

ET 200pro Motor Starters

Standard and High-Feature

Technical specifications

		Standard motor starters DSe, RSe	High-Feature motor starters	
			DSe, RSe	sDSSSte, sDSte, sRSSSte, sRSte
General data				
Motor starters that can be connected to ET 200pro or modules with width of 110 mm		Max. 8		
Mounting dimensions (W x H x D) • Direct-on-line starter and reversing starter	mm	110 x 230 x 150		110 x 230 x 160
Permissible ambient temperature • During operation • During storage	°C °C	-25 ... +55, from +40 with derating -40 ... +70		
Permissible mounting positions		Vertical, horizontal		
Vibration resistance acc. to IEC 60068, Part 2-6		2 g		
Shock resistance to IEC 60068 Part 2-27		Half-sine 15 g/11 ms		
Power consumption • From auxiliary circuit L+/M (U1) • From auxiliary circuit A1/A2 (U2)	V DC mA mA	24 Approx. 40 Approx. 200		
Rated operational current for power bus I _e		A 25		
Rated operational voltage U _e • Approval acc. to EN 60947-1, Appendix N • Approval acc. to CSA and UL	V AC V AC V AC	400 up to 200 up to 600		up to 400 up to 480
Approval to DIN VDE 0106, Part 101		V up to 500		up to 480
CSA and UL approval		V up to 600		up to 480
Conductor cross-sections • Incoming energy supply	mm ²	Max. 6 x 4		
Degree of protection		IP65		
Touch protection		Finger-safe		
Degree of pollution		3, IEC 60664 (IEC 61131)		
Rated impulse withstand voltage U _{imp}		kV 6		
Rated insulation voltage U _i		V 400		
Rated operational current for starter I _e • AC-1/2/3 at 40 °C - at 400 V - at 500 V • AC-4 at 40 °C - at 400 V	A A A	0.15 ... 2.0/1.5 ... 12.0 0.15 ... 2.0/1.5 ... 9.0 0.15 ... 2.0/1.5 ... 4.0		0.15 ... 2.0/1.5 ... 12.0 ¹⁾
Rated short-circuit breaking capacity		kA 100 at 400 V		
Type of coordination to IEC 60947-4-1		1		
Power of induction motors at 400 V		kW Max. 5.5		Max. 5.5/4 ²⁾
Utilization categories		AC-1, AC-2, AC-3, AC-4		AC-53a ³⁾ (max. 9 A with deactivated soft star function up to CLASS 10)
Safe isolation between main and auxiliary circuits		V 400, acc. to EN 60947-1, Appendix N		
Endurance of contactor • Mechanical • Electrical		30 million operating cycles Up to 10 million operating cycles; dependent on the current loading (see Manual)		-- --
Reliable switching frequency		Dependent on the current loading, motor starting time and relative ON period (see Manual)		
Operating times at 0.85 ... 1.1 x U _e • Closing delay • Opening delay	ms ms	11 ... 50 5 ... 45		-- --

1) **Caution!**
With deactivated soft starter control function the the permissible rated operational current is reduced to 9 A up to CLASS 10.

2) With parameterization as electronic starter max. 4 kW.

3) 8-hour operation.

		Standard motor starters DSe, RSe	High-Feature motor starters	
			DSe, RSe	sDSSSte, sDSte, sRSSSte, sRSte
Device functions				
Parameterizable rated operational current		Yes		
Parameterizable current limit values		No	Yes, 2 limit values	
Parameterizable response in case of current limit violation		No	Yes	
Zero current monitoring		Yes		
Parameterizable response in case of zero current violation		Yes		
Parameterizable current unbalance limit		No, fixed limit value (30 % x I_e)	Yes, 30 % ... 60 % x I_e	
Parameterizable response in case of unbalance limit violation		Yes		
Motor blocking monitoring		No	Yes	
Parameterizable blocking current limit		No	Yes, 150 % ... 1000 % x I_e	
Parameterizable blocking time limit	s	No	Yes, 1 ... 5	
Current value transmission		Yes		
Group warning diagnostics		No	Yes, parameterizable	
Group diagnostics		Yes, parameterizable		
Emergency start		Yes		
Digital inputs		No	Yes, 4 inputs	
• Parameterizable input signal		No	Yes, latching/ non-latching	
• Parameterizable input level		No	Yes, NC contacts/NO contacts	
• Parameterizable input signal delay	ms	No	Yes, 10 ... 80	
• Parameterizable input signal extension	ms	No	Yes, 0 ... 200	
• Parameterizable input control actions		No	Yes, 12 different actions	
400 V brake output		Yes, ordering option		
Parameterizable brake enabling delay	s	Yes, -2.5 ... 2.5		
Parameterizable holding time of the brake during stopping	s	Yes, 0 ... 25		
Parameterizable start-up type		No		Yes
Parameterizable ramp-down time		No		Yes
Parameterizable start voltage		No		Yes
Parameterizable stop voltage		No		Yes
Local device interface		Yes		
Firmware update		Yes, by trained personnel		
Thermal motor model		Yes		
Parameterizable trip class		No, CLASS 10 fixed	Yes, CLASS 5, 10, 15, 20	
Parameterizable response in case of overload of thermal motor model		No	Yes, 3 possible states	
Advance warning limit for motor heating	%	No	Yes, parameterizable 0 ... 95	
Advance warning limit time-related trip reserve	s	No	Yes, parameterizable 0 ... 500	
Parameterizable recovery time	min	No	Yes, 1 ... 30	
Parameterizable zero voltage safety		No, permanently integrated	Yes	
Reversing start function		Yes, ordering option		
Parameterizable interlock time for reversing starters		No, 150 ms fixed	Yes, 0 ... 60 s	
Integrated logbook functions		Yes, 3 device logbooks		
Integrated statistics data memory		Yes		
Parameterizable response in case of CPU / master stop		Yes		
Device indications				
• Group fault		SF LED (red)		
• Switching state		STATE LED (red, yellow, green)		
• Device status		DEVICE LED (red, yellow, green)		
• Digital inputs		No	IN 1 ... IN 4, LED	