SIEMENS

Data sheet 3RK1301-0BB10-0AB4

DS1E-X for ET200S High Feature DOL starter Setting range 2.4...8 A Mechanical switching Electronic protection AC-3, up to 3 kW / 400 V expandable for Brake control module 2DI 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 on-site operation	Yes
power loss [W] for rated value of the current	
● at AC in hot operating state	10 W
● at AC in hot operating state per pole	3.33 W
● without load current share typical	6.36 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 protective separation between main and auxiliary circuit	400 V
shock resistance	5g / 11 ms
vibration resistance	2g
mechanical service life (operating cycles) of the main contacts typical	100 000
type of assignment	2
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/26/2016
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2
Weight	1.55 kg
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 according to IEC 60947-1	CISPR11, ambience A (industrial sector)
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3, ambience A (industrial sector)
conducted interference	
● due to burst according to IEC 61000-4-4	2 kV on voltage supply, inputs and outputs
● due to conductor-earth surge according to IEC 61000-4-5	2 kV (U > 24 V DC)
● due to conductor-conductor surge according to IEC 61000-4-5	1 kV (U > 24 V DC)
field-based interference according 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	
proportion of dangerous failures	
● with low demand rate according to SN 31920	50 %
● with high demand rate according to SN 31920	75 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
IEC 61508	
T1 value for proof test interval or service life according to IEC 61508	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
Main circuit	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	2.4 ... 8 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	8 A
operating power at AC-3 at 400 V rated value	3 kW
operating power for 3-phase motors at 400 V at 50 Hz	1.1 ... 3 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
control supply voltage 1 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 according to CSA and UL rated value	600 V
Approvals Certificates	

General Product Approval

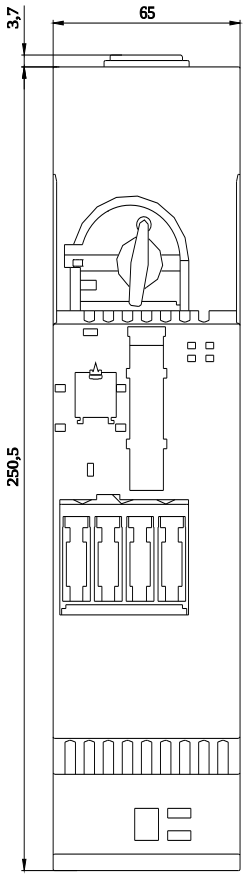
Confirmation

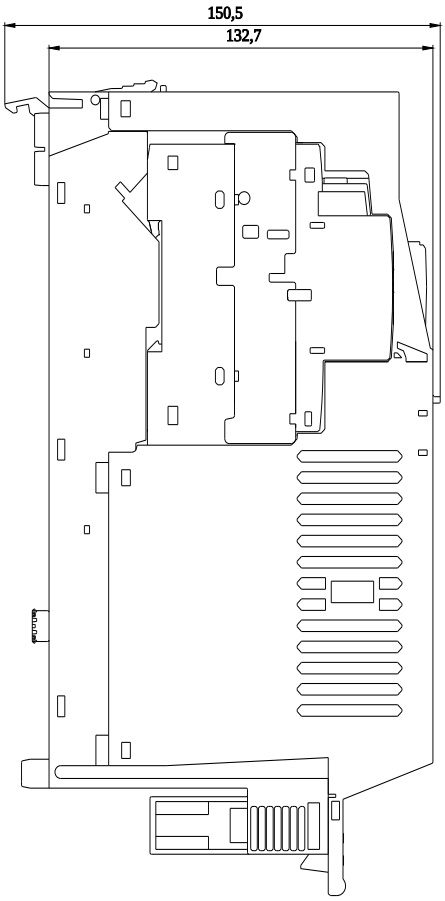
EMV	Test Certificates	other	Dangerous goods	Environment
	Type Test Certificates/Test Report	Confirmation	Transport Information	Environmental Confirmations

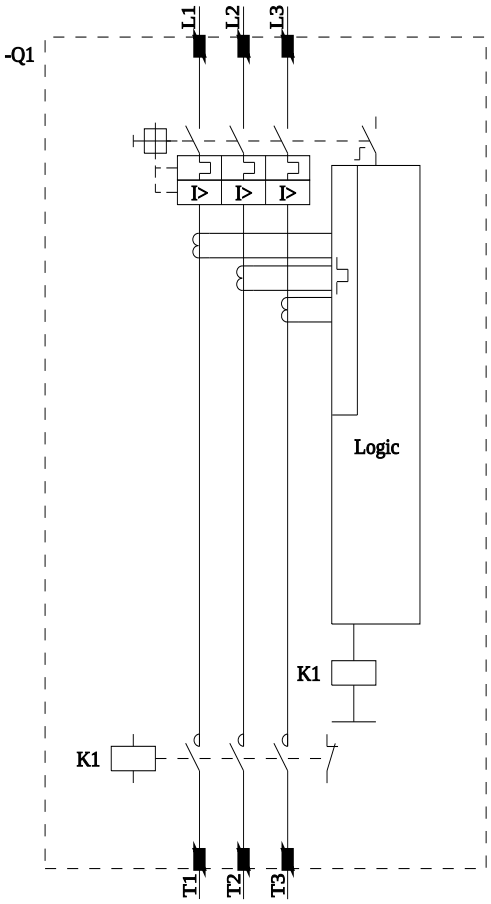
Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
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=3RK1301-0BB10-0AB4
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0BB10-0AB4

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0BB10-0AB4
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0BB10-0AB4&lang=en







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