes the Contactor
P1066	Digital Input 10 Failure Auto-acknowledge Counter	0	0	30000		
P1067	Digital Input 10 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1068	Digital Input 10 User Defined Failure Message 1		“AUX.IN”			
P1069	Digital Input 10 User Defined Failure Message 2		“PUT 10 ”			
P1070	Digital Input 10 User Defined Failure Message 3		“FAIL. ”			
P1071		0	0	52		0: Input Disabled
						1: User Defined Failure
						2: Mains Exists
						3: Mains Failure
						4: Auto Start Cancel
						5: Start Cancel
						6: Panel Key Lock
						7: Lamp Test
						8: Scheduled Tests Cancel

						9: Cancel Emergency Start Failures
						10: Emergency Stop
						11: Remote Start On-load
						12: Remote Start Off-load
						13: Generator Contactor Feedback 1
						14: Generator Contactor Feedback 2
						15: Mains Contactor Feedback 1
						16: Mains Contactor Feedback 2
						17: No Functionality
						18: No Functionality
						19: No Functionality
						20: Horn Silence Button
						21: Failure Acknowledge Button
						22: Horn Silence + Failure Acknowledge Button
						23: Start Button
						24: Stop Button
						25: Mains Contactor Open/Close Button
						26: Generator Contactor Open/Close Button
	Digital Input 11 Function					27: Mains Contactor Open Button
						28: Mains Contacto Close Button
						29: Generator Contactor Open Button
						30: Generator Contactor Close Button
						31: Manual Operation Button
						32: Auto Operation Button
						33: Test On-Load Button
						34: Test Off-load Button
						35: Off Operation Button
						36: Start in Manual Operation
						37: Start in Auto Operation
						38: Start in On-load Test Operation
						39: Start in Off-load Test Operation
						40: Start in Off Operation
						41: On-load/Off-load Selection for Front Panel Test Button
						42: Program Mode Lock
						43: Pre-crank Delay Disabled
						44: Load is not Transferred to Mains and Generator
						45: Load is Not Transferred to Mains
						46: Load is Not Transferred to Generator
						47: Transfer Load to Generator
						48: Transfer Load to Mains
						49: Dual Mutual Standby Priority
						50: Dual Mutual Standby Virtual Mains Input
						51: All Failures Cancelled
						52: Dual Mutual Standby Sync Success Input
P1072	Digital Input 11 Failure Delay	0.2	2	999		
P1073	Digital Input 11 Failure Return Time	0.2	2	999		
P1074		1	2	6		1:Only Display
						2:Display + Horn
						3:Display + Horn + Gen.Trip
	Digital Input 11 Failure Class					4:Display + Horn + Shotdown with Cooling
						5:Display + Horn + Shotdown without Cooling
						6:Display + Horn + Shotdown without cooling + Mains Trip
P1075	Digital Input 11 Failure Auto-acknowledge	0	0	1		0:Passive
						1:Active
P1076	Digital Input 11 Failure Auto-acknowledge Type	0	0	1		0:Limited
						1:Unlimited
P1077	Digital Input 11 Failure Auto-acknowledge Number	2	5	99		
P1078	Digital Input 11 Failure Contactor Type	0	1	1		0: Normally Closed
						0: Normally Open
P1079		0	2	3		0: Active All the Time
						1: Active when Engine Running
	Digital Input 11 Failure Contactor Activation Time					2: Active After Failure Delay Timer
						3: Active when Alternator Energizes the Contactor
P1080	Digital Input 11 Failure Auto-acknowledge Counter	0	0	30000		
P1081	Digital Input 11 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1082	Digital Input 11 User Defined Failure Message 1		“AUX.IN”			
P1083	Digital Input 11 User Defined Failure Message 2		“PUT 11 ”			
P1084	Digital Input 11 User Defined Failure Message 3		“FAIL. ”			
P1085		0	0	52		0: Input Disabled
						1: User Defined Failure
						2: Mains Exists
						3: Mains Failure
						4: Auto Start Cancel
						5: Start Cancel
						6: Panel Key Lock
						7: Lamp Test
						8: Scheduled Tests Cancel
						9: Cancel Emergency Start Failures
						10: Emergency Stop
						11: Remote Start On-load
						12: Remote Start Off-load
						13: Generator Contactor Feedback 1
						14: Generator Contactor Feedback 2
						15: Mains Contactor Feedback 1
						16: Mains Contactor Feedback 2
						17: No Functionality
						18: No Functionality
						19: No Functionality
						20: Horn Silence Button
						21: Failure Acknowledge Button
						22: Horn Silence + Failure Acknowledge Button
						23: Start Button
						24: Stop Button
						25: Mains Contactor Open/Close Button
						26: Generator Contactor Open/Close Button
	Digital Input 12 Function					27: Mains Contactor Open Button
						28: Mains Contacto Close Button
						29: Generator Contactor Open Button
						30: Generator Contactor Close Button
						31: Manual Operation Button
						32: Auto Operation Button
						33: Test On-Load Button
						34: Test Off-load Button
						35: Off Operation Button
						36: Start in Manual Operation
						37: Start in Auto Operation
						38: Start in On-load Test Operation
						39: Start in Off-load Test Operation
						40: Start in Off Operation
						41: On-load/Off-load Selection for Front Panel Test Button
						42: Program Mode Lock
						43: Pre-crank Delay Disabled
						44: Load is not Transferred to Mains and Generator
						45: Load is Not Transferred to Mains
						46: Load is Not Transferred to Generator
						47: Transfer Load to Generator
						48: Transfer Load to Mains
						49: Dual Mutual Standby Priority
						50: Dual Mutual Standby Virtual Mains Input
						51: All Failures Cancelled
						52: Dual Mutual Standby Sync Success Input
P1086	Digital Input 12 Failure Delay	0.2	2	999		
P1087	Digital Input 12 Failure Return Time	0.2	2	999		
P1088		1	2	6		1:Only Display

	Digital Input 12 Failure Class					2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1089	Digital Input 12 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1090	Digital Input 12 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1091	Digital Input 12 Failure Auto-acknowledge Number	2	5	99		
P1092	Digital Input 12 Failure Contactor Type	0	1	1		0: Normally Closed 0: Normally Open
P1093	Digital Input 12 Failure Contactor Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1094	Digital Input 12 Failure Auto-acknowledge Counter	0	0	30000		
P1095	Digital Input 12 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1096	Digital Input 12 User Defined Failure Message 1		“AUX.IN”			
P1097	Digital Input 12 User Defined Failure Message 2		“PUT 12 ”			
P1098	Digital Input 12 User Defined Failure Message 3		“FAIL. ”			
P1099	Digital Input 13 Function	0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button 26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock 43: Pre-crank Delay Disabled 44: Load is not Transferred to Mains and Generator 45: Load is Not Transferred to Mains 46: Load is Not Transferred to Generator 47: Transfer Load to Generator 48: Transfer Load to Mains 49: Dual Mutual Standby Priority 50: Dual Mutual Standby Virtual Mains Input 51: All Failures Cancelled 52: Dual Mutual Standby Sync Success Input
P1100	Digital Input 13 Failure Delay	0.2	2	999		
P1101	Digital Input 13 Failure Return Time	0.2	2	999		
P1102	Digital Input 13 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1103	Digital Input 13 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1104	Digital Input 13 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1105	Digital Input 13 Failure Auto-acknowledge Number	2	5	99		
P1106	Digital Input 13 Failure Contactor Type	0	1	1		0: Normally Closed 0: Normally Open
P1107	Digital Input 13 Failure Contactor Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1108	Digital Input 13 Failure Auto-acknowledge Counter	0	0	30000		
P1109	Digital Input 13 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1110	Digital Input 13 User Defined Failure Message 1		“AUX.IN”			
P1111	Digital Input 13 User Defined Failure Message 2		“PUT 13 ”			
P1112	Digital Input 13 User Defined Failure Message 3		“FAIL. ”			
P1113		0	0	52		0: Input Disabled 1: User Defined Failure 2: Mains Exists 3: Mains Failure 4: Auto Start Cancel 5: Start Cancel 6: Panel Key Lock 7: Lamp Test 8: Scheduled Tests Cancel 9: Cancel Emergency Start Failures 10: Emergency Stop 11: Remote Start On-load 12: Remote Start Off-load 13: Generator Contactor Feedback 1 14: Generator Contactor Feedback 2 15: Mains Contactor Feedback 1 16: Mains Contactor Feedback 2 17: No Functionality 18: No Functionality 19: No Functionality 20: Horn Silence Button 21: Failure Acknowledge Button 22: Horn Silence + Failure Acknowledge Button 23: Start Button 24: Stop Button 25: Mains Contactor Open/Close Button

	Digital Input 14 Function					26: Generator Contactor Open/Close Button 27: Mains Contactor Open Button 28: Mains Contacto Close Button 29: Generator Contactor Open Button 30: Generator Contactor Close Button 31: Manual Operation Button 32: Auto Operation Button 33: Test On-Load Button 34: Test Off-load Button 35: Off Operation Button 36: Start in Manual Operation 37: Start in Auto Operation 38: Start in On-load Test Operation 39: Start in Off-load Test Operation 40: Start in Off Operation 41: On-load/Off-load Selection for Front Panel Test Button 42: Program Mode Lock 43: Pre-crank Delay Disabled 44: Load is not Transferred to Mains and Generator 45: Load is Not Transferred to Mains 46: Load is Not Transferred to Generator 47: Transfer Load to Generator 48: Transfer Load to Mains 49: Dual Mutual Standby Priority 50: Dual Mutual Standby Virtual Mains Input 51: All Failures Cancelled 52: Dual Mutual Standby Sync Success Input
P1114	Digital Input 14 Failure Delay	0.2	2	999		
P1115	Digital Input 14 Failure Return Time	0.2	2	999		
P1116	Digital Input 14 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1117	Digital Input 14 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1118	Digital Input 14 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1119	Digital Input 14 Failure Auto-acknowledge Number	2	5	99		
P1120	Digital Input 14 Failure Contactor Type	0	1	1		0: Normally Closed 0: Normally Open
P1121	Digital Input 14 Failure Contactor Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1122	Digital Input 14 Failure Auto-acknowledge Counter	0	0	30000		
P1123	Digital Input 14 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500		
P1124	Digital Input 14 User Defined Failure Message 1		“AUX.IN”			
P1125	Digital Input 14 User Defined Failure Message 2		“PUT 14 ”			
P1126	Digital Input 14 User Defined Failure Message 3		“FAIL. ”			
P1127		0	0	150		0: Output Disabled 1: AMF Engine Start 2: Pulsing Horn 3: Horn 4: Load on Generator 5: Load on Mains 6: Fuel Pump Output 7: Thermostat 1 8: Thermostat 2 9: Not Functional 10: Man, Auto or Test Operation Mode Selected 11: Auto or Test Operation Mode Selected 12: Manual Operation Mode Selected 13: Auto Operation Mode Selected 14: Test Operation Mode Selected 15: Off Operation Mode Selected 16: Class 1 or 2 Failure 17: Class 3,4,5 or 6 Failure 18: General Failure 19: Class 1 Failure 20: Class 2 Failure 21: Class 3 Failure 22: Class 4 Failure 23: Class 5 Failure 24: Class 6 Failure 25: Mains Contactor Open Output 26: Generator Contactor Open Output 27: Nominal Speed Position (Active when Running) 28: Nominal Speed Position (Active when Runnin and Cooldown) 29: Idle Speed Position (Active During Failure Delay Timer) 30: Idle Speed Position (Active During Failure Delay Timer + Cooldown) 31: Generator Ready for Load 32: Generator Ready to Start 33: Genrator Ready to Start and in Auto Mode 34: Lamp Test 35: Alarm acknowledge and horn silence 36: Pre-programmed Test Active 37: Delayed Generator Voltage or Frequency Running Feedback Detected 38: Digital Input 1 Active 39: Digital Input 2 Active 40: Digital Input 3 Active 41: Digital Input 4 Active 42: Digital Input 5 Active 43: Digital Input 6 Active 44: Digital Input 7 Active 45: Digital Input 8 Active 46: Digital Input 9 Active 47: Digital Input 10 Active 48: Digital Input 11 Active 49: Digital Input 12 Active 50: Digital Input 13 Active 51: Digital Input 14 Active 52: Mains Failure 53: Mains Over Voltage 54: Mains Under Voltage 55: Mains Under Frequency 56: Mains Over Frequency 57: Pre-heat (Active During Pre-heat) 58: Pre-heat (Active Duting Pre-Heat + Cranking) 59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer) 60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time) 61: Start Process Begun 62: Not Functional 63: Not Functional 64: Not Functional 65: Charge Output 66: Not Functional

