

EU Declaration of Conformity

EN

Declaration number	850-850R-869-845-889-MRK-DOC-C-03112K26
Name of the manufacturer	GEPR Energy Canada Inc./UK Grid Solutions Limited
Address of the manufacturer	650 Markland Street, Markham , Ontario, L6C 0M1, Canada / Harry Kerr Drive, Stafford ST16 1WT , Great Britain (St Leonards Building)
Address of authorised representative	GE POWER MANAGEMENT S.L. , Avenida Pinoa 10, 48170 Zamudio, Spain

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Product / model	850, 850R, 869, 845, 889 (Including retrofit options for 745 to 845, 750/760 to 850, 469 to 869 , 489 to 889 and VDN)
Object of the declaration	Feeder Management Relay, Motor Management Relay, Transformer Management Relay, Generator Management Relay

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

2014/30/EU	EMC Directive	February 26, 2014
2014/35/EU	Low voltage Directive	February 26, 2014
2011/65/EU	ROHS Directive	June 8, 2011
(EU) 2015/863	(Amending Annex II to Directive 2011/65/EU)	March 31, 2015

References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared:

Document Name		Issue
EN 60255-26	Electromagnetic compatibility requirements for measuring relays and protection equipment	2013
EN 60255-27	Measuring relays and protection equipment -Part 27: Product safety requirements	2014

Signed for and on behalf of: **Place and Date:** Markham Ont , 03/11/2026
GEPR Energy Canada Inc./UK Grid Solutions Limited

Name: Michael Pilon

Name: Boris Kacmar

Function: Senior Program Manager, GEPR Energy Canada Inc.

Function: Grid Solutions, Regulatory Compliance, Manager

Signature:



Signature:



Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

Including accessory options: 18J0-0030 8 series Depth reducing Collar 1 3/8", 18J0-0029 8 series Depth Reducing Collar-3".SCOPE OF THIS DECLARATION DOES NOT INCLUDE OPTION "W"(WIFI OPTION)

ORDER CODE FOR 850 FEEDER PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
850	D	L5	R5	P5	H	N	N	A	A	A	M	D	S	D	C	SE		S	N	B	N
																					Example 850
																					APPLICATION
	E																				Industrial
	D																				Distribution Feeder
																					PHASE CURRENTS - SLOT J
		P1																			1A three-phase current inputs (J1), 4 voltage inputs (J2)
		P5																			5A three-phase current inputs (J1), 4 voltage inputs (J2)
																					PHASE CURRENTS - SLOT K
			NN																		No phase current inputs (Slot K)
			P1																		1A three-phase current inputs (K1), 4 voltage inputs (K2)
			P5																		5A three-phase current inputs (K1), 4 voltage inputs (K2)
																					GROUND CURRENTS
				G1																	1A ground input
				G5																	5A ground input
				S1																	1A ground input (J1), 1A sensitive ground input (K1)
				S5																	5A ground input (J1), 5A sensitive ground input (K1)
				Y1																	5A ground input (J1), 1A sensitive ground input (K1)
				Y5																	1A ground input (J1), 5A sensitive ground input (K1)
				D1																	1A ground input (J1), 1A polarizing current input (K1)
				D5																	5A ground input (J1), 5A polarizing current input (K1)
																					POWER SUPPLY
					H																125 to 250 V DC/100 to 240 V AC
					R																125 to 250 V DC/100 to 240 V AC - Extended Ride-through
					L																24 to 48 VDC
																					SLOT B
						N															None
						R															6 X RTDs (Pt100, Ni100, Ni120)
						S															6 X RTDs (Pt100, Ni100, Ni120, Cu10)
						C															15 Digital Inputs (Low / High voltage, Ext Supply)
																					SLOT C
						N															None
						R															6 X RTDs (Pt100, Ni100, Ni120)
						S															6 X RTDs (Pt100, Ni100, Ni120, Cu10)
						C															15 Digital Inputs (Low / High voltage, Ext Supply)
																					SLOT F
							A														2 Form A (Vmon) Relays, 2 Form C Relays, 1 Critical Failure Relay, 7 Digital Inputs (Int/Ext Supply)

