



DSS1E-X for ET200S High Feature direct soft starter Setting range 2.4...16 A Electronic switching Electronic protection AC-3, up to 7.5 kW / 400 V expandable for Brake control module 2DI module Motor starter ES Circuit breaker signaling parameterizable DPV 1-capable PROFIENERGY-capable to PN

Product brand name	SIMATIC
Product designation	Motor starters
Design of the product	direct starter
Product type designation	ET 200S
General technical data	
Trip class	CLASS 10 and 10A adjustable
Product function	
• on-site operation	Yes
Power loss [W] for rated value of the current	
• at AC in hot operating state	16 W
• at AC in hot operating state per pole	5.33 W
Power loss [W] for rated value of the current without load current share typical	2.4 W
Insulation voltage	
• rated value	500 V
Degree of pollution	3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)
maximum permissible voltage for safe isolation	
• between main and auxiliary circuit	400 V
Protection class IP	IP20

Shock resistance	5g / 11 ms
Vibration resistance	2g
Type of assignment	1
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	A
Reference code acc. to DIN EN 81346-2	Q
Reference code acc. to DIN EN 61346-2	Q
Product function	
• direct start	Yes
• reverse starting	No
Product component Motor brake output	Yes
Product feature	
• brake control with 230 V AC	No
• brake control with 24 V DC	No
• brake control with 180 V DC	No
• brake control with 500 V DC	No
Product extension braking module for brake control	Yes
Product function Short circuit protection	Yes
Design of short-circuit protection	circuit-breakers
Maximum short-circuit current breaking capacity (Icu)	
• at 400 V rated value	50 kA

Electromagnetic compatibility

EMC emitted interference	
• acc. to IEC 60947-1	CISPR11, ambience A (industrial sector)
EMI immunity acc. to IEC 60947-1	corresponds to degree of severity 3, ambience A (industrial sector)
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV on voltage supply, inputs and outputs
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV (U > 24 V DC)
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV (U > 24 V DC)
Field-bound parasitic coupling acc. to IEC 61000-4-3	80 MHz ... 1 GHz 10 V/m, 1.4 GHz ... 2 Hz 3 V/m, 2 GHz ... 2.7 GHz 1 V/m

Safety related data

B10 value	
• with high demand rate acc. to SN 31920	1 000 000
Proportion of dangerous failures	
• with low demand rate acc. to SN 31920	50 %
• with high demand rate acc. to SN 31920	75 %
Failure rate [FIT]	
• with low demand rate acc. to SN 31920	100 FIT

T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe

Main circuit

Number of poles for main current circuit	3
Design of the switching contact	solid-state
Adjustable pick-up value current of the current-dependent overload release	2.4 ... 16 A
Type of the motor protection	solid-state
Operating voltage • rated value	200 ... 400 V
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
Relative positive tolerance of the operating frequency	10 %
Relative negative tolerance of the operating frequency	10 %
Operating range relative to the operating voltage at AC • at 50 Hz	200 ... 440 V
Operating current • at AC-3 — at 400 V rated value	16 A
Operating power • at AC-3 — at 400 V rated value	7.5 kW
Operating power for three-phase motors at 400 V at 50 Hz	1.1 ... 7.5 kW

Inputs/ Outputs

Product function • digital inputs parameterizable • digital outputs parameterizable	Yes No
Number of digital inputs	2
Number of sockets • for digital output signals • for digital input signals	0 0

Supply voltage

Type of voltage of the supply voltage	DC
Supply voltage 1 at DC	24 ... 24 V
Supply voltage 1 at DC rated value • minimum permissible • maximum permissible	20.4 V 28.8 V

Control circuit/ Control

Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
• rated value	20.4 ... 28.8 V
Control supply voltage 1	
• at DC rated value	20.4 ... 28.8 V
• at DC	24 ... 24 V

Installation/ mounting/ dimensions

Mounting position	vertical, horizontal
Mounting type	pluggable on terminal module
Height	290 mm
Width	65 mm
Depth	150 mm

Ambient conditions

Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
• during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity during operation	5 ... 95 %