	Digital Output 1 Function					67: Pre-heat Status 68: Crank Status 69: Delay Between Cranking Status 70: Failure Delay Timer Status 71: Running Status 72: Cooldown Status 73: Engine Stopping Status 74: Post-start Status 75: Start Failure 76: Running Feedback Before Cranking Failure 77: Failed to Stop Failure 78: Generator Under Voltage Failure Level 1 79: Genreator Under Voltage Failure Level 2 80: Generator Over Voltage Failure Level 1 81: Generator Over Voltage Failure Level 2 82: Generator Under Frequency Failure Level 1 83: Generator Under Frequency Failure Level 2 84: Generator Over Frequency Failure Level 1 85: Generator Over Frequency Failure Level 2 86: Under RPM Failure Level 1 87: Under RPM Failure Level 2 88: Over RPM Failure Level 1 89: Over RPM Failure Level2 90: RPM Sensor Failure 91: Charge Voltage Failure Level 1 92: Charge Voltage Failure Level 2 93: Low Battery Voltage Failure Level 1 94: Low Battery Voltage Failure Level2 95: High Battery Voltage Failure Level 1 96: High Battery Voltage Failure Level2 97: Mains Contactor Failed to Open 98: Mains Contactor Failed to Close 99: Mains Contactor Status Unknown 100: Generator Contactor Failed to Open 101: Generator Contactor Failed to Close 102: Generator Contactor Status Unknown 103: Over Current Failure Level 1 104: Over Current Failure Level 2 105: Over Current Failure Level 3 106: KW Failure Level 1 107: KW Failure Level 2 108: KVar Failure Level 1 109: KVar Failure Level 2 110: KVA Failure Level 1 111: KVA Failure Level 2 112: Cosϕ Failure Level 1 113: Cosϕ Failure Level 2 114: Oil Pressure Switch Failure 115: Low Oil Pressure Failure Level 1 116: Low Oil Pressure Level 2 117: Analog Oil Pressure Sensor Failure 118: Coolant Temperature Switch Failure 119: High Coolant Temperature Level 1 120: High Coolant Temperature Level 2 121: Low Coolant Temperature Level 1 122: Low Coolant Temperature Level 2 123: Analog Coolant Temperature Sensor Failure 124: Low Fuel Failure Level 1 125: Low Fuel Level 2 126: Fuel Consumption While Stopped Failure 127: High Fuel Consumption While Running Failu 128: Fuel Level Sensor Failure 129: Fuel Refill Failure Level 1 130: Fuel Refill Failure level 2 131: Digital Input 1 Failure 132: Digital Inout 2 Failure 133: Digital Input 3 Failure 134: Digital Input 4 Failure 135: Digital Input 5 Failure 136: Digital Input 6 Failure 137: Periodic Engine Maintenance Timer 1 Passe 138: Periodic Engine Maintenance Timer 2 Passe 139: Periodic Engine Maintenance Timer 3 Passe 140: Periodic Engine Maintenance Timer 4 Passe 141: Periodic Engine Maintenance Timer 5 Passe 142: Periodic Engine Maintenance Timer 6 Passe 143: Periodic Maintenance Timer 1 Passed 144: Periodic Maintenance Timer 2 Passed 145: Periodic Maintenance Timer 3 Passed 146: Periodic Maintenance Timer 4 Passed 147: Periodic Maintenance Timer 5 Passed 148: Periodic Maintenance Timer 6 Passed 149: Load is on Mains or Generator 150: Dual Mutual Standby Synced Output
P1128	Digital Output 1 Activation Type	0	1	1		0: De-energize the Relay 1: Energize the Relay
P1129		0	0	150		0: Output Disabled 1: AMF Engine Start 2: Pulsing Horn 3: Horn 4: Load on Generator 5: Load on Mains 6: Fuel Pump Output 7: Thermostat 1 8: Thermostat 2 9: Not Functional 10: Man, Auto or Test Operation Mode Selected 11: Auto or Test Operation Mode Selected 12: Manual Operation Mode Selected 13: Auto Operation Mode Selected 14: Test Operation Mode Selected 15: Off Operation Mode Selected 16: Class 1 or 2 Failure 17: Class 3,4,5 or 6 Failure 18: General Failure 19: Class 1 Failure 20: Class 2 Failure 21: Class 3 Failure 22: Class 4 Failure 23: Class 5 Failure 24: Class 6 Failure 25: Mains Contactor Open Output 26: Generator Contactor Open Output 27: Nominal Speed Position (Active when Running) 28: Nominal Speed Position (Active when Runnin and Cooldown) 29: Idle Speed Position (Active During Failure Delay Timer) 30: Idle Speed Position (Active During Failure Delay Timer + Cooldown) 31: Generator Ready for Load 32: Generator Ready to Start 33: Genrator Ready to Start and in Auto Mode 34: Lamp Test 35: Alarm acknowledge and horn silence 36: Pre-programmed Test Active 37: Delayed Generator Voltage or Frequency Running Feedback Detected 38: Digital Input 1 Active

	Digital Output 2 Function					39: Digital Input 2 Active 40: Digital Input 3 Active 41: Digital Input 4 Active 42: Digital Input 5 Active 43: Digital Input 6 Active 44: Digital Input 7 Active 45: Digital Input 8 Active 46: Digital Input 9 Active 47: Digital Input 10 Active 48: Digital Input 11 Active 49: Digital Input 12 Active 50: Digital Input 13 Active 51: Digital Input 14 Active 52: Mains Failure 53: Mains Over Voltage 54: Mains Under Voltage 55: Mains Under Frequency 56: Mains Over Frequency 57: Pre-heat (Active During Pre-heat) 58: Pre-heat (Active Duting Pre-Heat + Cranking) 59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer) 60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time) 61: Start Process Begun 62: Not Functional 63: Not Functional 64: Not Functional 65: Charge Output 66: Not Functional 67: Pre-heat Status 68: Crank Status 69: Delay Between Cranking Status 70: Failure Delay Timer Status 71: Running Status 72: Cooldown Status 73: Engine Stopping Status 74: Post-start Status 75: Start Failure 76: Running Feedback Before Cranking Failure 77: Failed to Stop Failure 78: Generator Under Voltage Failure Level 1 79: Genreator Under Voltage Failure Level 2 80: Generator Over Voltage Failure Level 1 81: Generator Over Voltage Failure Level 2 82: Generator Under Frequency Failure Level 1 83: Generator Under Frequency Failure Level 2 84: Generator Over Frequency Failure Level 1 85: Generator Over Frequency Failure Level 2 86: Under RPM Failure Level 1 87: Under RPM Failure Level 2 88: Over RPM Failure Level 1 89: Over RPM Failure Level2 90: RPM Sensor Failure 91: Charge Voltage Failure Level 1 92: Charge Voltage Failure Level 2 93: Low Battery Voltage Failure Level 1 94: Low Battery Voltage Failure Level2 95: High Battery Voltage Failure Level 1 96: High Battery Voltage Failure Level2 97: Mains Contactor Failed to Open 98: Mains Contactor Failed to Close 99: Mains Contactor Status Unknown 100: Generator Contactor Failed to Open 101: Generator Contactor Failed to Close 102: Generator Contactor Status Unknown 103: Over Current Failure Level 1 104: Over Current Failure Level 2 105: Over Current Failure Level 3 106: KW Failure Level 1 107: KW Failure Level 2 108: KVar Failure Level 1 109: KVar Failure Level 2 110: KVA Failure Level 1 111: KVA Failure Level 2 112: Cosϕ Failure Level 1 113: Cosϕ Failure Level 2 114: Oil Pressure Switch Failure 115: Low Oil Pressure Failure Level 1 116: Low Oil Pressure Level 2 117: Analog Oil Pressure Sensor Failure 118: Coolant Temperature Switch Failure 119: High Coolant Temperature Level 1 120: High Coolant Temperature Level 2 121: Low Coolant Temperature Level 1 122: Low Coolant Temperature Level 2 123: Analog Coolant Temperature Sensor Failure 124: Low Fuel Failure Level 1 125: Low Fuel Level 2 126: Fuel Consumption While Stopped Failure 127: High Fuel Consumption While Running Failu 128: Fuel Level Sensor Failure 129: Fuel Refill Failure Level 1 130: Fuel Refill Failure level 2 131: Digital Input 1 Failure 132: Digital Inout 2 Failure 133: Digital Input 3 Failure 134: Digital Input 4 Failure 135: Digital Input 5 Failure 136: Digital Input 6 Failure 137: Periodic Engine Maintenance Timer 1 Passe 138: Periodic Engine Maintenance Timer 2 Passe 139: Periodic Engine Maintenance Timer 3 Passe 140: Periodic Engine Maintenance Timer 4 Passe 141: Periodic Engine Maintenance Timer 5 Passe 142: Periodic Engine Maintenance Timer 6 Passe 143: Periodic Maintenance Timer 1 Passed 144: Periodic Maintenance Timer 2 Passed 145: Periodic Maintenance Timer 3 Passed 146: Periodic Maintenance Timer 4 Passed 147: Periodic Maintenance Timer 5 Passed 148: Periodic Maintenance Timer 6 Passed 149: Load is on Mains or Generator 150: Dual Mutual Standby Synced Output
P1130	Digital Output 2 Activation Type	0	1	1		0: De-energize the Relay 1: Energize the Relay
P1131		0	0	150		0: Output Disabled 1: AMF Engine Start 2: Pulsing Horn 3: Horn 4: Load on Generator 5: Load on Mains 6: Fuel Pump Output 7: Thermostat 1 8: Thermostat 2 9: Not Functional 10: Man, Auto or Test Operation Mode Selected 11: Auto or Test Operation Mode Selected 12: Manual Operation Mode Selected

	Digital Output 3 Function					13: Auto Operation Mode Selected 14: Test Operation Mode Selected 15: Off Operation Mode Selected 16: Class 1 or 2 Failure 17: Class 3,4,5 or 6 Failure 18: General Failure 19: Class 1 Failure 20: Class 2 Failure 21: Class 3 Failure 22: Class 4 Failure 23: Class 5 Failure 24: Class 6 Failure 25: Mains Contactor Open Output 26: Generator Contactor Open Output 27: Nominal Speed Position (Active when Running) 28: Nominal Speed Position (Active when Runnin and Cooldown) 29: Idle Speed Position (Active During Failure Delay Timer) 30: Idle Speed Position (Active During Failure Delay Timer + Cooldown) 31: Generator Ready for Load 32: Generator Ready to Start 33: Genrator Ready to Start and in Auto Mode 34: Lamp Test 35: Alarm acknowledge and horn silence 36: Pre-programmed Test Active 37: Delayed Generator Voltage or Frequency Running Feedback Detected 38: Digital Input 1 Active 39: Digital Input 2 Active 40: Digital Input 3 Active 41: Digital Input 4 Active 42: Digital Input 5 Active 43: Digital Input 6 Active 44: Digital Input 7 Active 45: Digital Input 8 Active 46: Digital Input 9 Active 47: Digital Input 10 Active 48: Digital Input 11 Active 49: Digital Input 12 Active 50: Digital Input 13 Active 51: Digital Input 14 Active 52: Mains Failure 53: Mains Over Voltage 54: Mains Under Voltage 55: Mains Under Frequency 56: Mains Over Frequency 57: Pre-heat (Active During Pre-heat) 58: Pre-heat (Active Duting Pre-Heat + Cranking) 59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer) 60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time) 61: Start Process Begun 62: Not Functional 63: Not Functional 64: Not Functional 65: Charge Output 66: Not Functional 67: Pre-heat Status 68: Crank Status 69: Delay Between Cranking Status 70: Failure Delay Timer Status 71: Running Status 72: Cooldown Status 73: Engine Stopping Status 74: Post-start Status 75: Start Failure 76: Running Feedback Before Cranking Failure 77: Failed to Stop Failure 78: Generator Under Voltage Failure Level 1 79: Genreator Under Voltage Failure Level 2 80: Generator Over Voltage Failure Level 1 81: Generator Over Voltage Failure Level 2 82: Generator Under Frequency Failure Level 1 83: Generator Under Frequency Failure Level 2 84: Generator Over Frequency Failure Level 1 85: Generator Over Frequency Failure Level 2 86: Under RPM Failure Level 1 87: Under RPM Failure Level 2 88: Over RPM Failure Level 1 89: Over RPM Failure Level2 90: RPM Sensor Failure 91: Charge Voltage Failure Level 1 92: Charge Voltage Failure Level 2 93: Low Battery Voltage Failure Level 1 94: Low Battery Voltage Failure Level2 95: High Battery Voltage Failure Level 1 96: High Battery Voltage Failure Level2 97: Mains Contactor Failed to Open 98: Mains Contactor Failed to Close 99: Mains Contactor Status Unknown 100: Generator Contactor Failed to Open 101: Generator Contactor Failed to Close 102: Generator Contactor Status Unknown 103: Over Current Failure Level 1 104: Over Current Failure Level 2 105: Over Current Failure Level 3 106: KW Failure Level 1 107: KW Failure Level 2 108: KVar Failure Level 1 109: KVar Failure Level 2 110: KVA Failure Level 1 111: KVA Failure Level 2 112: Cosϕ Failure Level 1 113: Cosϕ Failure Level 2 114: Oil Pressure Switch Failure 115: Low Oil Pressure Failure Level 1 116: Low Oil Pressure Level 2 117: Analog Oil Pressure Sensor Failure 118: Coolant Temperature Switch Failure 119: High Coolant Temperature Level 1 120: High Coolant Temperature Level 2 121: Low Coolant Temperature Level 1 122: Low Coolant Temperature Level 2 123: Analog Coolant Temperature Sensor Failure 124: Low Fuel Failure Level 1 125: Low Fuel Level 2 126: Fuel Consumption While Stopped Failure 127: High Fuel Consumption While Running Failu 128: Fuel Level Sensor Failure 129: Fuel Refill Failure Level 1 130: Fuel Refill Failure level 2 131: Digital Input 1 Failure 132: Digital Inout 2 Failure 133: Digital Input 3 Failure 134: Digital Input 4 Failure