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 850 FEEDER PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
								M													
																					4 SSR (High-Speed, High-Break), 1 Critical Failure Relay, 7 Digital Inputs (Int/Ext Supply)
																					SLOT G
								N													
																					None
								A													
																					2 Form A Relays, 3 Form C Relays, 7 Digital Inputs (Int/Ext Supply)
								B													
																					9 Form A Relays, 10 Digital Inputs
								D													
																					8 Double Pole Outputs
								T													
																					4 SSR (High-Speed, High-Break), 2 Form A Relay, 4 Arc Flash Inputs (Point and Loop Sensors)
								K													
																					5 Form A Relays, 1 Form C Relay, 10 Digital Inputs
								L													
																					7 DcmA O/P, 4 DcmA I/P, 1 RTD
								M													
																					4 SSR (High-Speed, High-Break), 1 Form C Relay, 7 Digital Inputs (Int/Ext Supply)
								P													
																					8 Double Pole Outputs - C
																					SLOT H
								N													
																					None
								A													
																					2 Form A Relays, 3 Form C Relays, 7 Digital Inputs (Int/Ext Supply)
								B													
																					9 Form A Relays, 10 Digital Inputs
								D													
																					8 Double Pole Outputs
								F													
																					10 Digital Inputs, 4 Arc Flash Inputs (Point Sensors)
								T													
																					4 SSR (High-Speed, High-Break), 2 Form A Relay, 4 Arc Flash Inputs (Point and Loop Sensors)
								K													
																					5 Form A Relays, 1 Form C Relay, 10 Digital Inputs
								M													
																					4 SSR (High-Speed, High-Break), 1 Form C Relay, 7 Digital Inputs (Int/Ext Supply)
								P													
																					8 Double Pole Outputs - C
																					FACEPLATE
								M													
																					Basic: Membrane Keypad with 3 Pushbuttons
								A													
																					Advanced: Membrane Keypad with 10 Pushbuttons
																					CURRENT PROTECTION
											S										
																					Basic (850-E): 50P (2), 50N (2), 50G (1), 51P (2), 51N (2), 51G (1)
											M										
																					Standard (850-E): Basic, 50SG (1), 50_2 (1), 51SG (1), 51_2 (1), RGF (1)
											D										
																					Standard (850-D): 37 (3), 50P (4/CT bank), 50N (4/CT bank), 50G (4/CT bank), 51P (6 4), 51PP (2), 51N (4), 51G (2/CT bank), 50SG (4/CT bank), 50_2 (4/CT bank), 51SG (2/CT bank), 51_2 (2/CT bank), RGF (3), SOTF (3/Bkr), 67P (4), 67N (4), 67G (1/CT bank), 67SG (1/CT bank), 67_2 (1/CT bank), 49 (2), Load Encroachment (1/CT bank), Broken Conductor (3)
											A										
																					Advanced (850-E): Standard, 67P (1), 67N (1), 67G (1), 67SG (1), 67_2 (1), 49 (2), Load Encroachment (1), Broken Conductor (1)
																					VOLTAGE MONITORING AND PROTECTION

