3RK1301-0CB20-0AB4

Data sheet



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	
product function on-site operation	Yes
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
type of assignment	1
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/28/2009
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 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 GHz2 Hz 3 V/m, 2 GHz 2.7 GHz 1 V/m
Safety related data	
B10 value with high demand rate according to SN 31920	1 000 000

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proportion of dangerous failures	
 with low demand rate according to SN 31920 	50 %
with high demand rate according to SN 31920	75 %
failure rate [FIT]	
with low demand rate according to SN 31920	100 FIT
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	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	
Supply voltage type of voltage of the supply voltage	DC
	DC 24 24 V
type of voltage of the supply voltage	
type of voltage of the supply voltage supply voltage 1 at DC	
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value	24 24 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible	24 24 V 20.4 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible	24 24 V 20.4 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control	24 24 V 20.4 V 28.8 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage	24 24 V 20.4 V 28.8 V DC
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value	24 24 V 20.4 V 28.8 V DC
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V vertical, horizontal
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V vertical, horizontal pluggable on terminal module
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V vertical, horizontal pluggable on terminal module 290 mm
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 20.4 28.8 V vertical, horizontal pluggable on terminal module 290 mm 65 mm
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth Ambient conditions	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 20.4 28.8 V vertical, horizontal pluggable on terminal module 290 mm 65 mm
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth Ambient conditions installation altitude at height above sea level maximum ambient temperature	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 2 000 m 0 60 °C
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 0 60 °C -40 +70 °C
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 0 60 °C -40 +70 °C -40 +70 °C
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 0 60 °C -40 +70 °C
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value • minimum permissible • maximum permissible Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value control supply voltage 1 • at DC rated value • at DC Installation/ mounting/ dimensions mounting position fastening method height width depth Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Communication/ Protocol	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 0 60 °C -40 +70 °C -40 +70 °C
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 2 000 m 0 60 °C -40 +70 °C -40 +70 °C 5 95 %
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 2 000 m 0 60 °C -40 +70 °C -40 +70 °C 5 95 %
type of voltage of the supply voltage supply voltage 1 at DC supply voltage 1 at DC rated value	24 24 V 20.4 V 28.8 V DC 20.4 28.8 V 20.4 28.8 V 24 24 V vertical, horizontal pluggable on terminal module 290 mm 65 mm 150 mm 2 000 m 0 60 °C -40 +70 °C -40 +70 °C 5 95 %

Yes
No
Yes
Yes
2 byte
2 byte
via backplane bus
via backplane bus
screw-type terminals
using control module
using control module
plug
screw-type terminals
Screw-type terminals
via energy bus
via backplane bus
via backplane bus
480 V

(1)

General Product Approval

Confirmation









EMC

Declaration of Conformity

other





Confirmation

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RK1301-0CB20-0AB4

Cax online generator

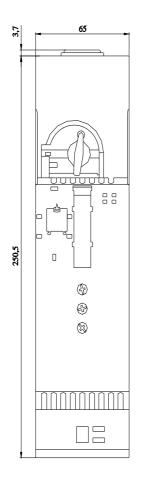
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0CB20-0AB4

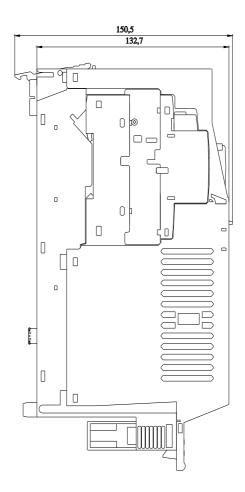
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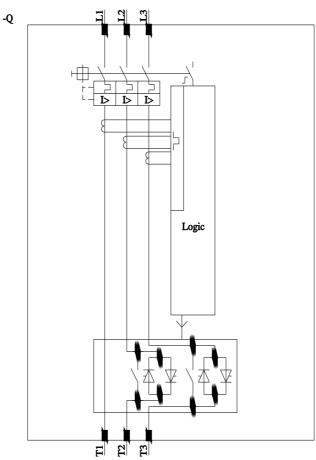
https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0CB20-0AB4

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0CB20-0AB4\&lang=ender.pdf}}$







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