						135: Digital Input 5 Failure
						136: Digital Input 6 Failure
						137: Periodic Engine Maintenance Timer 1 Passe
						138: Periodic Engine Maintenance Timer 2 Passe
						139: Periodic Engine Maintenance Timer 3 Passe
						140: Periodic Engine Maintenance Timer 4 Passe
						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1132	Digital Output 3 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1133		0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure
						19: Class 1 Failure
						20: Class 2 Failure
						21: Class 3 Failure
						22: Class 4 Failure
						23: Class 5 Failure
						24: Class 6 Failure
						25: Mains Contactor Open Output
						26: Generator Contactor Open Output
						27: Nominal Speed Position (Active when Running)
						28: Nominal Speed Position (Active when Runnin and Cooldown)
						29: Idle Speed Position (Active During Failure Delay Timer)
						30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
						31: Generator Ready for Load
						32: Generator Ready to Start
						33: Genrator Ready to Start and in Auto Mode
						34: Lamp Test
						35: Alarm acknowledge and horn silence
						36: Pre-programmed Test Active
						37: Delayed Generator Voltage or Frequency Running Feedback Detected
						38: Digital Input 1 Active
						39: Digital Input 2 Active
						40: Digital Input 3 Active
						41: Digital Input 4 Active
						42: Digital Input 5 Active
						43: Digital Input 6 Active
						44: Digital Input 7 Active
						45: Digital Input 8 Active
						46: Digital Input 9 Active
						47: Digital Input 10 Active
						48: Digital Input 11 Active
						49: Digital Input 12 Active
						50: Digital Input 13 Active
						51: Digital Input 14 Active
						52: Mains Failure
						53: Mains Over Voltage
						54: Mains Under Voltage
						55: Mains Under Frequency
						56: Mains Over Frequency
						57: Pre-heat (Active During Pre-heat)
						58: Pre-heat (Active Duting Pre-Heat + Cranking)
						59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer)
						60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time)
						61: Start Process Begun
						62: Not Functional
						63: Not Functional
						64: Not Functional
						65: Charge Output
						66: Not Functional
						67: Pre-heat Status
						68: Crank Status
						69: Delay Between Cranking Status
						70: Failure Delay Timer Status
	Digital Output 4 Function					71: Running Status
						72: Cooldown Status
						73: Engine Stopping Status
						74: Post-start Status
						75: Start Failure
						76: Running Feedback Before Cranking Failure
						77: Failed to Stop Failure
						78: Generator Under Voltage Failure Level 1
						79: Genreator Under Voltage Failure Level 2
						80: Generator Over Voltage Failure Level 1
						81: Generator Over Voltage Failure Level 2
						82: Generator Under Frequency Failure Level 1
						83: Generator Under Frequency Failure Level 2
						84: Generator Over Frequency Failure Level 1
						85: Generator Over Frequency Failure Level 2
						86: Under RPM Failure Level 1
						87: Under RPM Failure Level 2
						88: Over RPM Failure Level 1
						89: Over RPM Failure Level2
						90: RPM Sensor Failure
						91: Charge Voltage Failure Level 1
						92: Charge Voltage Failure Level 2
						93: Low Battery Voltage Failure Level 1
						94: Low Battery Voltage Failure Level2
						95: High Battery Voltage Failure Level 1
						96: High Battery Voltage Failure Level2
						97: Mains Contactor Failed to Open
						98: Mains Contactor Failed to Close
						99: Mains Contactor Status Unknown
						100: Generator Contactor Failed to Open
						101: Generator Contactor Failed to Close
						102: Generator Contactor Status Unknown
						103: Over Current Failure Level 1

						104: Over Current Failure Level 2
						105: Over Current Failure Level 3
						106: KW Failure Level 1
						107: KW Failure Level 2
						108: KVar Failure Level 1
						109: KVar Failure Level 2
						110: KVA Failure Level 1
						111: KVA Failure Level 2
						112: Cosϕ Failure Level 1
						113: Cosϕ Failure Level 2
						114: Oil Pressure Switch Failure
						115: Low Oil Pressure Failure Level 1
						116: Low Oil Pressure Level 2
						117: Analog Oil Pressure Sensor Failure
						118: Coolant Temperature Switch Failure
						119: High Coolant Temperature Level 1
						120: High Coolant Temperature Level 2
						121: Low Coolant Temperature Level 1
						122: Low Coolant Temperature Level 2
						123: Analog Coolant Temperature Sensor Failure
						124: Low Fuel Failure Level 1
						125: Low Fuel Level 2
						126: Fuel Consumption While Stopped Failure
						127: High Fuel Consumption While Running Failu
						128: Fuel Level Sensor Failure
						129: Fuel Refill Failure Level 1
						130: Fuel Refill Failure level 2
						131: Digital Input 1 Failure
						132: Digital Inout 2 Failure
						133: Digital Input 3 Failure
						134: Digital Input 4 Failure
						135: Digital Input 5 Failure
						136: Digital Input 6 Failure
						137: Periodic Engine Maintenance Timer 1 Passe
						138: Periodic Engine Maintenance Timer 2 Passe
						139: Periodic Engine Maintenance Timer 3 Passe
						140: Periodic Engine Maintenance Timer 4 Passe
						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1134	Digital Output 4 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1135		0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure
						19: Class 1 Failure
						20: Class 2 Failure
						21: Class 3 Failure
						22: Class 4 Failure
						23: Class 5 Failure
						24: Class 6 Failure
						25: Mains Contactor Open Output
						26: Generator Contactor Open Output
						27: Nominal Speed Position (Active when Running)
						28: Nominal Speed Position (Active when Runnin and Cooldown)
						29: Idle Speed Position (Active During Failure Delay Timer)
						30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
						31: Generator Ready for Load
						32: Generator Ready to Start
						33: Genrator Ready to Start and in Auto Mode
						34: Lamp Test
						35: Alarm acknowledge and horn silence
						36: Pre-programmed Test Active
						37: Delayed Generator Voltage or Frequency Running Feedback Detected
						38: Digital Input 1 Active
						39: Digital Input 2 Active
						40: Digital Input 3 Active
						41: Digital Input 4 Active
						42: Digital Input 5 Active
						43: Digital Input 6 Active
						44: Digital Input 7 Active
						45: Digital Input 8 Active
						46: Digital Input 9 Active
						47: Digital Input 10 Active
						48: Digital Input 11 Active
						49: Digital Input 12 Active
						50: Digital Input 13 Active
						51: Digital Input 14 Active
						52: Mains Failure
						53: Mains Over Voltage
						54: Mains Under Voltage
						55: Mains Under Frequency
						56: Mains Over Frequency
						57: Pre-heat (Active During Pre-heat)
						58: Pre-heat (Active Duting Pre-Heat + Cranking)
						59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer)
						60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time)
						61: Start Process Begun
						62: Not Functional
						63: Not Functional
						64: Not Functional
						65: Charge Output
						66: Not Functional
						67: Pre-heat Status
						68: Crank Status
						69: Delay Between Cranking Status
						70: Failure Delay Timer Status
	Digital Output 5 Function					71: Running Status
						72: Cooldown Status

						73: Engine Stopping Status
						74: Post-start Status
						75: Start Failure
						76: Running Feedback Before Cranking Failure
						77: Failed to Stop Failure
						78: Generator Under Voltage Failure Level 1
						79: Genreator Under Voltage Failure Level 2
						80: Generator Over Voltage Failure Level 1
						81: Generator Over Voltage Failure Level 2
						82: Generator Under Frequency Failure Level 1
						83: Generator Under Frequency Failure Level 2
						84: Generator Over Frequency Failure Level 1
						85: Generator Over Frequency Failure Level 2
						86: Under RPM Failure Level 1
						87: Under RPM Failure Level 2
						88: Over RPM Failure Level 1
						89: Over RPM Failure Level2
						90: RPM Sensor Failure
						91: Charge Voltage Failure Level 1
						92: Charge Voltage Failure Level 2
						93: Low Battery Voltage Failure Level 1
						94: Low Battery Voltage Failure Level2
						95: High Battery Voltage Failure Level 1
						96: High Battery Voltage Failure Level2
						97: Mains Contactor Failed to Open
						98: Mains Contactor Failed to Close
						99: Mains Contactor Status Unknown
						100: Generator Contactor Failed to Open
						101: Generator Contactor Failed to Close
						102: Generator Contactor Status Unknown
						103: Over Current Failure Level 1
						104: Over Current Failure Level 2
						105: Over Current Failure Level 3
						106: KW Failure Level 1
						107: KW Failure Level 2
						108: KVar Failure Level 1
						109: KVar Failure Level 2
						110: KVA Failure Level 1
						111: KVA Failure Level 2
						112: Cosϕ Failure Level 1
						113: Cosϕ Failure Level 2
						114: Oil Pressure Switch Failure
						115: Low Oil Pressure Failure Level 1
						116: Low Oil Pressure Level 2
						117: Analog Oil Pressure Sensor Failure
						118: Coolant Temperature Switch Failure
						119: High Coolant Temperature Level 1
						120: High Coolant Temperature Level 2
						121: Low Coolant Temperature Level 1
						122: Low Coolant Temperature Level 2
						123: Analog Coolant Temperature Sensor Failure
						124: Low Fuel Failure Level 1
						125: Low Fuel Level 2
						126: Fuel Consumption While Stopped Failure
						127: High Fuel Consumption While Running Failu
						128: Fuel Level Sensor Failure
						129: Fuel Refill Failure Level 1
						130: Fuel Refill Failure level 2
						131: Digital Input 1 Failure
						132: Digital Inout 2 Failure
						133: Digital Input 3 Failure
						134: Digital Input 4 Failure
						135: Digital Input 5 Failure
						136: Digital Input 6 Failure
						137: Periodic Engine Maintenance Timer 1 Passe
						138: Periodic Engine Maintenance Timer 2 Passe
						139: Periodic Engine Maintenance Timer 3 Passe
						140: Periodic Engine Maintenance Timer 4 Passe
						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1136	Digital Output 5 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1137		0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure
						19: Class 1 Failure
						20: Class 2 Failure
						21: Class 3 Failure
						22: Class 4 Failure
						23: Class 5 Failure
						24: Class 6 Failure
						25: Mains Contactor Open Output
						26: Generator Contactor Open Output
						27: Nominal Speed Position (Active when Running)
						28: Nominal Speed Position (Active when Runnin and Cooldown)
						29: Idle Speed Position (Active During Failure Delay Timer)
						30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
						31: Generator Ready for Load
						32: Generator Ready to Start
						33: Genrator Ready to Start and in Auto Mode
						34: Lamp Test
						35: Alarm acknowledge and horn silence
						36: Pre-programmed Test Active
						37: Delayed Generator Voltage or Frequency Running Feedback Detected
						38: Digital Input 1 Active
						39: Digital Input 2 Active
						40: Digital Input 3 Active
						41: Digital Input 4 Active
						42: Digital Input 5 Active
						43: Digital Input 6 Active
						44: Digital Input 7 Active

						45: Digital Input 8 Active
						46: Digital Input 9 Active
						47: Digital Input 10 Active
						48: Digital Input 11 Active
						49: Digital Input 12 Active
						50: Digital Input 13 Active
						51: Digital Input 14 Active
						52: Mains Failure
						53: Mains Over Voltage
						54: Mains Under Voltage
						55: Mains Under Frequency
						56: Mains Over Frequency
						57: Pre-heat (Active During Pre-heat)
						58: Pre-heat (Active Duting Pre-Heat + Cranking)
						59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer)
						60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time)
						61: Start Process Begun
						62: Not Functional
						63: Not Functional
						64: Not Functional
						65: Charge Output
						66: Not Functional
						67: Pre-heat Status
						68: Crank Status
						69: Delay Between Cranking Status
						70: Failure Delay Timer Status
	Digital Output 6 Function					71: Running Status
						72: Cooldown Status
						73: Engine Stopping Status
						74: Post-start Status
						75: Start Failure
						76: Running Feedback Before Cranking Failure
						77: Failed to Stop Failure
						78: Generator Under Voltage Failure Level 1
						79: Genreator Under Voltage Failure Level 2
						80: Generator Over Voltage Failure Level 1
						81: Generator Over Voltage Failure Level 2
						82: Generator Under Frequency Failure Level 1
						83: Generator Under Frequency Failure Level 2
						84: Generator Over Frequency Failure Level 1
						85: Generator Over Frequency Failure Level 2
						86: Under RPM Failure Level 1
						87: Under RPM Failure Level 2
						88: Over RPM Failure Level 1
						89: Over RPM Failure Level2
						90: RPM Sensor Failure
						91: Charge Voltage Failure Level 1
						92: Charge Voltage Failure Level 2
						93: Low Battery Voltage Failure Level 1
						94: Low Battery Voltage Failure Level2
						95: High Battery Voltage Failure Level 1
						96: High Battery Voltage Failure Level2
						97: Mains Contactor Failed to Open
						98: Mains Contactor Failed to Close
						99: Mains Contactor Status Unknown
						100: Generator Contactor Failed to Open
						101: Generator Contactor Failed to Close
						102: Generator Contactor Status Unknown
						103: Over Current Failure Level 1
						104: Over Current Failure Level 2
						105: Over Current Failure Level 3
						106: KW Failure Level 1
						107: KW Failure Level 2
						108: KVar Failure Level 1
						109: KVar Failure Level 2
						110: KVA Failure Level 1
						111: KVA Failure Level 2
						112: Cosϕ Failure Level 1
						113: Cosϕ Failure Level 2
						114: Oil Pressure Switch Failure
						115: Low Oil Pressure Failure Level 1
						116: Low Oil Pressure Level 2
						117: Analog Oil Pressure Sensor Failure
						118: Coolant Temperature Switch Failure
						119: High Coolant Temperature Level 1
						120: High Coolant Temperature Level 2
						121: Low Coolant Temperature Level 1
						122: Low Coolant Temperature Level 2
						123: Analog Coolant Temperature Sensor Failure
						124: Low Fuel Failure Level 1
						125: Low Fuel Level 2
						126: Fuel Consumption While Stopped Failure
						127: High Fuel Consumption While Running Failu
						128: Fuel Level Sensor Failure
						129: Fuel Refill Failure Level 1
						130: Fuel Refill Failure level 2
						131: Digital Input 1 Failure
						132: Digital Inout 2 Failure
						133: Digital Input 3 Failure
						134: Digital Input 4 Failure
						135: Digital Input 5 Failure
						136: Digital Input 6 Failure
						137: Periodic Engine Maintenance Timer 1 Passe
						138: Periodic Engine Maintenance Timer 2 Passe
						139: Periodic Engine Maintenance Timer 3 Passe
						140: Periodic Engine Maintenance Timer 4 Passe
						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1138	Digital Output 6 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1139		0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure

	Digital Output 7 Function					19: Class 1 Failure 20: Class 2 Failure 21: Class 3 Failure 22: Class 4 Failure 23: Class 5 Failure 24: Class 6 Failure 25: Mains Contactor Open Output 26: Generator Contactor Open Output 27: Nominal Speed Position (Active when Running) 28: Nominal Speed Position (Active when Runnin and Cooldown) 29: Idle Speed Position (Active During Failure Delay Timer) 30: Idle Speed Position (Active During Failure Delay Timer + Cooldown) 31: Generator Ready for Load 32: Generator Ready to Start 33: Genrator Ready to Start and in Auto Mode 34: Lamp Test 35: Alarm acknowledge and horn silence 36: Pre-programmed Test Active 37: Delayed Generator Voltage or Frequency Running Feedback Detected 38: Digital Input 1 Active 39: Digital Input 2 Active 40: Digital Input 3 Active 41: Digital Input 4 Active 42: Digital Input 5 Active 43: Digital Input 6 Active 44: Digital Input 7 Active 45: Digital Input 8 Active 46: Digital Input 9 Active 47: Digital Input 10 Active 48: Digital Input 11 Active 49: Digital Input 12 Active 50: Digital Input 13 Active 51: Digital Input 14 Active 52: Mains Failure 53: Mains Over Voltage 54: Mains Under Voltage 55: Mains Under Frequency 56: Mains Over Frequency 57: Pre-heat (Active During Pre-heat) 58: Pre-heat (Active Duting Pre-Heat + Cranking) 59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer) 60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time) 61: Start Process Begun 62: Not Functional 63: Not Functional 64: Not Functional 65: Charge Output 66: Not Functional 67: Pre-heat Status 68: Crank Status 69: Delay Between Cranking Status 70: Failure Delay Timer Status 71: Running Status 72: Cooldown Status 73: Engine Stopping Status 74: Post-start Status 75: Start Failure 76: Running Feedback Before Cranking Failure 77: Failed to Stop Failure 78: Generator Under Voltage Failure Level 1 79: Genreator Under Voltage Failure Level 2 80: Generator Over Voltage Failure Level 1 81: Generator Over Voltage Failure Level 2 82: Generator Under Frequency Failure Level 1 83: Generator Under Frequency Failure Level 2 84: Generator Over Frequency Failure Level 1 85: Generator Over Frequency Failure Level 2 86: Under RPM Failure Level 1 87: Under RPM Failure Level 2 88: Over RPM Failure Level 1 89: Over RPM Failure Level2 90: RPM Sensor Failure 91: Charge Voltage Failure Level 1 92: Charge Voltage Failure Level 2 93: Low Battery Voltage Failure Level 1 94: Low Battery Voltage Failure Level2 95: High Battery Voltage Failure Level 1 96: High Battery Voltage Failure Level2 97: Mains Contactor Failed to Open 98: Mains Contactor Failed to Close 99: Mains Contactor Status Unknown 100: Generator Contactor Failed to Open 101: Generator Contactor Failed to Close 102: Generator Contactor Status Unknown 103: Over Current Failure Level 1 104: Over Current Failure Level 2 105: Over Current Failure Level 3 106: KW Failure Level 1 107: KW Failure Level 2 108: KVar Failure Level 1 109: KVar Failure Level 2 110: KVA Failure Level 1 111: KVA Failure Level 2 112: Cosϕ Failure Level 1 113: Cosϕ Failure Level 2 114: Oil Pressure Switch Failure 115: Low Oil Pressure Failure Level 1 116: Low Oil Pressure Level 2 117: Analog Oil Pressure Sensor Failure 118: Coolant Temperature Switch Failure 119: High Coolant Temperature Level 1 120: High Coolant Temperature Level 2 121: Low Coolant Temperature Level 1 122: Low Coolant Temperature Level 2 123: Analog Coolant Temperature Sensor Failure 124: Low Fuel Failure Level 1 125: Low Fuel Level 2 126: Fuel Consumption While Stopped Failure 127: High Fuel Consumption While Running Failu 128: Fuel Level Sensor Failure 129: Fuel Refill Failure Level 1 130: Fuel Refill Failure level 2 131: Digital Input 1 Failure 132: Digital Inout 2 Failure 133: Digital Input 3 Failure 134: Digital Input 4 Failure 135: Digital Input 5 Failure 136: Digital Input 6 Failure 137: Periodic Engine Maintenance Timer 1 Passe 138: Periodic Engine Maintenance Timer 2 Passe 139: Periodic Engine Maintenance Timer 3 Passe 140: Periodic Engine Maintenance Timer 4 Passe

						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1140	Digital Output 7 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1141		0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure
						19: Class 1 Failure
						20: Class 2 Failure
						21: Class 3 Failure
						22: Class 4 Failure
						23: Class 5 Failure
						24: Class 6 Failure
						25: Mains Contactor Open Output
						26: Generator Contactor Open Output
						27: Nominal Speed Position (Active when Running)
						28: Nominal Speed Position (Active when Runnin and Cooldown)
						29: Idle Speed Position (Active During Failure Delay Timer)
						30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
						31: Generator Ready for Load
						32: Generator Ready to Start
						33: Genrator Ready to Start and in Auto Mode
						34: Lamp Test
						35: Alarm acknowledge and horn silence
						36: Pre-programmed Test Active
						37: Delayed Generator Voltage or Frequency Running Feedback Detected
						38: Digital Input 1 Active
						39: Digital Input 2 Active
						40: Digital Input 3 Active
						41: Digital Input 4 Active
						42: Digital Input 5 Active
						43: Digital Input 6 Active
						44: Digital Input 7 Active
						45: Digital Input 8 Active
						46: Digital Input 9 Active
						47: Digital Input 10 Active
						48: Digital Input 11 Active
						49: Digital Input 12 Active
						50: Digital Input 13 Active
						51: Digital Input 14 Active
						52: Mains Failure
						53: Mains Over Voltage
						54: Mains Under Voltage
						55: Mains Under Frequency
						56: Mains Over Frequency
						57: Pre-heat (Active During Pre-heat)
						58: Pre-heat (Active Duting Pre-Heat + Cranking)
						59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer)
						60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time)
						61: Start Process Begun
						62: Not Functional
						63: Not Functional
						64: Not Functional
						65: Charge Output
						66: Not Functional
						67: Pre-heat Status
						68: Crank Status
						69: Delay Between Cranking Status
						70: Failure Delay Timer Status
	Digital Output 8 Function					71: Running Status
						72: Cooldown Status
						73: Engine Stopping Status
						74: Post-start Status
						75: Start Failure
						76: Running Feedback Before Cranking Failure
						77: Failed to Stop Failure
						78: Generator Under Voltage Failure Level 1
						79: Genreator Under Voltage Failure Level 2
						80: Generator Over Voltage Failure Level 1
						81: Generator Over Voltage Failure Level 2
						82: Generator Under Frequency Failure Level 1
						83: Generator Under Frequency Failure Level 2
						84: Generator Over Frequency Failure Level 1
						85: Generator Over Frequency Failure Level 2
						86: Under RPM Failure Level 1
						87: Under RPM Failure Level 2
						88: Over RPM Failure Level 1
						89: Over RPM Failure Level2
						90: RPM Sensor Failure
						91: Charge Voltage Failure Level 1
						92: Charge Voltage Failure Level 2
						93: Low Battery Voltage Failure Level 1
						94: Low Battery Voltage Failure Level2
						95: High Battery Voltage Failure Level 1
						96: High Battery Voltage Failure Level2
						97: Mains Contactor Failed to Open
						98: Mains Contactor Failed to Close
						99: Mains Contactor Status Unknown
						100: Generator Contactor Failed to Open
						101: Generator Contactor Failed to Close
						102: Generator Contactor Status Unknown
						103: Over Current Failure Level 1
						104: Over Current Failure Level 2
						105: Over Current Failure Level 3
						106: KW Failure Level 1
						107: KW Failure Level 2
						108: KVar Failure Level 1
						109: KVar Failure Level 2

						110: KVA Failure Level 1
						111: KVA Failure Level 2
						112: Cosϕ Failure Level 1
						113: Cosϕ Failure Level 2
						114: Oil Pressure Switch Failure
						115: Low Oil Pressure Failure Level 1
						116: Low Oil Pressure Level 2
						117: Analog Oil Pressure Sensor Failure
						118: Coolant Temperature Switch Failure
						119: High Coolant Temperature Level 1
						120: High Coolant Temperature Level 2
						121: Low Coolant Temperature Level 1
						122: Low Coolant Temperature Level 2
						123: Analog Coolant Temperature Sensor Failure
						124: Low Fuel Failure Level 1
						125: Low Fuel Level 2
						126: Fuel Consumption While Stopped Failure
						127: High Fuel Consumption While Running Failu
						128: Fuel Level Sensor Failure
						129: Fuel Refill Failure Level 1
						130: Fuel Refill Failure level 2
						131: Digital Input 1 Failure
						132: Digital Inout 2 Failure
						133: Digital Input 3 Failure
						134: Digital Input 4 Failure
						135: Digital Input 5 Failure
						136: Digital Input 6 Failure
						137: Periodic Engine Maintenance Timer 1 Passe
						138: Periodic Engine Maintenance Timer 2 Passe
						139: Periodic Engine Maintenance Timer 3 Passe
						140: Periodic Engine Maintenance Timer 4 Passe
						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1142	Digital Output 8 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1143	Digital Output 9 Function	0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure
						19: Class 1 Failure
						20: Class 2 Failure
						21: Class 3 Failure
						22: Class 4 Failure
						23: Class 5 Failure
						24: Class 6 Failure
						25: Mains Contactor Open Output
						26: Generator Contactor Open Output
						27: Nominal Speed Position (Active when Running)
						28: Nominal Speed Position (Active when Runnin and Cooldown)
						29: Idle Speed Position (Active During Failure Delay Timer)
						30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
						31: Generator Ready for Load
						32: Generator Ready to Start
						33: Genrator Ready to Start and in Auto Mode
						34: Lamp Test
						35: Alarm acknowledge and horn silence
						36: Pre-programmed Test Active
						37: Delayed Generator Voltage or Frequency Running Feedback Detected
						38: Digital Input 1 Active
						39: Digital Input 2 Active
						40: Digital Input 3 Active
						41: Digital Input 4 Active
						42: Digital Input 5 Active
						43: Digital Input 6 Active
						44: Digital Input 7 Active
						45: Digital Input 8 Active
						46: Digital Input 9 Active
						47: Digital Input 10 Active
						48: Digital Input 11 Active
						49: Digital Input 12 Active
						50: Digital Input 13 Active
						51: Digital Input 14 Active
						52: Mains Failure
						53: Mains Over Voltage
						54: Mains Under Voltage
						55: Mains Under Frequency
						56: Mains Over Frequency
						57: Pre-heat (Active During Pre-heat)
						58: Pre-heat (Active Duting Pre-Heat + Cranking)
						59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer)
						60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time)
						61: Start Process Begun
						62: Not Functional
						63: Not Functional
						64: Not Functional
						65: Charge Output
						66: Not Functional
						67: Pre-heat Status
						68: Crank Status
						69: Delay Between Cranking Status
						70: Failure Delay Timer Status
						71: Running Status
						72: Cooldown Status
						73: Engine Stopping Status
						74: Post-start Status
						75: Start Failure
						76: Running Feedback Before Cranking Failure
						77: Failed to Stop Failure
						78: Generator Under Voltage Failure Level 1

						79: Genreator Under Voltage Failure Level 2
						80: Generator Over Voltage Failure Level 1
						81: Generator Over Voltage Failure Level 2
						82: Generator Under Frequency Failure Level 1
						83: Generator Under Frequency Failure Level 2
						84: Generator Over Frequency Failure Level 1
						85: Generator Over Frequency Failure Level 2
						86: Under RPM Failure Level 1
						87: Under RPM Failure Level 2
						88: Over RPM Failure Level 1
						89: Over RPM Failure Level2
						90: RPM Sensor Failure
						91: Charge Voltage Failure Level 1
						92: Charge Voltage Failure Level 2
						93: Low Battery Voltage Failure Level 1
						94: Low Battery Voltage Failure Level2
						95: High Battery Voltage Failure Level 1
						96: High Battery Voltage Failure Level2
						97: Mains Contactor Failed to Open
						98: Mains Contactor Failed to Close
						99: Mains Contactor Status Unknown
						100: Generator Contactor Failed to Open
						101: Generator Contactor Failed to Close
						102: Generator Contactor Status Unknown
						103: Over Current Failure Level 1
						104: Over Current Failure Level 2
						105: Over Current Failure Level 3
						106: KW Failure Level 1
						107: KW Failure Level 2
						108: KVar Failure Level 1
						109: KVar Failure Level 2
						110: KVA Failure Level 1
						111: KVA Failure Level 2
						112: Cosϕ Failure Level 1
						113: Cosϕ Failure Level 2
						114: Oil Pressure Switch Failure
						115: Low Oil Pressure Failure Level 1
						116: Low Oil Pressure Level 2
						117: Analog Oil Pressure Sensor Failure
						118: Coolant Temperature Switch Failure
						119: High Coolant Temperature Level 1
						120: High Coolant Temperature Level 2
						121: Low Coolant Temperature Level 1
						122: Low Coolant Temperature Level 2
						123: Analog Coolant Temperature Sensor Failure
						124: Low Fuel Failure Level 1
						125: Low Fuel Level 2
						126: Fuel Consumption While Stopped Failure
						127: High Fuel Consumption While Running Failu
						128: Fuel Level Sensor Failure
						129: Fuel Refill Failure Level 1
						130: Fuel Refill Failure level 2
						131: Digital Input 1 Failure
						132: Digital Inout 2 Failure
						133: Digital Input 3 Failure
						134: Digital Input 4 Failure
						135: Digital Input 5 Failure
						136: Digital Input 6 Failure
						137: Periodic Engine Maintenance Timer 1 Passe
						138: Periodic Engine Maintenance Timer 2 Passe
						139: Periodic Engine Maintenance Timer 3 Passe
						140: Periodic Engine Maintenance Timer 4 Passe
						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1144	Digital Output 9 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1145		0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure
						19: Class 1 Failure
						20: Class 2 Failure
						21: Class 3 Failure
						22: Class 4 Failure
						23: Class 5 Failure
						24: Class 6 Failure
						25: Mains Contactor Open Output
						26: Generator Contactor Open Output
						27: Nominal Speed Position (Active when Running)
						28: Nominal Speed Position (Active when Runnin and Cooldown)
						29: Idle Speed Position (Active During Failure Delay Timer)
						30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
						31: Generator Ready for Load
						32: Generator Ready to Start
						33: Genrator Ready to Start and in Auto Mode
						34: Lamp Test
						35: Alarm acknowledge and horn silence
						36: Pre-programmed Test Active
						37: Delayed Generator Voltage or Frequency Running Feedback Detected
						38: Digital Input 1 Active
						39: Digital Input 2 Active
						40: Digital Input 3 Active
						41: Digital Input 4 Active
						42: Digital Input 5 Active
						43: Digital Input 6 Active
						44: Digital Input 7 Active
						45: Digital Input 8 Active
						46: Digital Input 9 Active
						47: Digital Input 10 Active
						48: Digital Input 11 Active
						49: Digital Input 12 Active
						50: Digital Input 13 Active