Additional Information

ORDER CODE FOR 850 FEEDER PROTECTION SYSTEM																						
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
													S									Standard (850-E): 27P (4/VT bank), 27X (2/VT bank), 59P (4), 59N (4), 59X (2/VT bank), 81O (6/VT bank), 81U (6/VT bank)
													P									Advanced (850-D): 25 (1/CT bank), 27P (4/VT bank), 27X (2/VT bank), 27T (4), 27Q (3/Bkr), 32 (4), 32N (4), 55 (4), 59P (4), 59N (4), 59X (2/VT bank), 59_2 (2/VT bank), 81O (6/VT bank), 81U (6/VT bank), 81R (6/VT bank), Fast U/F (8), Neutral Admittance (4), *UV Restoration (1/Bkr), *UF Restoration (1/Bkr) Advanced (850-E): Standard, 25 (1/CT bank), 27T (4), 27Q (3/Bkr), 32 (4), 32N (4), 55 (4), 59_2 (2/VT bank), 81R (6/VT bank), Fast U/F (8), Neutral Admittance (4), UV Restoration (1/Bkr), UF Restoration (1/Bkr)
																						CONTROL
														B								Basic = Setpoint Group Control, Virtual Inputs, Trip Bus, Breaker Control, VTFF, Digital Elements
														F								Standard (850-E): Setpoint Group Control, Virtual Inputs, Trip Bus, Breaker Control, VTFF, Digital Elements, FlexLogic, CLP, 50BF (2/CT bank), CT Supervision (3)
														D								Standard = Setpoint Group Control, Virtual Inputs, Trip Bus (6), Breaker Control (1/Bkr), VTFF (1/ VT bank), Digital Elements, FlexLogic, CLP (1/Bkr), 50BF (2/CT bank), Pole Discordance (3), Autoreclose (1/Bkr), CT Spvn (3)
														P								Standard = Setpoint Group Control, Virtual Inputs, Trip Bus (6), Breaker Control (2), Digital Elements, FlexLogic, 50BF (1/CT bank)
														C								Advanced (850-E): Standard, Autoreclose, Bus Transfer (Requires voltage option P)
														H								Advanced HMI (850-E): Advanced, Tab Pushbuttons, Annunciator Panel, Configurable SLDs with Bay Control
														T								Advanced HMI (850-D): Setpoint Group Control, Virtual Inputs, Trip Bus (6), Breaker Control (1/Bkr), VTFF (1/VT bank), FlexLogic, CLP (1/Bkr), 50BF (2/CT bank), Pole Discordance (3), Autoreclose (1/Bkr), CT Supervision (3), Tab Pushbuttons, Annunciator Panel, Configurable SLDs with Bay Control
																						MONITORING
															B							Basic (850-E): Breaker Coil Monitoring (1/Bkr), Breaker Arcing (1/Bkr), THD, Current Demand (1/CT bank), Digital Counters (16), Data Logger, Power Quality (3)
															C							Standard (850-E): Basic, Advanced Breaker Health (1/Bkr)
															A							Advanced (850-D): Breaker Coil Monitoring (1/Bkr), Breaker Arcing (1/Bkr), THD, Current Demand (1/CT bank), Digital Counters (16), Data Logger, Power Quality (3), Advanced Breaker Health (1/Bkr), Harmonic Detection (6), TGFD (1/Bkr), Incipient fault detection Advanced (850-E): Standard, Harmonic Detection (6), TGFD (1/Bkr), Incipient fault detection

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 850 FEEDER PROTECTION SYSTEM																						
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
															H							Advanced (850-D): Breaker Coil Monitoring (1/Bkr), Breaker Arcing (1/Bkr), THD, Current Demand (1/CT bank), Digital Counters (16), Data Logger, Power Quality (3), Advanced Breaker Health (1/Bkr), Harmonic Detection (6), TGFD (1/Bkr), HiZ Advanced (850-E): Standard, Harmonic Detection (6), TGFD (1/Bkr), HiZ
COMMUNICATIONS																						
															S	E						Standard: Front USB, 1x Rear RS485 (Modbus RTU/TCP, DNP 3.0, IEC 60870-5-103), 1x Ethernet RJ45 port (Modbus TCP, DNP).
															1	E						Advanced: Standard + IEC 60870-5-104, 1588, SNTP, OPC-UA
															1	P						Advanced + PRP + HSR
															2	A						Advanced + Basic IEC 61850
															2	E						Advanced + PRP + HSR + Basic IEC 61850
															3	A						Advanced + IEC 61850
															3	E						Advanced + PRP + HSR + IEC 61850
															4	E						Advanced + 1x additional RS485 Port + HSR + PRP + IEC 61850
ADVANCED COMMUNICATIONS CONNECTOR																						
																	N					None. No additional communication ports. RJ45 Port 1 Enabled, RJ45 Port 2 disabled
																	S					ST, Multi-mode 1310nm - With 1E to 3E and 3F, the user gets 2x Fiber ST Ports. RJ45 ports 1 and 2 are disabled. With 4E and 4F, user gets 2x Fiber ST ports and 2xRJ45 Ports
																	C					RJ45, Copper 10/100M - With 1E to 3E and 3F, the user gets 2x RJ45 ports. RJ45 ports 1 and 2 are disabled. With 4E and 4F, user gets 4x RJ45 Ports
																	T					1x additional RS485 Port and 1x additional RJ45 Copper 10/100M port
WIRELESS COMMUNICATION																						
																		N				None
																		W				WiFi 802.11
SECURITY																						
																			B			Basic
																			A			Advanced: CyberSentry Level 1
FW OPTION																						
																			N			FW version 3.xx or earlier
																			4			FW version 4.xx

