

D-O-L starter for ET 200SP Direct-on-line-starter Expandable Setting
range 0.9...3A AC-3, 1.1 kW / 400 V Hybrid starter



Figure similar

product brand name	SIMATIC
Product designation	Motor starters
Design of the product	direct starter

General technical data:

Product function	Direct starter
• on-site operation	Yes
• Intrinsic device protection	Yes
• Adjustable current limitation	Yes
• Remote firmware update	Yes
• for power supply Reverse polarity protection	Yes
Insulation voltage	
• rated value	500 V
Degree of pollution	2
Overvoltage category	III
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• between main and auxiliary circuit	500 V

Protection class IP	IP20
Shock resistance	6g / 11 ms
Vibration resistance	15 mm to 6 Hz; 2g to 500 Hz
Mechanical service life (switching cycles)	
• of the main contacts typical	30 000 000
Type of assignment	1
Usage category	
• acc. to IEC 60947-4-2	AC53a: 3A: (8-0,7: 70-32)
• acc. to IEC 60947-4-3	AC51: 3A: (1,2-10: 50-360)
Equipment marking	
• acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	Q
• acc. to DIN EN 61346-2	A
Product function	
• direct start	Yes
• reverse starting	No
Product function Short circuit protection	Yes
Design of short-circuit protection	fuse
Trip class	CLASS 5 and 10 adjustable
Maximum short-circuit current breaking capacity (Icu)	
• at 400 V rated value	55 kA
• at 500 V rated value	55 kA
• at 500 V acc. to UL 60947 rated value	100 kA

Electromagnetic compatibility:

EMC emitted interference	
• acc. to IEC 60947-1	class A
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	8 kV air discharge
Conducted HF-interference emissions acc. to CISPR11	Class A for industrial environment
Field-bound HF-interference emission acc. to CISPR11	Class A for industrial environment

Inputs/ Outputs:

Number of digital inputs	4
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Main circuit:

Number of poles for main current circuit	3
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Design of the switching contact	Hybrid
Adjustable pick-up value current of the current-dependent overload release	0.9 ... 3 A
Minimum load [% of IM]	20 %
Type of the motor protection	solid-state
Operating voltage • rated value	48 ... 500 V
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
Operating range relative to the operating voltage at AC • at 50 Hz	48 ... 500 V
Operating current • at AC at 400 V rated value	3 A
Operating power • for three-phase motors at 400 V at 50 Hz minimum • for three-phase motors at 400 V at 50 Hz maximum	0.21 kW 1.1 kW

Supply voltage:

Type of voltage of the supply voltage	DC
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Control circuit/ Control:

Type of voltage of the control supply voltage	DC
Control supply voltage 1 • at DC rated value	20.4 ... 28.8 V
Control current • at DC in standby mode • at DC during operation • at DC when switching on	85 mA 140 mA 230 mA
Switch-on delay time	20 ... 25 ms
Off-delay time	20 ... 35 ms
Power loss [W] in auxiliary and control circuit • in switching state OFF — with bypass circuit — without bypass circuit • in switching state ON — with bypass circuit — without bypass circuit	1.6 W 0 W 2.7 W 0 W

Installation/ mounting/ dimensions:

Mounting type	pluggable in BaseUnit
Height	142 mm
Width	30 mm

Depth	150 mm
Required spacing	
• with side-by-side mounting	
— upwards	50 mm
— downwards	50 mm

Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity during operation	10 ... 95 %
Air pressure	
• acc. to SN 31205	900 ... 1 060 hPa

Communication/ Protocol:

Product function Bus communication	Yes
Protocol	
• is supported PROFIBUS DP protocol	Yes
• is supported PROFINET protocol	Yes
Product function	
• supports PROFlenergy measured values	Yes
• supports PROFlenergy shutdown	Yes

Connections/ Terminals:

Type of electrical connection	
• for main energy infeed	Plug contact to Base Unit
• for load-side outgoing feeder	Plug contact to Base Unit
• for supply voltage line-side	Plug contact to Base Unit
Wire length for motor unshielded maximum	200 m





UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	3 A
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	0.1 hp
— at 230 V rated value	0.16 hp
• for three-phase AC motor	
— at 200/208 V rated value	0.5 hp
— at 220/230 V rated value	0.5 hp
— at 460/480 V rated value	1.5 hp
Operating voltage	