Communication/ Protocol

Protocol is supported	
• PROFIBUS DP protocol	Yes
• PROFINET protocol	Yes
Design of the interface	
• PROFINET protocol	Yes
Product function Bus communication	Yes
Protocol is supported	
• AS-Interface protocol	No
Product function	
• supports PROFINET measured values	Yes
• supports PROFINET shutdown	Yes
address range memory of address range	
• of the inputs	2 byte
• of the outputs	2 byte
Type of electrical connection	
• of the communication interface	via backplane bus
• for communication transmission	via backplane bus

Connections/ Terminals

Type of electrical connection	
• for main current circuit	screw-type terminals

Type of electrical connection • 1 for digital input signals • 2 for digital input signals	using control module using control module
Type of electrical connection • at the manufacturer-specific device interface • for main energy infeed • for load-side outgoing feeder • for main energy transmission • for supply voltage line-side • for supply voltage transmission	plug screw-type terminals Screw-type terminals via energy bus via backplane bus via backplane bus

UL/CSA ratings

Operating voltage • at AC at 60 Hz acc. to CSA and UL rated value	480 V
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Certificates/ approvals

General Product Approval			EMC	Declaration of Conformity	
					
CCC	CSA	UL		RCM	EG-Konf.

Declaration of Conformity	Test Certificates	other
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Confirmation](#)



Profibus

Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1301-0CB20-0AB4>

Cax online generator

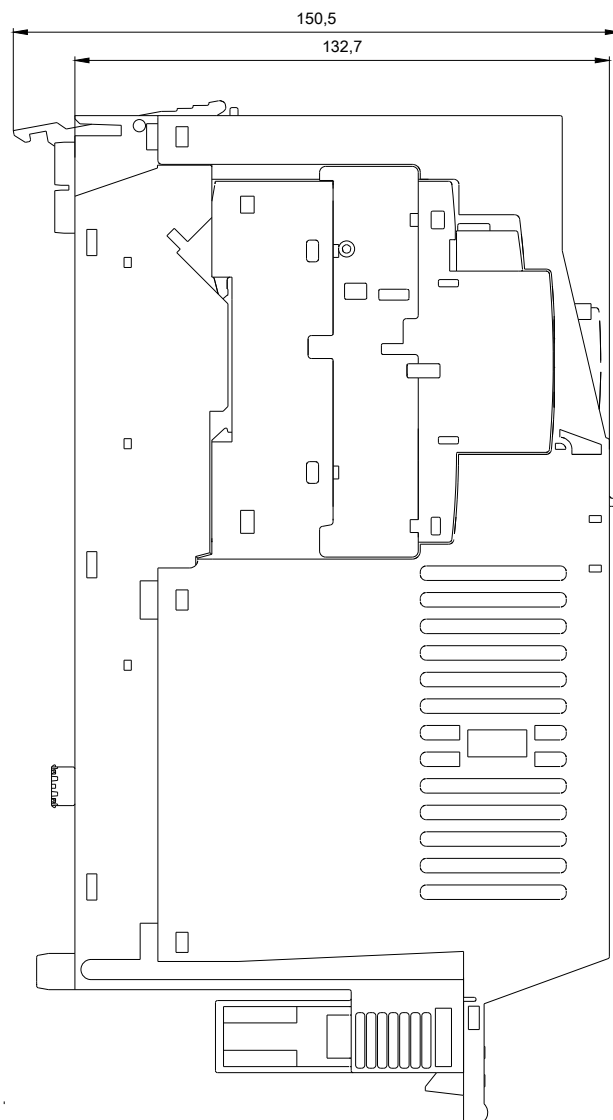
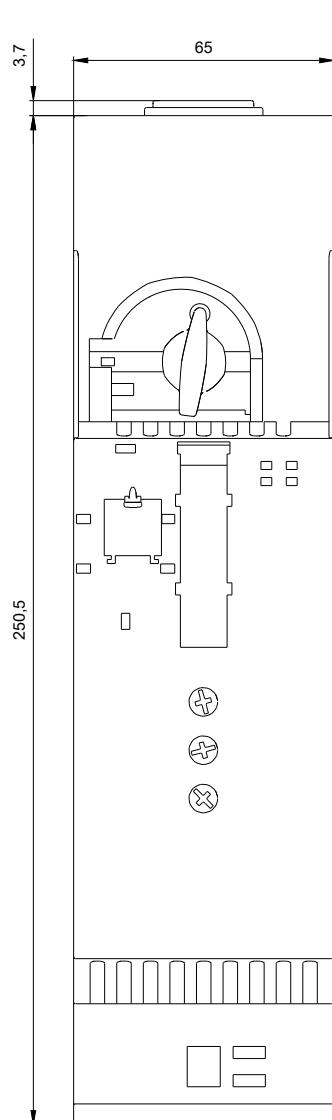
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0CB20-0AB4>

