SIEMENS

Data sheet 3RK1301-0CB20-0AB4

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
● 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)
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation between main and auxiliary circuit	400 V
shock resistance	5g / 11 ms
vibration resistance	2g
type of assignment	1
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	28.05.2009 00:00:00
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
breaking capacity maximum short-circuit current (Icu)	
● at 400 V rated value	50 kA
Electromagnetic compatibility	
EMC emitted interference acc. to IEC 60947-1	CISPR11, ambience A (industrial sector)

EMC 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-based interference 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 class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe
Main circuit	
number of poles for main current circuit	3
design of the switching contact	solid-state
adjustable current response 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
operational 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 3-phase motors at 400 V at 50 Hz	1.1 ... 7.5 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	
● at DC rated value	20.4 ... 28.8 V
● at DC	24 ... 24 V
Installation/ mounting/ dimensions	
mounting position	vertical, horizontal
fastening method	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 PROFIenergy measured values	Yes
● supports PROFIenergy shutdown	Yes
address space 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	using control module
● 2 for digital input signals	using control module
type of electrical connection	
● at the manufacturer-specific device interface	plug
● for main energy infeed	screw-type terminals
● for load-side outgoing feeder	Screw-type terminals
● for main energy transmission	via energy bus
● for supply voltage line-side	via backplane bus
● for supply voltage transmission	via backplane bus
UL/CSA ratings	
operating voltage at AC at 60 Hz acc. to CSA and UL rated value	480 V

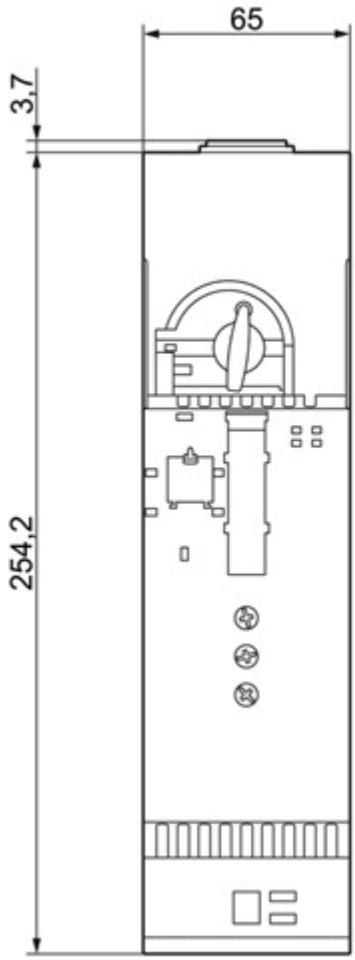
Certificates/ approvals

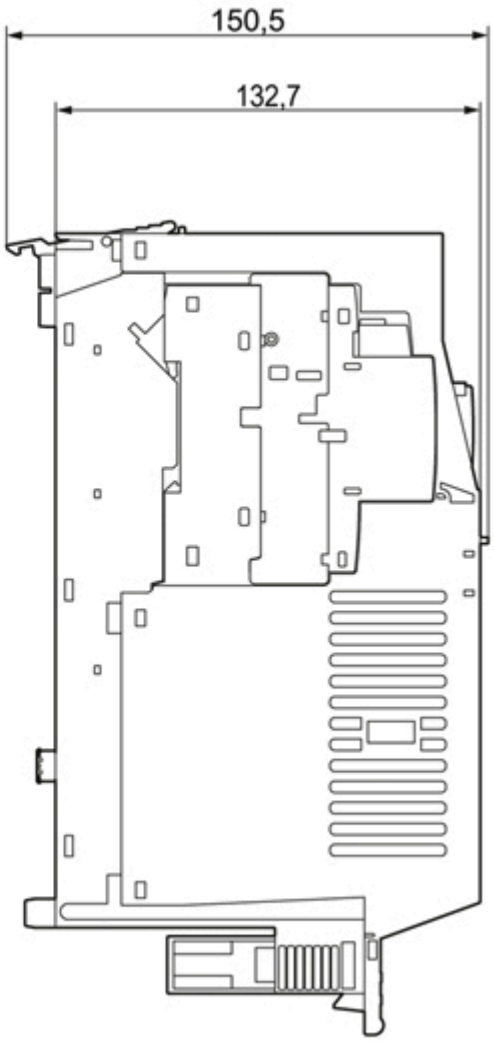
General Product Approval				EMC	Declaration of Conformity
CSA	CCC	UL	EAC	RCM	Miscellaneous