	Digital Output 10 Function					51: Digital Input 14 Active 52: Mains Failure 53: Mains Over Voltage 54: Mains Under Voltage 55: Mains Under Frequency 56: Mains Over Frequency 57: Pre-heat (Active During Pre-heat) 58: Pre-heat (Active Duting Pre-Heat + Cranking) 59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer) 60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time) 61: Start Process Begun 62: Not Functional 63: Not Functional 64: Not Functional 65: Charge Output 66: Not Functional 67: Pre-heat Status 68: Crank Status 69: Delay Between Cranking Status 70: Failure Delay Timer Status 71: Running Status 72: Cooldown Status 73: Engine Stopping Status 74: Post-start Status 75: Start Failure 76: Running Feedback Before Cranking Failure 77: Failed to Stop Failure 78: Generator Under Voltage Failure Level 1 79: Genreator Under Voltage Failure Level 2 80: Generator Over Voltage Failure Level 1 81: Generator Over Voltage Failure Level 2 82: Generator Under Frequency Failure Level 1 83: Generator Under Frequency Failure Level 2 84: Generator Over Frequency Failure Level 1 85: Generator Over Frequency Failure Level 2 86: Under RPM Failure Level 1 87: Under RPM Failure Level 2 88: Over RPM Failure Level 1 89: Over RPM Failure Level2 90: RPM Sensor Failure 91: Charge Voltage Failure Level 1 92: Charge Voltage Failure Level 2 93: Low Battery Voltage Failure Level 1 94: Low Battery Voltage Failure Level2 95: High Battery Voltage Failure Level 1 96: High Battery Voltage Failure Level2 97: Mains Contactor Failed to Open 98: Mains Contactor Failed to Close 99: Mains Contactor Status Unknown 100: Generator Contactor Failed to Open 101: Generator Contactor Failed to Close 102: Generator Contactor Status Unknown 103: Over Current Failure Level 1 104: Over Current Failure Level 2 105: Over Current Failure Level 3 106: KW Failure Level 1 107: KW Failure Level 2 108: KVar Failure Level 1 109: KVar Failure Level 2 110: KVA Failure Level 1 111: KVA Failure Level 2 112: Cosϕ Failure Level 1 113: Cosϕ Failure Level 2 114: Oil Pressure Switch Failure 115: Low Oil Pressure Failure Level 1 116: Low Oil Pressure Level 2 117: Analog Oil Pressure Sensor Failure 118: Coolant Temperature Switch Failure 119: High Coolant Temperature Level 1 120: High Coolant Temperature Level 2 121: Low Coolant Temperature Level 1 122: Low Coolant Temperature Level 2 123: Analog Coolant Temperature Sensor Failure 124: Low Fuel Failure Level 1 125: Low Fuel Level 2 126: Fuel Consumption While Stopped Failure 127: High Fuel Consumption While Running Failu 128: Fuel Level Sensor Failure 129: Fuel Refill Failure Level 1 130: Fuel Refill Failure level 2 131: Digital Input 1 Failure 132: Digital Inout 2 Failure 133: Digital Input 3 Failure 134: Digital Input 4 Failure 135: Digital Input 5 Failure 136: Digital Input 6 Failure 137: Periodic Engine Maintenance Timer 1 Passe 138: Periodic Engine Maintenance Timer 2 Passe 139: Periodic Engine Maintenance Timer 3 Passe 140: Periodic Engine Maintenance Timer 4 Passe 141: Periodic Engine Maintenance Timer 5 Passe 142: Periodic Engine Maintenance Timer 6 Passe 143: Periodic Maintenance Timer 1 Passed 144: Periodic Maintenance Timer 2 Passed 145: Periodic Maintenance Timer 3 Passed 146: Periodic Maintenance Timer 4 Passed 147: Periodic Maintenance Timer 5 Passed 148: Periodic Maintenance Timer 6 Passed 149: Load is on Mains or Generator 150: Dual Mutual Standby Synced Output
P1146	Digital Output 10 Activation Type	0	1	1		0: De-energize the Relay 1: Energize the Relay
P1147		0	0	150		0: Output Disabled 1: AMF Engine Start 2: Pulsing Horn 3: Horn 4: Load on Generator 5: Load on Mains 6: Fuel Pump Output 7: Thermostat 1 8: Thermostat 2 9: Not Functional 10: Man, Auto or Test Operation Mode Selected 11: Auto or Test Operation Mode Selected 12: Manual Operation Mode Selected 13: Auto Operation Mode Selected 14: Test Operation Mode Selected 15: Off Operation Mode Selected 16: Class 1 or 2 Failure 17: Class 3,4,5 or 6 Failure 18: General Failure 19: Class 1 Failure 20: Class 2 Failure 21: Class 3 Failure 22: Class 4 Failure 23: Class 5 Failure 24: Class 6 Failure

Digital Output 11 Function	25: Mains Contactor Open Output
	26: Generator Contactor Open Output
	27: Nominal Speed Position (Active when Running)
	28: Nominal Speed Position (Active when Runnin and Cooldown)
	29: Idle Speed Position (Active During Failure Delay Timer)
	30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
	31: Generator Ready for Load
	32: Generator Ready to Start
	33: Genrator Ready to Start and in Auto Mode
	34: Lamp Test
	35: Alarm acknowledge and horn silence
	36: Pre-programmed Test Active
	37: Delayed Generator Voltage or Frequency Running Feedback Detected
	38: Digital Input 1 Active
	39: Digital Input 2 Active
	40: Digital Input 3 Active
	41: Digital Input 4 Active
	42: Digital Input 5 Active
	43: Digital Input 6 Active
	44: Digital Input 7 Active
	45: Digital Input 8 Active
	46: Digital Input 9 Active
	47: Digital Input 10 Active
	48: Digital Input 11 Active
	49: Digital Input 12 Active
	50: Digital Input 13 Active
	51: Digital Input 14 Active
	52: Mains Failure
	53: Mains Over Voltage
	54: Mains Under Voltage
	55: Mains Under Frequency
	56: Mains Over Frequency
	57: Pre-heat (Active During Pre-heat)
	58: Pre-heat (Active Duting Pre-Heat + Cranking)
	59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer)
	60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time)
	61: Start Process Begun
	62: Not Functional
	63: Not Functional
	64: Not Functional
	65: Charge Output
	66: Not Functional
	67: Pre-heat Status
	68: Crank Status
	69: Delay Between Cranking Status
	70: Failure Delay Timer Status
	71: Running Status
	72: Cooldown Status
	73: Engine Stopping Status
	74: Post-start Status
	75: Start Failure
	76: Running Feedback Before Cranking Failure
	77: Failed to Stop Failure
	78: Generator Under Voltage Failure Level 1
	79: Genreator Under Voltage Failure Level 2
	80: Generator Over Voltage Failure Level 1
	81: Generator Over Voltage Failure Level 2
	82: Generator Under Frequency Failure Level 1
	83: Generator Under Frequency Failure Level 2
	84: Generator Over Frequency Failure Level 1
	85: Generator Over Frequency Failure Level 2
	86: Under RPM Failure Level 1
	87: Under RPM Failure Level 2
	88: Over RPM Failure Level 1
	89: Over RPM Failure Level2
	90: RPM Sensor Failure
	91: Charge Voltage Failure Level 1
	92: Charge Voltage Failure Level 2
	93: Low Battery Voltage Failure Level 1
	94: Low Battery Voltage Failure Level2
	95: High Battery Voltage Failure Level 1
	96: High Battery Voltage Failure Level2
	97: Mains Contactor Failed to Open
	98: Mains Contactor Failed to Close
	99: Mains Contactor Status Unknown
	100: Generator Contactor Failed to Open
	101: Generator Contactor Failed to Close
	102: Generator Contactor Status Unknown
	103: Over Current Failure Level 1
	104: Over Current Failure Level 2
	105: Over Current Failure Level 3
	106: KW Failure Level 1
	107: KW Failure Level 2
	108: KVar Failure Level 1
	109: KVar Failure Level 2
	110: KVA Failure Level 1
	111: KVA Failure Level 2
	112: Cosϕ Failure Level 1
	113: Cosϕ Failure Level 2
	114: Oil Pressure Switch Failure
	115: Low Oil Pressure Failure Level 1
	116: Low Oil Pressure Level 2
	117: Analog Oil Pressure Sensor Failure
	118: Coolant Temperature Switch Failure
	119: High Coolant Temperature Level 1
	120: High Coolant Temperature Level 2
	121: Low Coolant Temperature Level 1
	122: Low Coolant Temperature Level 2
	123: Analog Coolant Temperature Sensor Failure
	124: Low Fuel Failure Level 1
	125: Low Fuel Level 2
	126: Fuel Consumption While Stopped Failure
	127: High Fuel Consumption While Running Failu
	128: Fuel Level Sensor Failure
	129: Fuel Refill Failure Level 1
	130: Fuel Refill Failure level 2
	131: Digital Input 1 Failure
	132: Digital Inout 2 Failure
	133: Digital Input 3 Failure
	134: Digital Input 4 Failure
	135: Digital Input 5 Failure
	136: Digital Input 6 Failure
	137: Periodic Engine Maintenance Timer 1 Passe
	138: Periodic Engine Maintenance Timer 2 Passe
	139: Periodic Engine Maintenance Timer 3 Passe
	140: Periodic Engine Maintenance Timer 4 Passe
	141: Periodic Engine Maintenance Timer 5 Passe
	142: Periodic Engine Maintenance Timer 6 Passe
	143: Periodic Maintenance Timer 1 Passed
	144: Periodic Maintenance Timer 2 Passed
	145: Periodic Maintenance Timer 3 Passed
	146: Periodic Maintenance Timer 4 Passed

						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1148	Digital Output 11 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1149	Digital Output 12 Function	0	0	150		0: Output Disabled
						1: AMF Engine Start
						2: Pulsing Horn
						3: Horn
						4: Load on Generator
						5: Load on Mains
						6: Fuel Pump Output
						7: Thermostat 1
						8: Thermostat 2
						9: Not Functional
						10: Man, Auto or Test Operation Mode Selected
						11: Auto or Test Operation Mode Selected
						12: Manual Operation Mode Selected
						13: Auto Operation Mode Selected
						14: Test Operation Mode Selected
						15: Off Operation Mode Selected
						16: Class 1 or 2 Failure
						17: Class 3,4,5 or 6 Failure
						18: General Failure
						19: Class 1 Failure
						20: Class 2 Failure
						21: Class 3 Failure
						22: Class 4 Failure
						23: Class 5 Failure
						24: Class 6 Failure
						25: Mains Contactor Open Output
						26: Generator Contactor Open Output
						27: Nominal Speed Position (Active when Running)
						28: Nominal Speed Position (Active when Runnin and Cooldown)
						29: Idle Speed Position (Active During Failure Delay Timer)
						30: Idle Speed Position (Active During Failure Delay Timer + Cooldown)
						31: Generator Ready for Load
						32: Generator Ready to Start
						33: Genrator Ready to Start and in Auto Mode
						34: Lamp Test
						35: Alarm acknowledge and horn silence
						36: Pre-programmed Test Active
						37: Delayed Generator Voltage or Frequency Running Feedback Detected
						38: Digital Input 1 Active
						39: Digital Input 2 Active
						40: Digital Input 3 Active
						41: Digital Input 4 Active
						42: Digital Input 5 Active
						43: Digital Input 6 Active
						44: Digital Input 7 Active
						45: Digital Input 8 Active
						46: Digital Input 9 Active
						47: Digital Input 10 Active
						48: Digital Input 11 Active
						49: Digital Input 12 Active
						50: Digital Input 13 Active
						51: Digital Input 14 Active
						52: Mains Failure
						53: Mains Over Voltage
						54: Mains Under Voltage
						55: Mains Under Frequency
						56: Mains Over Frequency
						57: Pre-heat (Active During Pre-heat)
						58: Pre-heat (Active Duting Pre-Heat + Cranking)
						59: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer)
						60: Pre-heat (Active During Pre-heat + Cranking + Failure Delay Timer + Heating Time)
						61: Start Process Begun
						62: Not Functional
						63: Not Functional
						64: Not Functional
						65: Charge Output
						66: Not Functional
						67: Pre-heat Status
						68: Crank Status
						69: Delay Between Cranking Status
						70: Failure Delay Timer Status
						71: Running Status
						72: Cooldown Status
						73: Engine Stopping Status
						74: Post-start Status
						75: Start Failure
						76: Running Feedback Before Cranking Failure
						77: Failed to Stop Failure
						78: Generator Under Voltage Failure Level 1
						79: Genreator Under Voltage Failure Level 2
						80: Generator Over Voltage Failure Level 1
						81: Generator Over Voltage Failure Level 2
						82: Generator Under Frequency Failure Level 1
						83: Generator Under Frequency Failure Level 2
						84: Generator Over Frequency Failure Level 1
						85: Generator Over Frequency Failure Level 2
						86: Under RPM Failure Level 1
						87: Under RPM Failure Level 2
						88: Over RPM Failure Level 1
						89: Over RPM Failure Level2
						90: RPM Sensor Failure
						91: Charge Voltage Failure Level 1
						92: Charge Voltage Failure Level 2
						93: Low Battery Voltage Failure Level 1
						94: Low Battery Voltage Failure Level2
						95: High Battery Voltage Failure Level 1
						96: High Battery Voltage Failure Level2
						97: Mains Contactor Failed to Open
						98: Mains Contactor Failed to Close
						99: Mains Contactor Status Unknown
						100: Generator Contactor Failed to Open
						101: Generator Contactor Failed to Close
						102: Generator Contactor Status Unknown
						103: Over Current Failure Level 1
						104: Over Current Failure Level 2
						105: Over Current Failure Level 3
						106: KW Failure Level 1
						107: KW Failure Level 2
						108: KVar Failure Level 1
						109: KVar Failure Level 2
						110: KVA Failure Level 1
						111: KVA Failure Level 2
						112: Cosϕ Failure Level 1
						113: Cosϕ Failure Level 2
						114: Oil Pressure Switch Failure
						115: Low Oil Pressure Failure Level 1