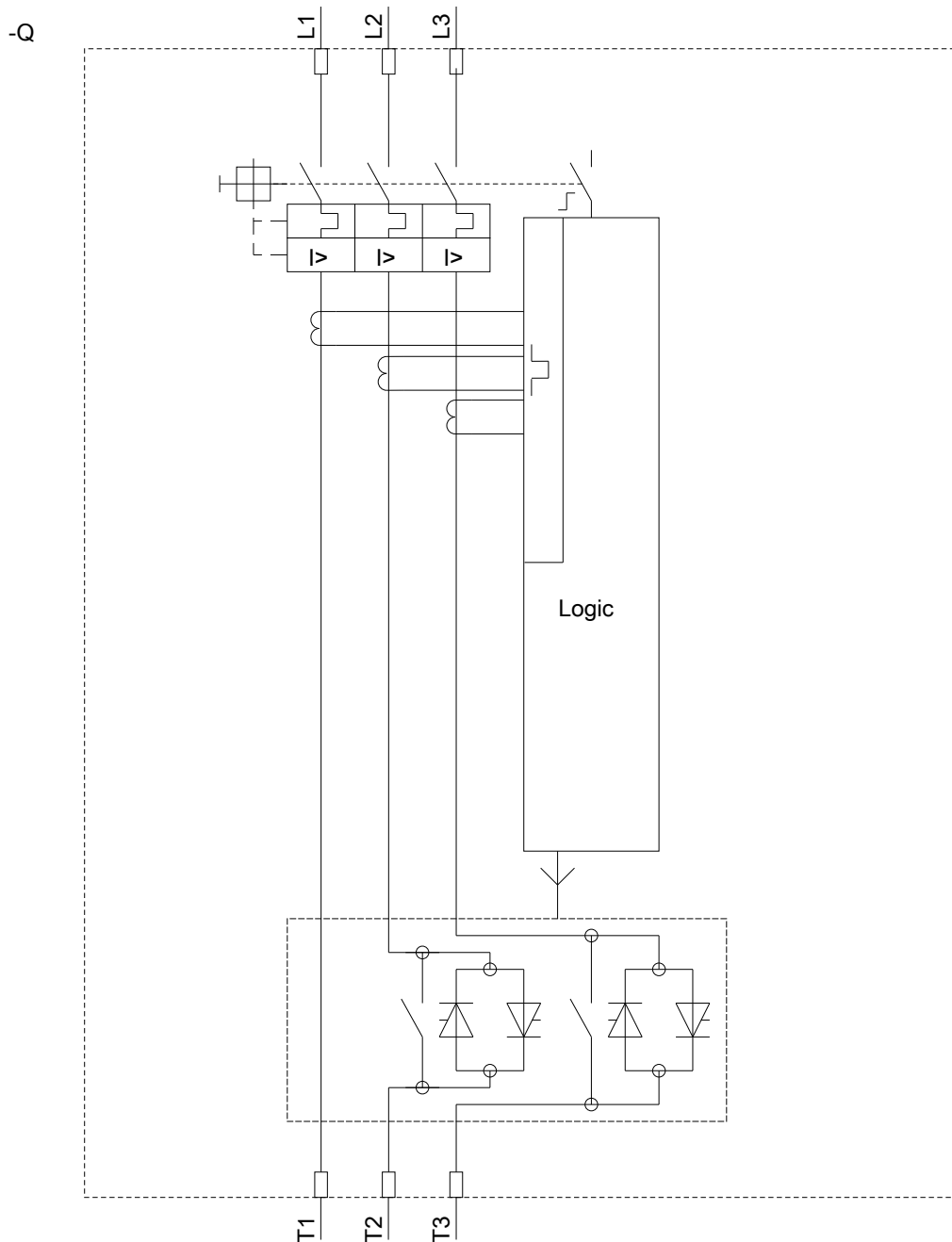
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0CB20-0AB4>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0CB20-0AB4&lang=en





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