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 845 TRANSFORMER PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
845	E	P5	R5	G5	H	N	N	A	N	N	G	A	P	F	M	2	E	S	W	A	N
Example 845																					
APPLICATION																					
E																					Standard
PHASE CURRENTS - SLOT J																					
	NN																				Two windings, no voltage
	P1																				1A three-phase current inputs (J1), voltage inputs (J2)
	P5																				5A three-phase current inputs (J1), voltage inputs (J2)
PHASE CURRENTS - SLOT K																					
		M1																			1A three-phase current inputs (K1), 1A three-phase current inputs (K2)
		M5																			5A three-phase current inputs (K1), 5A three-phase current inputs (K2)
		MX																			5A three-phase current inputs (K1), 1A three-phase current inputs (K2)
		H1																			1A three-phase current inputs (K1) - two windings with voltage
		H5																			5A three-phase current inputs (K1) - two windings with voltage
		R1																			1A three-phase current inputs (K1), 1A three-phase current inputs (K2) - three windings with voltage
		R5																			5A three-phase current inputs (K1), 5A three-phase current inputs (K2) - three windings with voltage
GROUND CURRENTS																					
			G1																		1A ground input (1 per phase current bank)
			G5																		5A ground input (1 per phase current bank)
			Q1																		5A ground input (J1), 1A ground input (K1)
			Q2																		5A (J1) + 1A (K1) + 1A (K2)
			Q3																		1A (J1) + 5A (K1) + 5A (K2)
POWER SUPPLY																					
				H																	125 to 250 V DC/100 to 240 V AC
				R																	125 to 250 V DC/100 to 240 V AC - Extended Ride-through
				L																	24 to 48 VDC
SLOT B																					
				N																	None
				R																	6 X RTDs (Pt100, Ni100, Ni120)
				S																	6 X RTDs (Pt100, Ni100, Ni120, Cu10)
				C																	15 Digital Inputs (24 V DC, Ext Supply)
SLOT C																					

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 845 TRANSFORMER PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
							N														None
							R														6 X RTDs (Pt100, Ni100, Ni120)
							S														6 X RTDs (Pt100, Ni100, Ni120, Cu10)
							C														15 Digital Inputs (24 V DC, Ext Supply)
																					SLOT F
							A														2 Form A (Vmon) Relays, 2 Form C Relays, 1 Critical Failure Relay, 7 Digital Inputs (Int/Ext Supply)
							M														4 SSR (High-Speed, High-Break), 1 Critical Failure Relay, 7 Digital Inputs (Int/Ext Supply)
																					SLOT G
								N													None
								A													2 Form A (Vmon) Relays, 3 Form C Relays, 7 Digital Inputs (Int/Ext Supply)
								B													9 Form A Relays, 10 Digital Inputs
								D													8 Double Pole Outputs
								T													4 SSR (High-Speed, High-Break), 2 Form A Relay, 4 Arc Flash Inputs (Point and Loop Sensors)
								K													5 Form A Relays, 1 Form C Relay, 10 Digital Inputs
								L													7 DcmA O/P, 4 DcmA I/P, 1 RTD, 1 Ohms Input
								M													4 SSR (High-Speed, High-Break), 1 Form C Relay, 7 Digital Inputs (Int/Ext Supply)
								P													8 Double Pole Outputs - C
																					SLOT H
								N													None
								A													2 Form A Relays, 3 Form C Relays, 7 Digital Inputs (Int/Ext Supply)
								B													9 Form A Relays, 10 Digital Inputs
								D													8 Double Pole Outputs
								F													10 Digital Inputs, 4 Arc Flash Inputs (Point Sensors)
								T													4 SSR (High-Speed, High-Break), 2 Form A Relay, 4 Arc Flash Inputs (Point and Loop Sensors)
								K													5 Form A Relays, 1 Form C Relay, 10 Digital Inputs
								M													4 SSR (High-Speed, High-Break), 1 Form C Relay, 7 Digital Inputs (Int/Ext Supply)
								P													8 Double Pole Outputs - C
																					FACEPLATE
									M												Basic: Membrane Keypad with 3 Pushbuttons
									A												Advanced: Membrane Keypad with 10 Pushbuttons
																					CURRENT PROTECTION
											S										Basic: 87T, 50/87, 50P, 50N, 50G, 51P, 51N, 51G, Transformer Overload
											M										Standard: Basic, 50_2, 51_2, RGF
											A										Advanced: Standard, 67P, 67G, 67N
																					VOLTAGE MONITORING AND PROTECTION
												N									None