						116: Low Oil Pressure Level 2
						117: Analog Oil Pressure Sensor Failure
						118: Coolant Temperature Switch Failure
						119: High Coolant Temperature Level 1
						120: High Coolant Temperature Level 2
						121: Low Coolant Temperature Level 1
						122: Low Coolant Temperature Level 2
						123: Analog Coolant Temperature Sensor Failure
						124: Low Fuel Failure Level 1
						125: Low Fuel Level 2
						126: Fuel Consumption While Stopped Failure
						127: High Fuel Consumption While Running Failu
						128: Fuel Level Sensor Failure
						129: Fuel Refill Failure Level 1
						130: Fuel Refill Failure level 2
						131: Digital Input 1 Failure
						132: Digital Inout 2 Failure
						133: Digital Input 3 Failure
						134: Digital Input 4 Failure
						135: Digital Input 5 Failure
						136: Digital Input 6 Failure
						137: Periodic Engine Maintenance Timer 1 Passe
						138: Periodic Engine Maintenance Timer 2 Passe
						139: Periodic Engine Maintenance Timer 3 Passe
						140: Periodic Engine Maintenance Timer 4 Passe
						141: Periodic Engine Maintenance Timer 5 Passe
						142: Periodic Engine Maintenance Timer 6 Passe
						143: Periodic Maintenance Timer 1 Passed
						144: Periodic Maintenance Timer 2 Passed
						145: Periodic Maintenance Timer 3 Passed
						146: Periodic Maintenance Timer 4 Passed
						147: Periodic Maintenance Timer 5 Passed
						148: Periodic Maintenance Timer 6 Passed
						149: Load is on Mains or Generator
						150: Dual Mutual Standby Synced Output
P1150	Digital Output 12 Activation Type	0	1	1		0: De-energize the Relay
						1: Energize the Relay
P1123	Mains Contactor Close Output Type	0	1	3		0: Not Active
						1: Constant Output
						2: Switch-on Switch-off Output
						3: Pulsing Type Output
P1124	Mains Contactor Open Output Type	0	0	3		0: Not Active
						1: Constant Output
						2: Switch-on Switch-off Output
						3: Pulsing Type Output
P1153	Mains Contactor Close Output Pulse Number	1	5	900		
P1154	Mains Contactor Open Output Pulse Number	1	5	900		
P1155	Mains Contactor Output Security Open Pulse Number	1	1	900		
P1156	Mains Contactor Output Unlock Pulse Number	1	1	900		
P1157	Mains Contactor Close Output Pulse Duration	0.1	0.5	60	Second	
P1158	Mains Contactor Close Output Delay Between Pulses	0.1	1	60	Second	
P1159	Mains Contactor Open Output Pulse Duration	0.1	0.5	60	Second	
P1160	Mains Contactor Open Output Delay Between Pulses	0.1	1	60	Second	
P1161	Mains Contactor Output Auto-Unlock	0	0	1		0:Passive
						1:Active
P1162	Send Security Unlock Signal to Generator Contactor Before Closing Mains Contactor	0	0	1		0:Passive
						1:Active
P1163	Mains Contactor Close Output Activation Type	0	1	1		0:Normally Closed
						1:Normalde Open
P1164	Mains Contactor Spring Wind Type	0	1	2		0: No Spring 1: When Contactor is Opened 2: When Contactor is Closed
P1165	Mains Contactor Spring Wind Time	0	0	90	Second	
P1166	Send Control Signal to Mains Contactor at Start-up	0	0	1		0:Passive
						1:Active
P1139	Generator Contactor Close Output Type	0	1	3		0: Not Active
						1: Constant Output
						2: Switch-on Switch-off Output
						3: Pulsing Type Output
P1140	Generator Contactor Open Output Type	0	0	3		0: Not Active
						1: Constant Output
						2: Switch-on Switch-off Output
						3: Pulsing Type Output
P1169	Generator Contactor Close Output Pulse Number	1	5	900		
P1170	Generator Contactor Open Output Pulse Number	1	5	900		
P1171	Generator Contactor Output Security Open Pulse Number	1	1	900		
P1172	Generator Contactor Output Unlock Pulse Number	1	5	900		
P1173	Generator Contactor Close Output Pulse Duration	0.1	0.5	60	Second	
P1174	Generator Contactor Close Output Delay Between Pulses	0.1	1	60	Second	
P1175	Generator Contactor Open Output Pulse Duration	0.1	0.5	60	Second	
P1176	Generator Contactor Open Output Delay Between Pulses	0.1	1	60	Second	
P1177	Generator Contactor Output Auto-Unlock	0	0	1		0:Passive
						1:Active
P1178	Send Security Unlock Signal to Generator Contactor Before Closing Generator Contactor	0	0	1		0:Passive
						1:Active
P1179	Generator Contactor Close Output Activation Type	0	1	1		0:Normally Closed
						1:Normally Open
P1180	Generator Contactor Spring Wind Type	0	1	2		0: No Spring 1: When Contactor is Opened 2: When Contactor is Closed
P1181	Generator Contactor Spring Wind Time	0	0	90	Second	
P1182	Send Control Signal to Generator Contactor at Start-up	0	0	1		0:Passive
						1:Active
P1183	Scheduled Test 1 Active	0	0	2		0:Not Active
						1:Weekly Test
						2:Monthly Test
P1184	Scheduled Test 1 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1185	Scheculed Test 1 Day of Month	1	1	31		
P1186	Scheduled Test 1 Day of Week	1	1	7		1:Monday
						2:Tuesday
						3:Wednesday
						4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1187	Scheduled Test 1 Start Hour	0	20	23		
P1188	Scheduled Test 1 Start Minute	0	0	59		
P1189	Scheduled Test 1 Duration Hour	0	0	200		
P1190	Scheduled Test 1 Duration Minute	1	10	59		
P1191	Scheduled Test 2 Active	0	0	2		0:Not Active
						1:Weekly Test
						2:Monthly Test
P1192	Scheduled Test 2 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1193	Scheculed Test 2 Day of Month	1	1	31		
P1194	Scheduled Test 2 Day of Week	1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
						4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1195	Scheduled Test 2 Start Hour	0	20	23		
P1196	Scheduled Test 2 Start Minute	0	0	59		
P1197	Scheduled Test 2 Duration Hour	0	0	200		
P1198	Scheduled Test 2 Duration Minute	1	10	59		
P1199	Scheduled Test 3 Active	0	0	2		0:Not Active
						1:Weekly Test

						2:Monthly Test
P1200	Scheduled Test 3 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1201	Scheculed Test 3 Day of Month	1	1	31		
P1202		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 3 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1203	Scheduled Test 3 Start Hour	0	20	23		
P1204	Scheduled Test 3 Start Minute	0	0	59		
P1205	Scheduled Test 3 Duration Hour	0	0	200		
P1206	Scheduled Test 3 Duration Minute	1	10	59		
P1207		0	0	2		0:Not Active
	Scheduled Test 4 Active					1:Weekly Test
						2:Monthly Test
P1208	Scheduled Test 4 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1209	Scheculed Test 4 Day of Month	1	1	31		
P1210		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 4 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1211	Scheduled Test 4 Start Hour	0	20	23		
P1212	Scheduled Test 4 Start Minute	0	0	59		
P1213	Scheduled Test 4 Duration Hour	0	0	200		
P1214	Scheduled Test 4 Duration Minute	1	10	59		
P1215		0	0	2		0:Not Active
	Scheduled Test 5 Active					1:Weekly Test
						2:Monthly Test
P1216	Scheduled Test 5 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1217	Scheculed Test 5 Day of Month	1	1	31		
P1218		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 5 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1219	Scheduled Test 5 Start Hour	0	20	23		
P1220	Scheduled Test 5 Start Minute	0	0	59		
P1221	Scheduled Test 5 Duration Hour	0	0	200		
P1222	Scheduled Test 5 Duration Minute	1	10	59		
P1223		0	0	2		0:Not Active
	Scheduled Test 6 Active					1:Weekly Test
						2:Monthly Test
P1224	Scheduled Test 6 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1225	Scheculed Test 6 Day of Month	1	1	31		
P1226		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 6 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1227	Scheduled Test 6 Start Hour	0	20	23		
P1228	Scheduled Test 6 Start Minute	0	0	59		
P1229	Scheduled Test 6 Duration Hour	0	0	200		
P1230	Scheduled Test 6 Duration Minute	1	10	59		
P1231		0	0	2		0:Not Active
	Scheduled Test 7 Active					1:Weekly Test
						2:Monthly Test
P1232	Scheduled Test 7 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1233	Scheculed Test 7 Day of Month	1	1	31		
P1234		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 7 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1235	Scheduled Test 7 Start Hour	0	20	23		
P1236	Scheduled Test 7 Start Minute	0	0	59		
P1237	Scheduled Test 7 Duration Hour	0	0	200		
P1238	Scheduled Test 7 Duration Minute	1	10	59		
P1239		0	0	2		0:Not Active
	Scheduled Test 8 Active					1:Weekly Test
						2:Monthly Test
P1240	Scheduled Test 8 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1241	Scheculed Test 8 Day of Month	1	1	31		
P1242		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 8 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1243	Scheduled Test 8 Start Hour	0	20	23		
P1244	Scheduled Test 8 Start Minute	0	0	59		
P1245	Scheduled Test 8 Duration Hour	0	0	200		
P1246	Scheduled Test 8 Duration Minute	1	10	59		
P1247		0	0	2		0:Not Active
	Scheduled Test 9 Active					1:Weekly Test
						2:Monthly Test
P1248	Scheduled Test 9 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1249	Scheculed Test 9 Day of Month	1	1	31		
P1250		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 9 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday
P1251	Scheduled Test 9 Start Hour	0	20	23		
P1252	Scheduled Test 9 Start Minute	0	0	59		
P1253	Scheduled Test 9 Duration Hour	0	0	200		
P1254	Scheduled Test 9 Duration Minute	1	10	59		
P1255		0	0	2		0:Not Active
	Scheduled Test 10 Active					1:Weekly Test
						2:Monthly Test
P1256	Scheduled Test 10 Type	0	0	1		0:Off-load Test
						1:On-load Test
P1257	Scheculed Test 10 Day of Month	1	1	31		
P1258		1	2	7		1:Monday
						2:Tuesday
						3:Wednesday
	Scheduled Test 10 Day of Week					4:Thursday
						5:Friday
						6:Saturday
						7:Sunday

