

Figure 1-6: 850-D Distribution Feeder Order Codes

Application	850	-	D	**	**	**	*	*	*	*	*	*	*	*	D	P	T	*	*	*	*	N	N	850-D Feeder Protection System
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) with 4 voltage inputs (K2)
	P5																							5A three-phase current inputs (K1) with 4 voltage inputs (K2)
Ground Currents	G1																							1A ground input
	G5																							5A ground input
	S1																							1A ground input, 1A sensitive ground input
	S5																							5A ground input, 5A sensitive ground input
	Y5																							1A ground input (J1), 5A sensitive ground input (K1)
	D1																							1A ground input, 1A polarizing current input
	D5																							5A ground input, 5A polarizing current input
Power Supply	H																							110 to 250 V DC/110 to 230 V AC
	R																							110 to 250 V DC/110 to 230 V AC - Extended Ride-through
	L																							24 to 48 V DC
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)
	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
	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)
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
	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)
Faceplate	M																							Basic: Membrane Keypad with 3 Pushbuttons
	G																							Standard: Rugged Keypad with 3 Pushbuttons
	A																							Advanced: Membrane Front Panel with 10 Pushbuttons
Current Protection															D									Standard (850-D): 37 (3), 50P (4/CT bank), 50N (4/CT bank), 50G (4/CT bank), 51P (4), 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)
Voltage Monitoring and Protection																								Advanced (850-D): 27P (4/VT bank), 27X (2/VT bank), 59P (4), 59N (4), 59X (2/VT bank), 810 (6/VT bank), 81U (6/VT bank), 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																								Advanced HMI (850-D): Setpoint Group Control, Virtual Inputs, Trip Bus (6), Breaker Control (1/Bkr), VFFF (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																								Advanced (850-D): Breaker Coil Monitoring (1/Bkr), Breaker Arcing (1/Bkr), THD, Current Demand (1/CT bank), Digital Counters (16), Data Logger, Advanced Breaker Health (1/Bkr), Harmonic Detection (6), TGFD (1/Bkr)
Communications <sup>1</sup>																								Standard: Front USB, 1 x Rear RS485 (Modbus RTU, DNP 3.0, IEC 60870-5-103), 1 x Ethernet (Modbus TCP, DNP)
	1																							Advanced: Front USB, 1 x Rear RS485, 2 x Ethernet Fiber, Modbus RTU/TCP, DNP 3.0, IEC 60870-5-103/104, 1588, SNTP, OPC-UA
	1																							Advanced, PRP
	3																							Advanced, Extended IEC 61850
	3																							Advanced, PRP, Extended IEC 61850
Advanced Communications Connector																								None
	S																							ST, Multi-mode 1310 nm
	C																							RJ45, Copper 10/100 M
Wireless Communication																								None
	W																							WiFi 802.11
Security																								Basic
	A																							Advanced: CyberSentry Level 1
Future Option																								Not Available

1. Communications options 2A and 2E have been discontinued.