

For Operation in the Control Cabinet

ET 200S Motor Starters and Safety Motor Starters

ET 200S Failsafe motor starters

More information

F-DS1e-x direct-on-line starter/F-RS1e-x reversing starter

		Direct-on-line starters	Reversing starters	
Dimensions				
Dimensions (W x H x D)	mm	65 x 290 x 150 (incl. terminal module)	130 x 290 x 150 (incl. terminal module)	
Height with PE/N module	mm	332		
Depth with 2DI control module (not safe)	mm	173		
Module-specific specifications				
Type of coordination		Type 2 up to $I_g \leq 16$ A at 400 V		
Internal power supply		U1 (from PM-D F/PM-DF X1)		
Maximum achievable safety class		SIL 3 Shutdown class 6 (AK6) Category 4		
• Acc. to IEC 61508 • Acc. to DIN VDE 0801 • Acc. to ENh EN 954-1				
Safety characteristics				
Low demand	PFD _{AVG} (10a)			
• Test interval 3 months • Test interval 6 months		3.5 x 10 ⁻⁵ 8.0 x 10 ⁻⁵		
High demand/continuous mode	PFH			
• Test interval 3 months • Test interval 6 months	1/h 1/h	8.1 x 10 ⁻¹⁰ 1.8 x 10 ⁻⁹		
Proof-test interval	Years	10		
Voltages, currents, potentials				
Switching capacity		Up to 7.5 kW at 400 V AC in three setting ranges:		
	A	0.3 ... 3		
	A	2.4 ... 8		
	A	2.4 ... 16		
Status, alarms, diagnostics				
Status display		SF, DEVICE and C-STAT, SG1 ... SG6		
Diagnostics functions				
Group fault display		Red LED (SF)		
Diagnostics information can be read out		Available		
Control circuit				
Rated operational voltage for electronics U_1		V	DC 24 (DC 20.4 ... 28.8)	DC 24 (DC 21.6 ... 26.4)
Reverse polarity protection for electronics U_1		Yes		
Rated operational voltage for contactor U_2		V	24 DC (20.4 ... 28.8 V DC)	
Reverse polarity protection for contactor U_2		Yes		
Power consumption				
• From electronics supply U_1	mA	Approx. 40		Approx. 100
• From contactor supply U_2				
- Pickup - Hold	A mA	1.7 (for 80 ms) max. 350		-- --
• From SG1 up to 6				
- Pickup - Hold	mA mA	250 (for 200 ms) max. 55		
• Test function of the shunt release/starter protector (50 ms) from U_1	A	Approx. 1.5		
• From the backplane bus	mA	Approx. 20		
Main circuit				
Rated operational voltage U_e				
• Acc. to DIN VDE 0106, Part 1014, IEC 60947-1, EN 60947-1	V	500 AC		
• Protective separation between main and auxiliary circuits	V	400		
• UL, CSA	V	600 AC		
Rated insulation voltage U_i		V	500 AC	
Rated impulse withstand voltage U_{imp}		kV	6	
Rated frequency		Hz	50/60	