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 869 MOTOR PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
869	E	P1	P1	P1	H	N	N	A	N	N	M	S	S	B	B	SE		N	N	B	N
Example 869																					
APPLICATION																					
	E																				
Standard																					
PHASE CURRENTS - SLOT J																					
		P1																			
1A three-phase current inputs (J1)																					
		P5																			
5A three-phase current inputs (J1)																					
PHASE CURRENTS - SLOT K																					
			NN																		
No phase current inputs (Slot K)																					
			P1																		
1A three-phase current inputs (K1)																					
			P5																		
5A three-phase current inputs (K1)																					
			C5																		
5A three phase current inputs (K1), SM Field Inputs (K2) with DcmA Field Current Input																					
			D5																		
5A three phase current inputs (K1), SM Field Inputs (K2) with VDC Field Current Input																					
GROUND CURRENTS																					
				G1																	
1A ground input (1 per phase current bank)																					
				G5																	
5A ground input (1 per phase current bank)																					
				S1																	
1A ground input (J1), 1A sensitive ground input (K1)																					
				B1																	
1A ground input (J1), 50:0.025A ground input (K1)																					
				B5																	
5A ground input (J1), 50:0.025A ground input (K1)																					
				0B																	
50:0.025A ground input (J1)																					
				5B																	
50:0.025A ground input (J1), 5A ground input (K1)																					
POWER SUPPLY																					
				H																	
125 to 250 V DC/100 to 240 V AC																					
				R																	
125 to 250 V DC/100 to 240 V AC - Extended Ride-through																					
				L																	
24 to 48 VDC																					
SLOT B																					
					N																
None																					
					R																
6 X RTDs (Pt100, Ni100, Ni120)																					
					S																
6 X RTDs (Pt100, Ni100, Ni120, Cu10)																					
					C																
15 Digital Inputs (24 V DC, Ext Supply)																					
SLOT C																					
						N															
None																					
						R															
6 X RTDs (Pt100, Ni100, Ni120)																					
						S															
6 X RTDs (Pt100, Ni100, Ni120, Cu10)																					
						C															
15 Digital Inputs (24 V DC, Ext Supply)																					
SLOT F																					

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 869 MOTOR PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
														T							
																					Advanced HMI: Standard, Tab Pushbuttons, Annunciator Panel, Configurable SLDs with Bay Control
																					MONITORING
															B						Basic: Motor Health Report, Motor Start Report, Motor Learned Data, Data Logger, Breaker Coil Monitoring, Breaker Arcing, Harmonics, THD Demand
															C						Standard: Basic, Breaker Health Report, Broken Rotor Bar**
															A						Advanced: Standard, Harmonic Detection, Stator Inter-Turn Fault
															E						Extended: Advanced, ESA Functions
																					COMMUNICATIONS
															S	E					Standard: Front USB, 1x Rear RS485 (Modbus RTU/TCP, DNP 3.0, IEC 60870-5-103), 1x Ethernet RJ45 port (Modbus TCP, DNP).
															1	E					Advanced: Standard + IEC 60870-5-104, 1588, SNTP, OPC-UA
															1	P					Advanced + PRP + HSR
															2	A					Advanced + Basic IEC 61850
															2	E					Advanced + PRP + HSR + Basic IEC 61850
															3	A					Advanced + IEC 61850
															3	E					Advanced + PRP + HSR + IEC 61850
															4	E					Advanced + 1x additional RS485 Port + HSR + PRP + IEC 61850
																					ADVANCED COMMUNICATIONS CONNECTOR
																	N				None, no additional communication ports. RJ45 Port 1 Enabled, RJ45 Port 2 disabled
																	S				ST, Multi-mode 1310nm - With 1E to 3E and 3F, the user gets 2x Fiber ST Ports. RJ45 ports 1 and 2 are disabled. With 4E and 4F, user gets 2x Fiber ST ports and 2xRJ45 Ports
																	C				RJ45, Copper 10/100M - With 1E to 3E and 3F, the user gets 2x RJ45 ports. RJ45 ports 1 and 2 are disabled. With 4E and 4F, user gets 4x RJ45 Ports
																	T				1x additional RS485 Port and 1x additional RJ45 Copper 10/100M port
																					WIRELESS COMMUNICATION
																		N			None
																		W			WiFi 802.11
																					SECURITY
																			B		Basic
																			A		Advanced: CyberSentry Level 1
																					FW OPTION
																			N		FW version 3.xx or earlier
																			4		FW version 4.xx

