

DSS1E-X for ET200S High Feature direct soft starter Setting range 0.3...3 A Mechanical switching Electronic protection AC-3, up to 1.1 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	
Product function	
<ul style="list-style-type: none"> on-site operation 	Yes
Power loss [W] typical	9 W
Power loss [W] for rated value of the current	
<ul style="list-style-type: none"> at AC in hot operating state 	9 W
<ul style="list-style-type: none"> at AC in hot operating state per pole 	3 W
Power loss [W] for rated value of the current without load current share typical	2.4 W
Degree of pollution	3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul style="list-style-type: none"> between main and auxiliary circuit 	400 V
Protection class IP	IP20
Shock resistance	5g / 11 ms

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
Trip class	CLASS 10 and 10A adjustable
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
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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	0.3 ... 3 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	3 A
Operating power	
• at AC-3	
— at 400 V rated value	1.1 kW

Inputs/ Outputs

Product function	
• digital inputs parameterizable	Yes
• digital outputs parameterizable	No
Number of digital inputs	2
Number of sockets	
• for digital output signals	0
• for digital input signals	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	20.4 V
• maximum permissible	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	
<ul style="list-style-type: none"> • at DC rated value 	20.4 ... 28.8 V
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • maximum 	2 000 m
Relative humidity during operation	5 ... 95 %

Communication/ Protocol

Protocol is supported	
<ul style="list-style-type: none"> • PROFIBUS DP protocol 	Yes
<ul style="list-style-type: none"> • PROFINET protocol 	Yes
Design of the interface	
<ul style="list-style-type: none"> • PROFINET protocol 	Yes
Product function Bus communication	Yes
Protocol is supported	
<ul style="list-style-type: none"> • AS-Interface protocol 	No
Product function	
<ul style="list-style-type: none"> • supports PROFIenergy measured values 	Yes
<ul style="list-style-type: none"> • supports PROFIenergy shutdown 	Yes
address range memory of address range	
<ul style="list-style-type: none"> • of the inputs 	2 byte
<ul style="list-style-type: none"> • of the outputs 	2 byte
Type of electrical connection	
<ul style="list-style-type: none"> • of the communication interface 	via backplane bus
<ul style="list-style-type: none"> • for communication transmission 	via backplane bus

Connections/ Terminals

Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	screw-type terminals
Type of electrical connection	
<ul style="list-style-type: none"> • 1 for digital input signals 	using control module
<ul style="list-style-type: none"> • 2 for digital input signals 	using control module
Type of electrical connection	
<ul style="list-style-type: none"> • at the manufacturer-specific device interface 	plug
<ul style="list-style-type: none"> • for main energy infeed 	screw-type terminals
<ul style="list-style-type: none"> • for load-side outgoing feeder 	Screw-type terminals

- for main energy transmission
- for supply voltage line-side
- for supply voltage transmission

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

Certificates/ approvals

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

Declaration of Conformity	Test Certificates	other
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=3RK1301-0AB20-0AB4>

Cax online generator

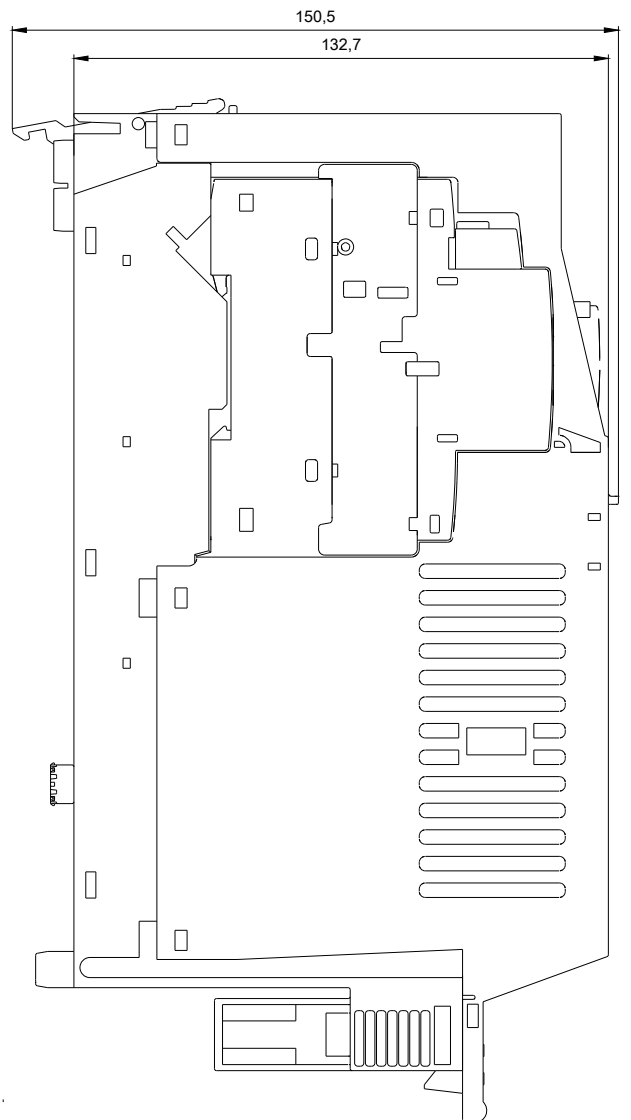
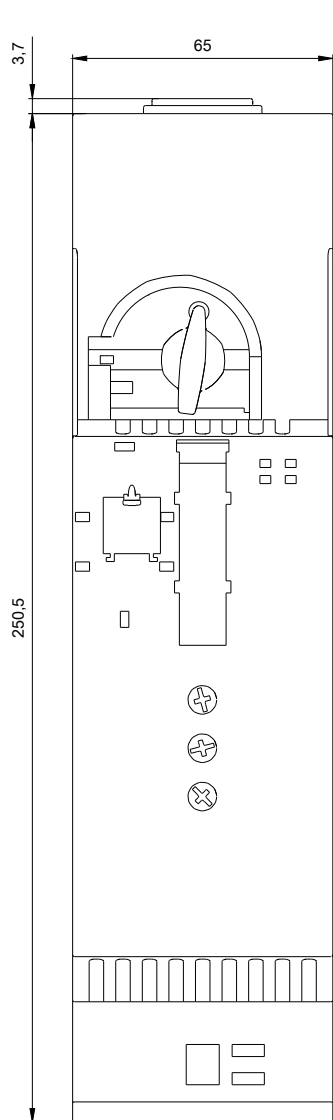
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0AB20-0AB4>

