Reversing starter Electronic switching Electronic overload protection up to 4 kW / 400 V; 2.8 A to 9 A High-Feature Option: 3DI/LC module PROFlenergy



Product brand name	SIMATIC
Product category	Motor starter
Product designation	Reversing starter
Product type designation	ET 200SP

General technical data		
Equipment variant acc. to IEC 60947-4-2	3	
Product function	Reversing starter	
 on-site operation 	Yes	
 Intrinsic device protection 	Yes	
 Remote firmware update 	Yes	
• for power supply Reverse polarity protection	Yes	
Power loss [W] for rated value of the current		
 at AC in hot operating state per pole 	1.7 W	
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		
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: 9A: (8-0,7: 70-32)		
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	Q		
Reference code acc. to DIN EN 61346-2	Α		
Product function			
• direct start	Yes		
• reverse starting	Yes		
Product component Motor brake output	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		
Maximum short-circuit current breaking capacity (Icu)			
in the IT network			
● at 400 V rated value	55 kA		
• at 500 V rated value	55 kA		
Electromagnetic compatibility			
EMC emitted interference			
• acc. to IEC 60947-1	class A		
EMI immunity 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		
 due to high-frequency radiation acc. to IEC 61000-4-6 	Class A		
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		
Safety related data			
MTBF	46 y		
Safe state	Load circuit open		
Protection against electrical shock	finger-safe		
Main circuit			
Number of poles for main current circuit	3		
Design of the switching contact	Hybrid		
Adjustable pick-up value current of the current- dependent overload release	2.8 9 A		
Minimum load [%]	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		
Relative symmetrical tolerance of the operating frequency	5 %		
Relative positive tolerance of the operating frequency	5 %		
Relative negative tolerance of the operating frequency	5 %		
Operating range relative to the operating voltage at			
AC			
● at 50 Hz	48 500 V		
Operating current			
● at AC at 400 V rated value	9 A		
Ampacity when starting maximum	90 A		
Inputs/ Outputs			
Number of digital inputs	4		
• Note	4 via 3DI/LC module		
Supply voltage			
Type of voltage of the supply voltage	DC		
Supply voltage 1 at DC rated value			
• minimum permissible	20.4 V		
maximum permissible	28.8 V		
Supply voltage at DC rated value	24 V		
Consumed current for rated value of supply voltage			
• in standby mode	85 mA		
during operation	140 mA		
when switching on	230 mA		
Power loss [W] for rated value of supply voltage			

in switching state OFF with bypass circuit
in switching state ON with bypass circuit
3.4 W

Response times	
Switch-on delay time	20 ms
Off-delay time	35 50 ms

nstallation/ mounting/ dimensions Mounting position	Vertical, horizontal, flat (observe derating)
• (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	4 000 m; For derating see manual		
Ambient temperature			
during operation	-25 +60 °C		
 during operation maximum 	For derating see manual		
• during storage	-40 +70 °C		
during transport	-40 +70 °C		
Environmental category during operation acc. to IEC 60721	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices)		
Relative humidity during operation	10 95 %		
Air pressure			
• acc. to SN 31205	900 1 060 hPa		

Communication/ Protocol		
Protocol is supported		
 PROFIBUS DP protocol 	Yes	
 PROFINET protocol 	Yes	
Product function Bus communication	Yes	
Protocol is supported		
AS-interface protocol	No	
Product function		
 supports PROFlenergy measured values 	Yes	
 supports PROFlenergy shutdown 	Yes	
address range memory of address range		
• of the inputs	4 byte	
• of the outputs	2 byte	