- at AC at 60 Hz acc. to CSA and UL rated value

480 V

Certificates/approvals

General Product Approval			Declaration of Conformity	Test Certificates	other
				Typprüfbescheinigung/Werkszeugnis	Bestätigungen
CCC	CSA	UL	EG-Konf.		

other

[PROFINET-Zertifizierung](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK13080AC000CP0>

Cax online generator

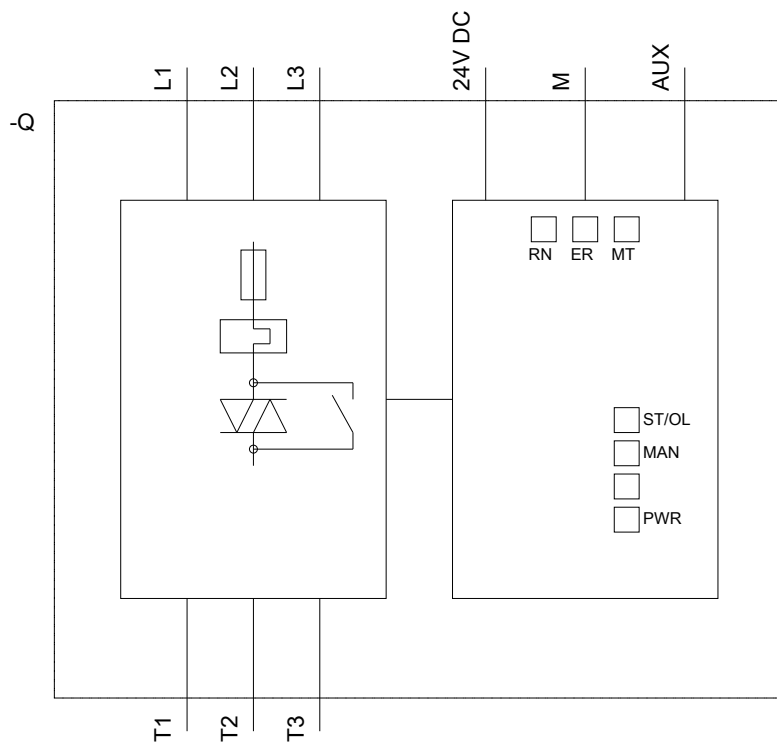
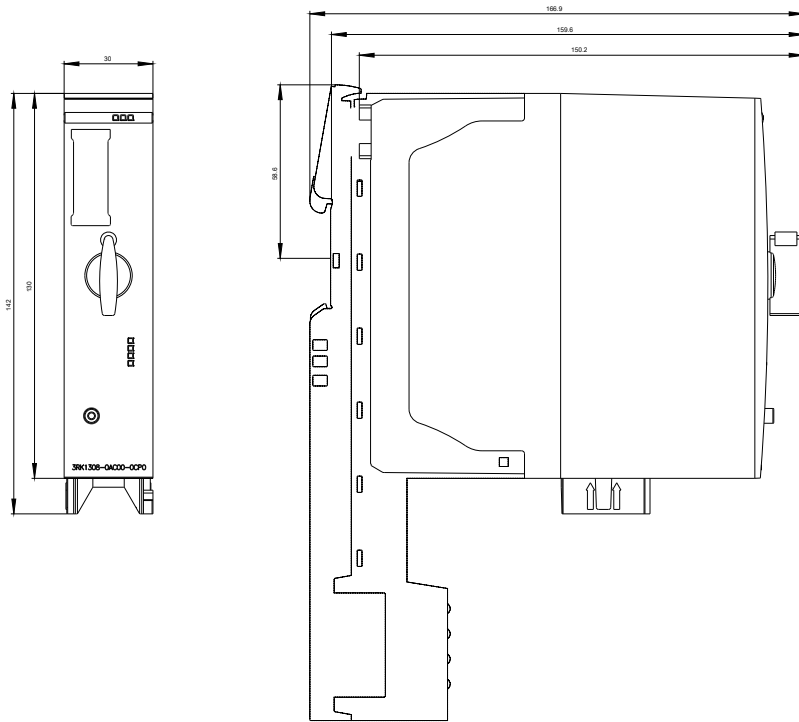
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK13080AC000CP0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK13080AC000CP0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK13080AC000CP0&lang=en



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