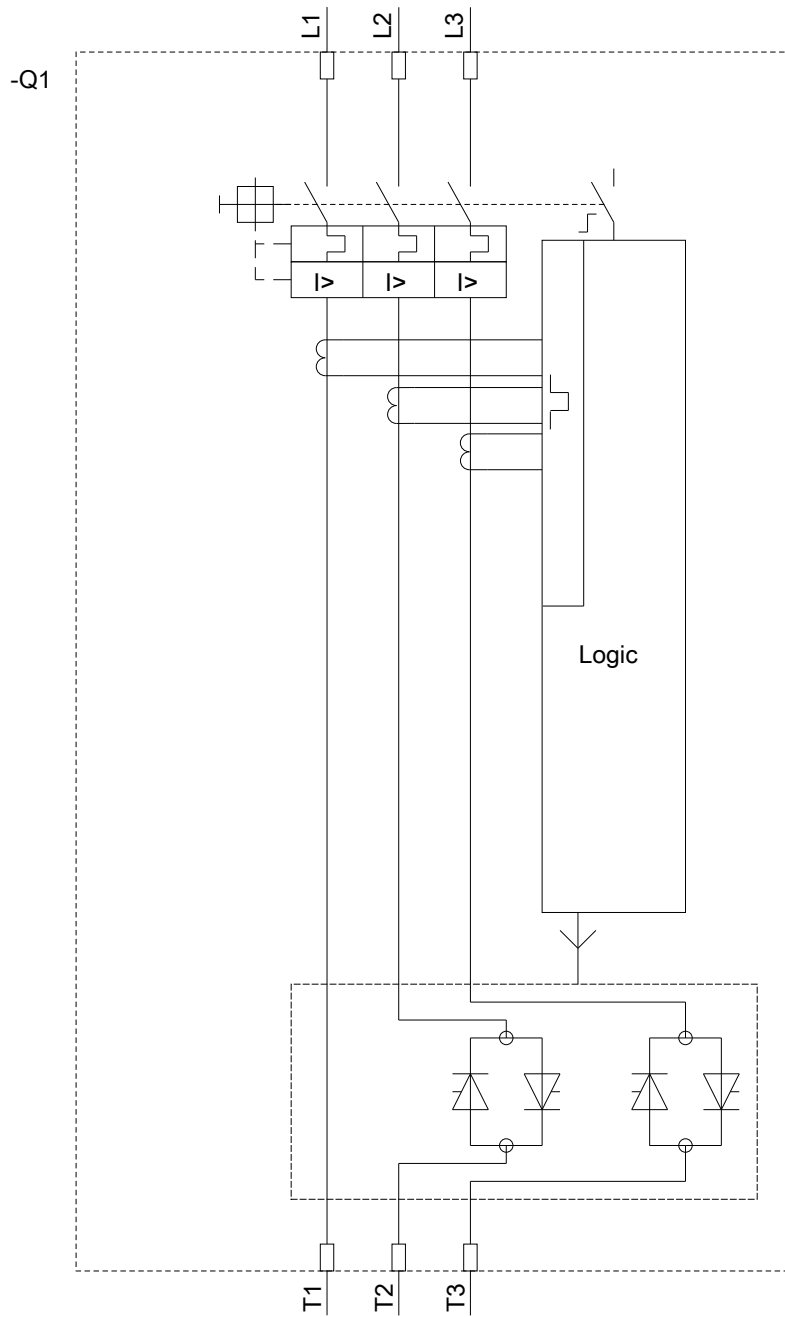
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0AB20-0AB4>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0AB20-0AB4&lang=en





last modified:

07/26/2019