P1259	Scheduled Test 10 Start Hour	0	20	23		
P1260	Scheduled Test 10 Start Minute	0	0	59		
P1261	Scheduled Test 10 Duration Hour	0	0	200		
P1262	Scheduled Test 10 Duration Minute	1	10	59		
P1263	AN0 Measurement Source	0	5	5		0: No Source 1: Thermostat 1 (Table) Source 2: Thermostat 1 (VDO Olcusan 120C) Source 3: Thermostat 2 (Table) Source 4: Thermostat 2 (VDO Olcusan 120C) Source 5: AN0 Table
P1264	AN0 Alarm Status	0	0	2		0:Not Active 1: Low Level 2: High Level
P1265	AN0 Failure Value	-9999	20	9999		
P1266	AN0 Failure Delay	2	5	20	Second	
P1267	AN0 Failure Return Time	2	5	20	Second	
P1268	AN0 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1269	AN0 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1270	AN0 Failure Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1271	AN0 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1272	AN0 Failure Auto-acknowledge Number	2	5	99		
P1273	AN0 Failure Hystheresis Value	-25	1	25		
P1274	AN0 Auto-acknowledge Counter	0	0	30000		
P1275	AN0 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P1276	AN1 Alarm Status	0	0	2		0:Not Active 1: Low Level 2: High Level
P1277	AN1 Failure Value	-9999	120	9999		
P1278	AN1 Failure Delay	2	5	20	Second	
P1279	AN1 Failure Return Time	2	5	20	Second	
P1280	AN1 Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1281	AN1 Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1282	AN1 Failure Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1283	AN1 Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1284	AN1 Failure Auto-acknowledge Number	2	5	99		
P1285	AN1 Failure Hystheresis Value	-25	1	25	V	
P1286	AN1 Auto-acknowledge Counter	0	0	30000		
P1287	AN1 Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P1288	Number of Points on AN0 Table	2	2	12		
P1289	AN0 1st Point Value	-9999	0	9999		
P1290	AN0 1st Point Resistance Value	0	0	30000	ohm	
P1291	AN0 2nd Point Value	-9999	0	9999		
P1292	AN0 2nd Point Resistance Value	0	0	30000	ohm	
P1293	AN0 3rd Point Value	-9999	0	9999		
P1294	AN0 3rd Point Resistance Value	0	0	30000	ohm	
P1295	AN0 4th Point Value	-9999	0	9999		
P1296	AN0 4th Point Resistance Value	0	0	30000	ohm	
P1297	AN0 5th Point Value	-9999	0	9999		
P1298	AN0 5th Point Resistance Value	0	0	30000	ohm	
P1299	AN0 6th Point Value	-9999	0	9999		
P1300	AN0 6th Point Resistance Value	0	0	30000	ohm	
P1301	AN0 7th Point Value	-9999	0	9999		
P1302	AN0 7th Point Resistance Value	0	0	30000	ohm	
P1303	AN0 8th Point Value	-9999	0	9999		
P1304	AN0 8th Point Resistance Value	0	0	30000	ohm	
P1305	AN0 9th Point Value	-9999	0	9999		
P1306	AN0 9th Point Resistance Value	0	0	30000	ohm	
P1307	AN0 10th Point Value	-9999	0	9999		
P1308	AN0 10th Point Resistance Value	0	0	30000	ohm	
P1309	AN0 11th Point Value	-9999	0	9999		
P1310	AN0 11th Point Resistance Value	0	0	30000	ohm	
P1311	AN0 12th Point Value	-9999	0	9999		
P1312	AN0 12th Point Resistance Value	0	0	30000	ohm	
P1313	Number of Points on AN1 Table	2	2	12		
P1314	AN1 1st Point Value	-9999	0	9999		
P1315	AN1 1st Point Resistance Value	0	0	30000	ohm	

P1316	AN1 2nd Point Value	-9999	0	9999		
P1317	AN1 2nd Point Resistance Value	0	0	30000	ohm	
P1318	AN1 3rd Point Value	-9999	0	9999		
P1319	AN1 3rd Point Resistance Value	0	0	30000	ohm	
P1320	AN1 4th Point Value	-9999	0	9999		
P1321	AN1 4th Point Resistance Value	0	0	30000	ohm	
P1322	AN1 5th Point Value	-9999	0	9999		
P1323	AN1 5th Point Resistance Value	0	0	30000	ohm	
P1324	AN1 6th Point Value	-9999	0	9999		
P1325	AN1 6th Point Resistance Value	0	0	30000	ohm	
P1326	AN1 7th Point Value	-9999	0	9999		
P1327	AN1 7th Point Resistance Value	0	0	30000	ohm	
P1328	AN1 8th Point Value	-9999	0	9999		
P1329	AN1 8th Point Resistance Value	0	0	30000	ohm	
P1330	AN1 9th Point Value	-9999	0	9999		
P1331	AN1 9th Point Resistance Value	0	0	30000	ohm	
P1332	AN1 10th Point Value	-9999	0	9999		
P1333	AN1 10th Point Resistance Value	0	0	30000	ohm	
P1334	AN1 11th Point Value	-9999	0	9999		
P1335	AN1 11th Point Resistance Value	0	0	30000	ohm	
P1336	AN1 12th Point Value	-9999	0	9999		
P1337	AN1 12th Point Resistance Value	0	0	30000	ohm	
P1338	RS232 Baud Rate	0	4	5		0: 2400 1: 4800 2: 9600 3: 14400 4: 19200 5: 38400
P1339	RS232 Parity Bit	0	0	2		0:None 1:Odd 2:Even
P1340	RS232 Stop Bit	1	1	2		1:1 2:2
P1341	RS232 Modbus Slave Address	1	1	255		
P1342	RS232 Reply Packet Delay	0.02	0.04	9	Second	
P1343	RS232 Modem Function	0	0	1		0:None 1:GSM Modem
P1344	GSM PIN Code	0	0	9999		
P1345	GSM Message Center Number 1		“902323”			
P1346	GSM Message Center Number 2		“767806”			
P1347	GSM Message Center Number 3		“ ”			
P1348	1st GSM Recipient Number 1		“902323”			
P1349	1st GSM Recipient Number 2		“767806”			
P1350	1st GSM Recipient Number 3		“”			
P1351	2nd GSM Recipient Number 1		“902323”			
P1352	2nd GSM Recipient Number 2		“767806”			
P1353	2nd GSM Recipient Number 3		“ ”			
P1354	Mains Vr Calibration Gain Value	0.001	0.84	1.2		
P1355	Mains Vs Calibration Gain Value	0.001	0.84	1.2		
P1356	Mains Vt Calibration Gain Value	0.001	0.84	1.2		
P1357	Mains Vrs Calibration Gain Value	0.001	1,000	1.2		
P1358	Mains Vst Calibration Gain Value	0.001	1,000	1.2		
P1359	Mains Vtr Calibration Gain Value	0.001	1,000	1.2		
P1360	Generator Vr Calibration Gain Value	0.001	0.84	1.2		
P1361	Generator Vs Calibration Gain Value	0.001	0.84	1.2		
P1362	Generator Vt Calibration Gain Value	0.001	0.84	1.2		
P1363	Generator Vrs Calibration Gain Value	0.001	1,000	1.2		
P1364	Generator Vst Calibration Gain Value	0.001	1,000	1.2		
P1365	Generator Vtr Calibration Gain Value	0.001	1,000	1.2		
P1366	Generator Ir Calibration Gain Value	0.01	3.58	9.99		
P1367	Generator Is Calibration Gain Value	0.01	3.58	9.99		
P1368	Generator It Calibration Gain Value	0.01	3.58	9.99		
P1369	Battery Voltage Calibration Gain Value	0.01	0.42	9.99		
P1370	Charge Voltage Calibration Gain Value	0.01	0.42	9.99		
P1371	KW Phase r Calibration Gain Value	0.01	1	9.99		
P1372	KW Phase s Calibration Gain Value	0.01	1	9.99		
P1373	KW Phase t Calibration Gain Value	0.01	1	9.99		
P1374	KVar Phase r Calibration Gain Value	0.01	1	9.99		
P1375	KVar Phase s Calibration Gain Value	0.01	1	9.99		
P1376	KVar Phase t Calibration Gain Value	0.01	1	9.99		
P1377	KVA Phase r Calibration Gain Value	0.01	1	9.99		
P1378	KVA Phase s Calibration Gain Value	0.01	1	9.99		
P1379	KVA Phase t Calibration Gain Value	0.01	1	9.99		
P1380	Cosϕ Phase r Calibration Gain Value	0.01	1	9.99		
P1381	Cosϕ Phase s Calibration Gain Value	0.01	1	9.99		
P1382	Cosϕ Phase t Calibration Gain Value	0.01	1	9.99		
P1383	Mains Vr Calibration Offset Value	-29	0	29	V	
P1384	Mains Vs Calibration Offset Value	-29	0	29	V	
P1385	Mains Vt Calibration Offset Value	-29	0	29	V	
P1386	Mains Vrs Calibration Offset Value	-29	0	29	V	
P1387	Mains Vst Calibration Offset Value	-29	0	29	V	
P1388	Mains Vtr Calibration Offset Value	-29	0	29	V	
P1389	Generator Vr Calibration Offset Value	-29	0	29	V	
P1390	Generator Vs Calibration Offset Value	-29	0	29	V	
P1391	Generator Vt Calibration Offset Value	-29	0	29	V	
P1392	Generator Vrs Calibration Offset Value	-29	0	29	V	
P1393	Generator Vst Calibration Offset Value	-29	0	29	V	
P1394	Generator Vtr Calibration Offset Value	-29	0	29	V	
P1395	Battery Voltage Calibration Offset Value	-9.9	0	9.9		
P1396	Charge Voltage Calibration Offset Value	-9.9	0	9.9		
P1397	Generator Ir Calibration Offset Value	-99	0	99		
P1398	Generator Is Calibration Offset Value	-99	0	99		
P1399	Generator It Calibration Offset Value	-99	0	99		
P1400	KW Phase r Calibration Offset Value	-999	0	999	KW	
P1401	KW Phase s Calibration Offset Value	-999	0	999	KW	
P1402	KW Phase s Calibration Offset Value	-999	0	999	KW	

P1403	KVar Phase r Calibration Offset Value	-999	0	999	KVAR	
P1404	KVar Phase s Calibration Offset Value	-999	0	999	KVAR	
P1405	KVar Phase t Calibration Offset Value	-999	0	999	KVAR	
P1406	KVA Phase r Calibration Offset Value	-999	0	999	KVA	
P1407	KVA Phase s Calibration Offset Value	-999	0	999	KVA	
P1408	KVA Phase t Calibration Offset Value	-999	0	999	KVA	
P1409	Cosϕ Phase r Calibration Offset Value	-0.99	0	0.99		
P1410	Cosϕ Phase s Calibration Offset Value	-0.99	0	0.99		
P1411	Cosϕ Phase t Calibration Offset Value	-0.99	0	0.99		
P1412	Oil Pressure Calibration Offset Value	-9.9	0	9.9		
P1413	Temperature Calibration Offset Value	-9	0	9		
P1414	Fuel Level Calibration Offset Value	-9	0	9		
P1415	Oil Pressure Sensor Failure Lower Limit Value	1	8	1023		
P1416	Oil Pressure Sensor Failure Upper Limit Value	1	1015	1023		
P1417	Oil Pressure Sensor Calibration Gain Value	1	100	120		
P1418	Coolant Temperature Sensor Failure Lower Limit Value	1	8	1023		
P1419	Coolant Temperature Sensor Failure Upper Limit Value	1	1015	1023		
P1420	Coolant Temperature Sensor Calibration Gain Value	1	100	120		
P1421	Fuel Level Sensor Failure Lower Limit Value	1	8	1023		
P1422	Fuel Level Sensor Failure Upper Limit Value	1	1015	1023		
P1423	Fuel Level Sensor Calibration Gain Value	1	100	120		
P1424	U Phase Current Transformer 50hz Phase Shift	1	142	2000	uS	
P1425	V Phase Current Transformer 50hz Phase Shift	1	142	2000	uS	
P1426	W Phase Current Transformer 50hz Phase Shift	1	142	2000	uS	
P1427	Earth Current Input Active	0	1	1		0:Passive 1:Active
P1428	Earth Current Transformer Primer Ratio	5	100	9900		
P1429	Earth Current Transformer Seconder Ratio	1	5	5		
P1430	Earth Current Ie Calibration Gain Value	0.01	3.58	9.99		
P1431	Earth Current Ie Calibration Offset Value	-99	0	99		
P1432	Earth Failure Active	0	0	1		0:Passive 1:Active
P1433	Earth Failure Limit Value	1	20	50	Amp	
P1434	Earth Failure Delay	2	5	20	Second	
P1435	Earth Failure Return Time	2	5	20	Second	
P1436	Earth Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1437	Earth Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1438	Earth Failure Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1439	Earth Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1440	Earth Failure Auto-acknowledge Number	2	5	99		
P1441	Earth Failure Hystheresis Value	1	1	25	Amp	
P1442	Earth Failure Auto-acknowledge Counter	0	0	30000		
P1443	Earth Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P1444	Reverse Power Protection Failure Active	0	0	1		0:Passive 1:Active
P1445	Reverse Power Protection Failure Limit Value	-50	-10	5	KW	
P1446	Reverse Power Protection Failure Delay	2	5	20	Second	
P1447	Reverse Power Protection Failure Return Time	2	5	20	Second	
P1448	Reverse Power Protection Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1449	Reverse Power Protection Failure Auto-acknowledge	0	0	1		0:Passive 1:Active
P1450	Reverse Power Protection Failure Activation Time	0	2	3		0: Active All the Time 1: Active when Engine Running 2: Active After Failure Delay Timer 3: Active when Alternator Energizes the Contactor
P1451	Reverse Power Protection Failure Auto-acknowledge Type	0	0	1		0:Limited 1:Unlimited
P1452	Reverse Power Protection Failure Auto-acknowledge Number	2	5	99		
P1453	Reverse Power Protection Failure Hystheresis Value	-12	-0.1	12	KW	
P1454	Reverse Power Protection Failure Auto-acknowledge Counter	0	0	30000		
P1455	Reverse Power Protection Failure Auto-acknowledge Counter Decrease Timer	0.1	10	6500	Hour	
P1456	Phase Sequence Failure Active	0	1	1		0:Passive 1:Active
P1457	Phase Sequence Failure Class	1	2	6		1:Only Display 2:Display + Horn 3:Display + Horn + Gen.Trip 4:Display + Horn + Shotdown with Cooling 5:Display + Horn + Shotdown without Cooling 6:Display + Horn + Shotdown without cooling + Mains Trip
P1458	RS485 Port Function	0	0	3		0:Modbus Slave 1:Dual Slave 2:Dual Master (No Equal Aging)