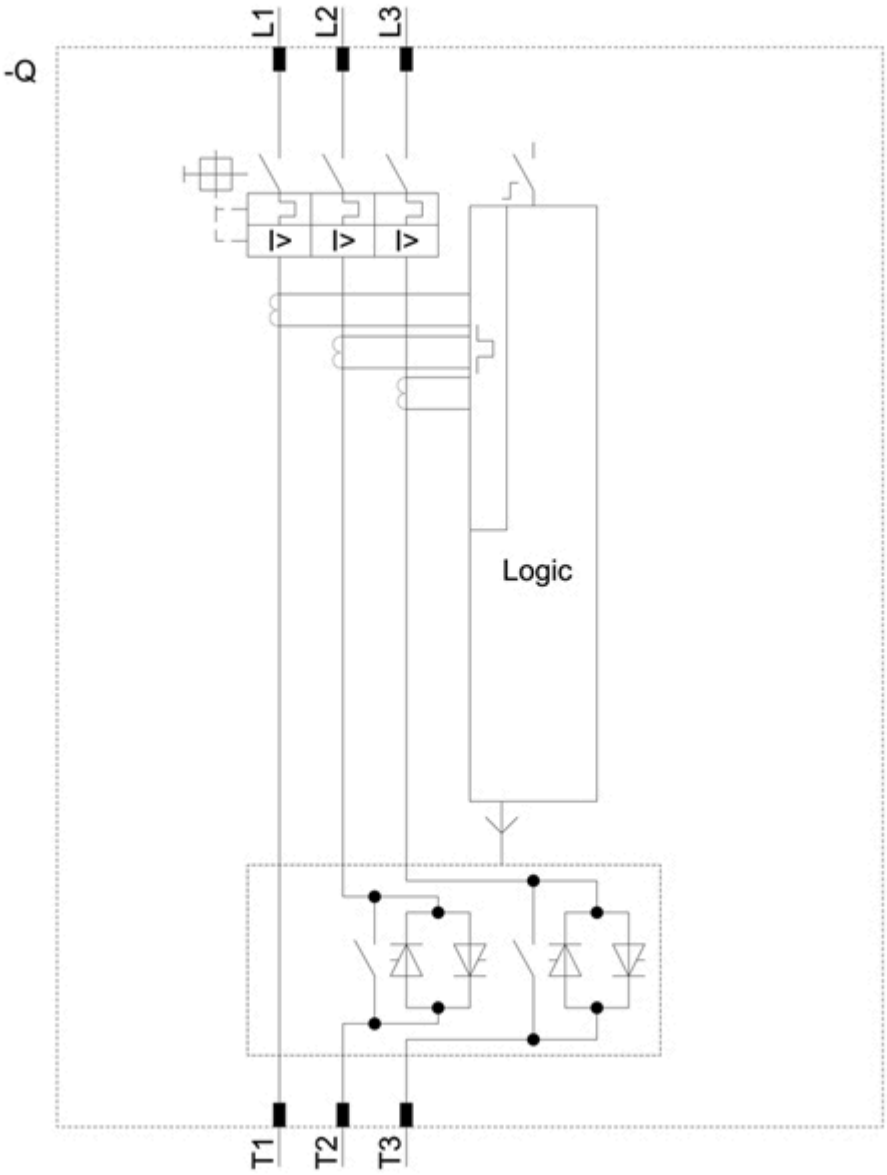
Declaration of Conformity	Test Certificates	other	
EG-Konf.	Type Test Certific-ates/Test Report	Confirmation	Profibus

Further information

Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10
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







last modified: 12/15/2020