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 889 GENERATOR PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
889	E	PS	PS	G5	H	N	N	A	L	A	G	A	P	F	A	2	E	S	N	A	N
																					Example 889
																					APPLICATION
																					Standard
																					PHASE CURRENTS - SLOT J
																					1A three-phase current inputs (J1), voltage inputs (J2)
																					5A three-phase current inputs (J1), voltage inputs (J2)
																					PHASE CURRENTS - SLOT K
																					1A three-phase current inputs (K1), voltage inputs (K2)
																					5A three-phase current inputs (K1), voltage inputs (K2)
																					1A three-phase current inputs (K1), 1A three-phase current inputs (K2)
																					5A three-phase current inputs (K1), 5A three-phase current inputs (K2)
																					GROUND CURRENTS
																					1A ground input (1 per phase current bank)
																					5A ground input (1 per phase current bank)
																					1A ground input (J1), 1A sensitive ground input (K1)
																					5A ground input (J1), 5A sensitive ground input (K1)
																					1A ground input (J1), 50:0.025 ground input (K1)
																					5A ground input (J1), 50:0.025 ground input (K1)
																					POWER SUPPLY
																					125 to 250 V DC/100 to 240 V AC
																					125 to 250 V DC/100 to 240 V AC - Extended Ride-through
																					24 to 48 VDC
																					SLOT B
																					None
																					6 X RTDs (Pt100, Ni100, Ni120)
																					6 X RTDs (Pt100, Ni100, Ni120, Cu10)
																					15 Digital Inputs (24 V DC, Ext Supply)
																					SLOT C
																					None
																					6 X RTDs (Pt100, Ni100, Ni120)
																					6 X RTDs (Pt100, Ni100, Ni120, Cu10)
																					15 Digital Inputs (24 V DC, Ext Supply)
																					SLOT F
																					2 Form A (Vmon) Relays, 2 Form C Relays, 1 Critical Failure Relay, 7 Digital Inputs (Int/Ext Supply)