						3:Dual Master (Equal Aging)
P1459	RS485 Baud Rate	0	4	5		0: 2400 1: 4800 2: 9600 3: 14400 4: 19200 5: 38400
P1460	RS485 Parity Bit	0	0	2		0:None 1:Odd 2:Even
P1461	RS485 Stop Bit	1	1	2		1:1 Stop Bit 2:2 Stop Bit
P1462	RS485 Modbus Slave Address	1	1	255		
P1463	RS485 Reply Packet Delay	0.02	0.04	9	Second	
P1464	Reset KWh Values	0	0	1		0:Passive 1:Active
P1465	R Phase KWh	0	0	99999.9		
P1466	S Phase KWh	0	0	99999.9		
P1467	T Phase KWh	0	0	99999.9		
P1468	Panel Language Setting	0	1	1		0:Not Functional 1:English
P1469	Panel Contrast Setting	0	39	63		
P1470	User Defined Page 1 Value 1	0	0	50		0: RPM 1: Oil Pressure (Bar) 2: Oil Pressure (PSI) 3: Oil Pressure (kPa) 4: Engine Cooldown Temperature (Celcius) 5: Engine Cooldown Temperature (Fahreneit) 6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power 29: L3 Active Power 30: Total Active Power 31: L1 Reactive Power 32: L2 Reactive Power 33: L3 Reactive Power 34: Total Reactive Power 35: L1 Visible Power 36: L2 Visible Power 37: L3 Visible Power 38: Total Visible Power 39: L1 Cosϕ 40: L2 Cosϕ 41: L3 Cosϕ 42: Average Cosϕ 43:L1 KWh 44: L2 KWh 45: L3 KWh 46: Running Hours 47: AN0 Analog 48: AN1 Analog 49: AN2 Analog Voltage 50:AN3 Analog
P1471	User Defined Page 1 Value 2	0	1	50		0: RPM 1: Oil Pressure (Bar) 2: Oil Pressure (PSI) 3: Oil Pressure (kPa) 4: Engine Cooldown Temperature (Celcius) 5: Engine Cooldown Temperature (Fahreneit) 6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power 29: L3 Active Power 30: Total Active Power 31: L1 Reactive Power 32: L2 Reactive Power 33: L3 Reactive Power 34: Total Reactive Power 35: L1 Visible Power 36: L2 Visible Power 37: L3 Visible Power 38: Total Visible Power 39: L1 Cosϕ 40: L2 Cosϕ 41: L3 Cosϕ 42: Average Cosϕ 43:L1 KWh 44: L2 KWh 45: L3 KWh 46: Running Hours 47: AN0 Analog 48: AN1 Analog 49: AN2 Analog Voltage 50:AN3 Analog
P1472		0	9	50		0: RPM

	User Defined Page 1 Value 3					1: Oil Pressure (Bar) 2: Oil Pressure (PSI) 3: Oil Pressure (kPa) 4: Engine Cooldown Temperature (Celcius) 5: Engine Cooldown Temperature (Fahreneit) 6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power 29: L3 Active Power 30: Total Active Power 31: L1 Reactive Power 32: L2 Reactive Power 33: L3 Reactive Power 34: Total Reactive Power 35: L1 Visible Power 36: L2 Visible Power 37: L3 Visible Power 38: Total Visible Power 39: L1 Cosϕ 40: L2 Cosϕ 41: L3 Cosϕ 42: Average Cosϕ 43:L1 KWh 44: L2 KWh 45: L3 KWh 46: Running Hours 47: AN0 Analog 48: AN1 Analog 49: AN2 Analog Voltage 50:AN3 Analog
P1473	User Defined Page 1 Value 4	0	26	50		0: RPM 1: Oil Pressure (Bar) 2: Oil Pressure (PSI) 3: Oil Pressure (kPa) 4: Engine Cooldown Temperature (Celcius) 5: Engine Cooldown Temperature (Fahreneit) 6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power 29: L3 Active Power 30: Total Active Power 31: L1 Reactive Power 32: L2 Reactive Power 33: L3 Reactive Power 34: Total Reactive Power 35: L1 Visible Power 36: L2 Visible Power 37: L3 Visible Power 38: Total Visible Power 39: L1 Cosϕ 40: L2 Cosϕ 41: L3 Cosϕ 42: Average Cosϕ 43:L1 KWh 44: L2 KWh 45: L3 KWh 46: Running Hours 47: AN0 Analog 48: AN1 Analog 49: AN2 Analog Voltage 50:AN3 Analog
P1474	User Defined Page 1 Value 5	0	30	50		0: RPM 1: Oil Pressure (Bar) 2: Oil Pressure (PSI) 3: Oil Pressure (kPa) 4: Engine Cooldown Temperature (Celcius) 5: Engine Cooldown Temperature (Fahreneit) 6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power

						29: L3 Active Power
						30: Total Active Power
						31: L1 Reactive Power
						32: L2 Reactive Power
						33: L3 Reactive Power
						34: Total Reactive Power
						35: L1 Visible Power
						36: L2 Visible Power
						37: L3 Visible Power
						38: Total Visible Power
						39: L1 Cosϕ
						40: L2 Cosϕ
						41: L3 Cosϕ
						42: Average Cosϕ
						43:L1 KWh
						44: L2 KWh
						45: L3 KWh
						46: Running Hours
						47: AN0 Analog
						48: AN1 Analog
						49: AN2 Analog Voltage
						50:AN3 Analog
P1475	User Defined Page 2 Value 1	0	46	50		0: RPM
						1: Oil Pressure (Bar)
						2: Oil Pressure (PSI)
						3: Oil Pressure (kPa)
						4: Engine Cooldown Temperature (Celcius)
						5: Engine Cooldown Temperature (Fahreneit)
						6: Battery Voltage
						7: Charge Voltage
						8: Fuel Level
						9: Generator Frequency
						10: Generator Current (R Phase)
						11: Generator Current (S Phase)
						12: Generator Current (T Phase)
						13: Generator Voltage (L1-N)
						14: Generator Voltage (L2-N)
						15: Generator Voltage (L3-N)
						16: Generator Voltage (L1-L2)
						17: Generator Voltage (L2-L3)
						18: Generator Voltage (L3-L1)
						19: Mains Frequency
						20: Mains Voltage (L1-N)
						21: Mains Voltage (L2-N)
						22: Mains Voltage (L3-N)
						23: Mains Voltage (L1-L2)
						24: Mains Voltage (L2-L3)
						25: Mains Voltage (L3-L1)
						26: Earth Current
						27: L1 Active Power
						28: L2 Active Power
						29: L3 Active Power
						30: Total Active Power
						31: L1 Reactive Power
						32: L2 Reactive Power
						33: L3 Reactive Power
						34: Total Reactive Power
						35: L1 Visible Power
						36: L2 Visible Power
						37: L3 Visible Power
						38: Total Visible Power
						39: L1 Cosϕ
						40: L2 Cosϕ
						41: L3 Cosϕ
						42: Average Cosϕ
						43:L1 KWh
						44: L2 KWh
						45: L3 KWh
						46: Running Hours
						47: AN0 Analog
						48: AN1 Analog
						49: AN2 Analog Voltage
						50:AN3 Analog
P1476	User Defined Page 2 Value 2	0	8	50		0: RPM
						1: Oil Pressure (Bar)
						2: Oil Pressure (PSI)
						3: Oil Pressure (kPa)
						4: Engine Cooldown Temperature (Celcius)
						5: Engine Cooldown Temperature (Fahreneit)
						6: Battery Voltage
						7: Charge Voltage
						8: Fuel Level
						9: Generator Frequency
						10: Generator Current (R Phase)
						11: Generator Current (S Phase)
						12: Generator Current (T Phase)
						13: Generator Voltage (L1-N)
						14: Generator Voltage (L2-N)
						15: Generator Voltage (L3-N)
						16: Generator Voltage (L1-L2)
						17: Generator Voltage (L2-L3)
						18: Generator Voltage (L3-L1)
						19: Mains Frequency
						20: Mains Voltage (L1-N)
						21: Mains Voltage (L2-N)
						22: Mains Voltage (L3-N)
						23: Mains Voltage (L1-L2)
						24: Mains Voltage (L2-L3)
						25: Mains Voltage (L3-L1)
						26: Earth Current
						27: L1 Active Power
						28: L2 Active Power
						29: L3 Active Power
						30: Total Active Power
						31: L1 Reactive Power
						32: L2 Reactive Power
						33: L3 Reactive Power
						34: Total Reactive Power
						35: L1 Visible Power
						36: L2 Visible Power
						37: L3 Visible Power
						38: Total Visible Power
						39: L1 Cosϕ
						40: L2 Cosϕ
						41: L3 Cosϕ
						42: Average Cosϕ
						43:L1 KWh
						44: L2 KWh
						45: L3 KWh
						46: Running Hours
						47: AN0 Analog
						48: AN1 Analog
						49: AN2 Analog Voltage
						50:AN3 Analog
P1477		0	15	50		0: RPM
						1: Oil Pressure (Bar)
						2: Oil Pressure (PSI)
						3: Oil Pressure (kPa)
						4: Engine Cooldown Temperature (Celcius)
						5: Engine Cooldown Temperature (Fahreneit)

	User Defined Page 2 Value 3					6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power 29: L3 Active Power 30: Total Active Power 31: L1 Reactive Power 32: L2 Reactive Power 33: L3 Reactive Power 34: Total Reactive Power 35: L1 Visible Power 36: L2 Visible Power 37: L3 Visible Power 38: Total Visible Power 39: L1 Cosϕ 40: L2 Cosϕ 41: L3 Cosϕ 42: Average Cosϕ 43:L1 KWh 44: L2 KWh 45: L3 KWh 46: Running Hours 47: AN0 Analog 48: AN1 Analog 49: AN2 Analog Voltage 50:AN3 Analog
P1478	User Defined Page 2 Value 4	0	25	50		0: RPM 1: Oil Pressure (Bar) 2: Oil Pressure (PSI) 3: Oil Pressure (kPa) 4: Engine Cooldown Temperature (Celcius) 5: Engine Cooldown Temperature (Fahreneit) 6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power 29: L3 Active Power 30: Total Active Power 31: L1 Reactive Power 32: L2 Reactive Power 33: L3 Reactive Power 34: Total Reactive Power 35: L1 Visible Power 36: L2 Visible Power 37: L3 Visible Power 38: Total Visible Power 39: L1 Cosϕ 40: L2 Cosϕ 41: L3 Cosϕ 42: Average Cosϕ 43:L1 KWh 44: L2 KWh 45: L3 KWh 46: Running Hours 47: AN0 Analog 48: AN1 Analog 49: AN2 Analog Voltage 50:AN3 Analog
P1479	User Defined Page 2 Value 5	0	37	50		0: RPM 1: Oil Pressure (Bar) 2: Oil Pressure (PSI) 3: Oil Pressure (kPa) 4: Engine Cooldown Temperature (Celcius) 5: Engine Cooldown Temperature (Fahreneit) 6: Battery Voltage 7: Charge Voltage 8: Fuel Level 9: Generator Frequency 10: Generator Current (R Phase) 11: Generator Current (S Phase) 12: Generator Current (T Phase) 13: Generator Voltage (L1-N) 14: Generator Voltage (L2-N) 15: Generator Voltage (L3-N) 16: Generator Voltage (L1-L2) 17: Generator Voltage (L2-L3) 18: Generator Voltage (L3-L1) 19: Mains Frequency 20: Mains Voltage (L1-N) 21: Mains Voltage (L2-N) 22: Mains Voltage (L3-N) 23: Mains Voltage (L1-L2) 24: Mains Voltage (L2-L3) 25: Mains Voltage (L3-L1) 26: Earth Current 27: L1 Active Power 28: L2 Active Power 29: L3 Active Power 30: Total Active Power 31: L1 Reactive Power 32: L2 Reactive Power 33: L3 Reactive Power

						34: Total Reactive Power
						35: L1 Visible Power
						36: L2 Visible Power
						37: L3 Visible Power
						38: Total Visible Power
						39: L1 Cosϕ
						40: L2 Cosϕ
						41: L3 Cosϕ
						42: Average Cosϕ
						43:L1 KWh
						44: L2 KWh
						45: L3 KWh
						46: Running Hours
						47: AN0 Analog
						48: AN1 Analog
						49: AN2 Analog Voltage
						50:AN3 Analog
P1480	Group Minimum Running Time	1	4	255		
P1481	Pass Synchronization Between Goups Exist	0	0	1		0: Does not exist
						1: Exists
P1482	Synchronization Passover Time Exceed	10	120	250	Second	
P1483	Minimum Co-work Time	500	1500	9999	ms	
P1484	Canbus Communication Failure Class	1	2	6		1:Only Display
						2:Display + Horn
						3:Display + Horn + Gen.Trip
						4:Display + Horn + Shotdown with Cooling
						5:Display + Horn + Shotdown without Cooling
						6:Display + Horn + Shotdown without cooling + Mains Trip
P1485	ECU control command sending	0	1	1		0:Passive
						1:Active
P1486	ECU Alternative Speed Setting	0	0	1		0:Passive
						1:Active
P1487	ECU Droop	0	1	1		0:Passive
						1:Active
P1488	ECU droop value	0	4.0	5.0		
P1489	AN3 Sensor Active	0	0	1		0:Fuel Level
						1:AN3
P1490	AN3 Failure Activation Time	0	0	3		0: Active All the Time
						1: Active when Engine Running
						2: Active After Failure Delay Timer
						3: Active when Alternator Energizes the Contactor
P1491	AN3 Failure Message 1		“AN3 FA”			
P1492	AN3 Failure Message 2		“ILUER ”			
P1493	AN3 Failure Message 3		“ ”			
P1494	Real Time Clock Setting Year	12	12	99		
P1495	Real Time Clock Setting Month	1	1	12		1: January
						2: February
						3: March
						4: April
						5:00 AM
						6: June
						7: July
						8: August
						9: September
						10: October
						11: November
						12: January
P1496	Real Time Clock Setting Day of Month	1	1	31		
P1497	Real Time Clock Setting Day of Week	1	1	7		1: Monday
						2: Tuesday
						3: Wednesday
						4: Thursday
						5: Friday
						6: Saturday
						7: Sunday
P1498	Real Time Clock Setting Hour	0	0	23		
P1499	Real Time Clock Setting Minute	0	0	59		
P1500	Real Time Clock Setting Second	0	0	59		