Type of electrical connection Plug contact to Base Unit • of the communication interface Connections/Terminals Type of electrical connection Pluggable module - accessory • 1 for digital input signals Type of electrical connection Plug contact to Base Unit • for main energy infeed • for load-side outgoing feeder Plug contact to Base Unit Plug contact to Base Unit • for supply voltage line-side Wire length for motor unshielded maximum 200 m UL/CSA ratings Full-load current (FLA) for three-phase AC motor 9 A • at 480 V rated value Current with locked rotor (LRA) for three-phase AC 72 A motor at 480 V rated value Yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 0.33 hp 1 hp - at 230 V rated value • for three-phase AC motor 2 hp - at 200/208 V rated value - at 220/230 V rated value 2 hp

5 hp

480 V

Certificates/approvals

Operating voltage

- at 460/480 V rated value

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

General Product Approval EMC Declaration of Conformity













Declaration of Conformity	Test Certific- ates	Marine / Shipping			other
Miscellaneous	Type Test Certificates/Test Report	ON SHIPPHO	Lloyd's Register	DNV-GL	Confirmation

other

PROFINET-Certification

Further information

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

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

Industry Mall (Online ordering system)

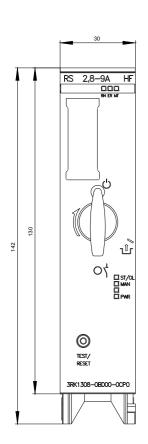
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1308-0BD00-0CP0

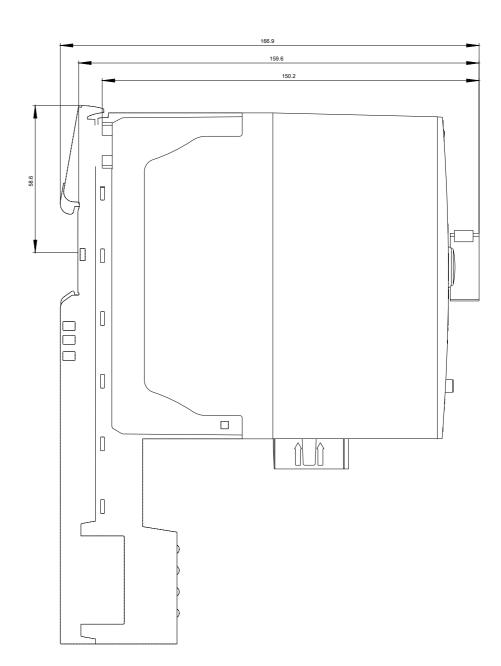
Cax online generator

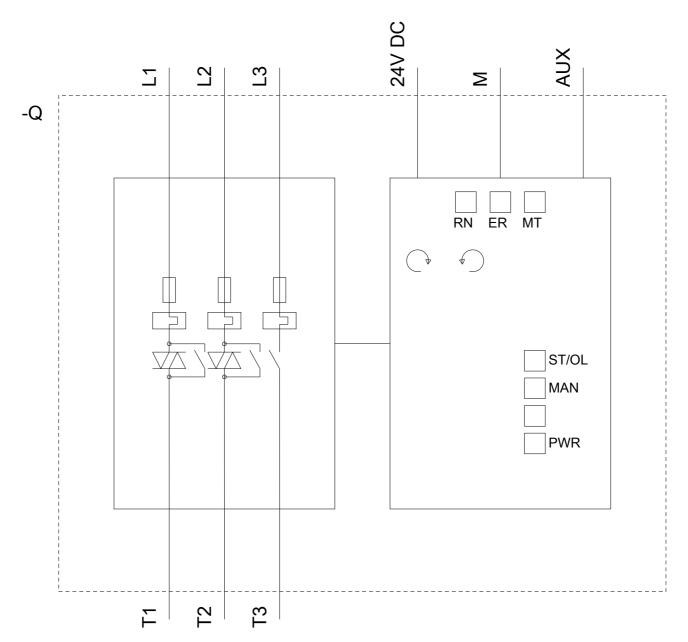
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1308-0BD00-0CP0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RK1308-0BD00-0CP0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1308-0BD00-0CP0&lang=en







last modified: 04/18/2019