Declaration number

850-850R-869-845-889-MRK-DOC-C-03112K26

Additional Information

ORDER CODE FOR 889 GENERATOR PROTECTION SYSTEM																					
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
								M													
																					4 SSR (High-Speed, High-Break), 1 Critical Failure Relay, 7 Digital Inputs (Int/Ext Supply)
																					SLOT G
								N													None
								A													2 Form A Relays, 3 Form C Relays, 7 Digital Inputs (Int/Ext Supply)
								B													9 Form A Relays, 10 Digital Inputs
								D													8 Double Pole Outputs
								T													4 SSR (High-Speed, High-Break), 2 Form A Relay, 4 Arc Flash Inputs (Point and Loop Sensors)
								K													5 Form A Relays, 1 Form C Relay, 10 Digital Inputs
								L													7 DcmA O/P, 4 DcmA I/P, 1 RTD
								M													4 SSR (High-Speed, High-Break), 1 Form C Relay, 7 Digital Inputs (Int/Ext Supply)
								P													8 Double Pole Outputs - C
																					SLOT H
								N													None
								A													2 Form A Relays, 3 Form C Relays, 7 Digital Inputs (Int/Ext Supply)
								B													9 Form A Relays, 10 Digital Inputs
								D													8 Double Pole Outputs
								F													10 Digital Inputs, 4 Arc Flash Inputs (Point Sensors)
								T													4 SSR (High-Speed, High-Break), 2 Form A Relay, 4 Arc Flash Inputs (Point and Loop Sensors)
								K													5 Form A Relays, 1 Form C Relay, 10 Digital Inputs
								M													4 SSR (High-Speed, High-Break), 1 Form C Relay, 7 Digital Inputs (Int/Ext Supply)
								P													8 Double Pole Outputs - C
																					FACEPLATE
								M													Basic: Membrane Keypad with 3 Pushbuttons
								A													Advanced: Membrane Keypad with 10 Pushbuttons
																					CURRENT PROTECTION
											M										Standard: 38 (RTD) (1), 39 (Anlp) (1), 46 (Gen. Unbl.) (1), 50/27 (1), 50OFL (1), 50OL (1), 50P (2/CT bank), 50N (1/CT bank), 50G (2), 50SG (1), 50_2 (1/CT bank), 51V (2), 51N (2), 51G (2), 51SG (1), 67N (1), 67G (1), 67SG (1), 76 (Anlp) (1), 87G (1)
											A										Advanced: Standard, 67P (1), 67_2 (1), 87GD (RGF) (1), 87O, Load Encroachment
																					VOLTAGE MONITORING AND PROTECTION
												S									Standard: 24 (2), 25 (1), 27TN (1), 27P (2), 27X (2), 32 (2), 40Q (1), 40 (1), 47 (1), 59X (2), 81O (2), 81U (4)
												P									Advanced: Standard, 21P, 55, 59P (2), 59N (1), 59_2 (1), 64TN (100% stator ground) (1), 78 (1), 81R (2),
																					CONTROL

ORDER CODE FOR 889 GENERATOR PROTECTION SYSTEM																						
Pos.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
														F								Standard: Setpoint Group Control, Virtual Inputs Control, Trip Bus, FlexLogic, VTFF (1), 50BF (1), Sequential Shutdown, Field Breaker Discrepancy, Breaker Control, Digital Elements
														T								Advanced HMI: Standard, Tab Pushbuttons, Annunciator Panel, Configurable SLDs with Bay Control
																						MONITORING
														B								Basic: Breaker Coil and Arcing Monitoring, Demand, Digital Counters, Running Hours
														C								Standard: Basic, Breaker Health Report, 49TOL (Thermal Overload) (1)
														A								Advanced: Standard, 81A, Harmonic Detection
														E								Extended: Advanced, ESA Functions
																						COMMUNICATIONS
														S	E							Standard: Front USB, 1x Rear RS485 (Modbus RTU/TCP, DNP 3.0, IEC 60870-5-103), 1x Ethernet RJ45 port (Modbus TCP, DNP).
														1	E							Advanced: Standard + IEC 60870-5-104, 1588, SNTP, OPC-UA
														1	P							Advanced + PRP + HSR
														2	A							Advanced + Basic IEC 61850
														2	E							Advanced + PRP + HSR + Basic IEC 61850
														3	A							Advanced + IEC 61850
														3	E							Advanced + PRP + HSR + IEC 61850
														4	E							Advanced + 1x additional RS485 Port + HSR + PRP + IEC 61850
																						ADVANCED COMMUNICATIONS CONNECTOR
																	N					None, no additional communication ports. RJ45 Port 1 Enabled, RJ45 Port 2 disabled
																	S					ST, Multi-mode 1310nm - With 1E to 3E and 3F, the user gets 2x Fiber ST Ports. RJ45 ports 1 and 2 are disabled. With 4E and 4F, user gets 2x Fiber ST ports and 2xRJ45 Ports
																	C					RJ45, Copper 10/100M - With 1E to 3E and 3F, the user gets 2x RJ45 ports. RJ45 ports 1 and 2 are disabled. With 4E and 4F, user gets 4x RJ45 Ports
																						WIRELESS COMMUNICATION:
																		N				None
																			W			WiFi 802.11
																						SECURITY
																				B		Basic
																				A		Advanced: CyberSentry Level 1
																						FW OPTION