3RK1301-0CB13-1AA4

Data sheet



F-RS1E-X for ET 200S Failsafe reversing starter Setting range 2.4...16 A Mechanical switching Electronic protection AC-3, up to 7.5 kW / 400 V expandable for Brake control module 2DI module 2DI control module Circuit breaker signaling parameterizable

product brand name	SIMATIC
product designation	Motor starters
design of the product	reversing 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
operating frequency maximum	80 1/h
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
product function	
direct start	No
reverse starting	Yes
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 GHz2 Hz 3 V/m, 2 GHz 2.7 GHz 1 V/m
Safety related data	
safety device type according to IEC 61508-2	Type B
safe state	Load circuit open
SIL Claim Limit (subsystem) according to EN 62061	SILCL 3
performance level (PL) according to EN ISO 13849-1	e
category according to EN ISO 13849-1	4
stop category according to EN 60204-1	0
average diagnostic coverage level (DCavg)	99 %
PFHD with high demand rate according to EN 62061	1.8E-9 1/h
failure rate [FIT]	1.0L=0 I/II
 at rate of recognizable hazardous failures (λdd) 	3 800 FIT
 at rate of non-recognizable hazardous failures (λdu) 	25 FIT
Safe failure fraction (SFF)	99.5 %
· ,	8E-5
PFDavg with low demand rate according to IEC 61508	
Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508	8E-5 1/y
MTBF	11 a
MTTFd	31 a
hardware fault tolerance according to IEC 61508	1
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 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 output signals for digital input signals	0
Supply voltage	
type of voltage of the supply voltage	DC
	24 24 V
supply voltage 1 at DC	∠ + ∠ + V
supply voltage 1 at DC rated value	20.4 V
minimum permissible movimum 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	21.6 26.4 V
control supply voltage 1	
at DC rated value	21.6 26.4 V
• at DC	24 24 V
Installation/ mounting/ dimensions	
mounting position	vertical, horizontal
fastening method	pluggable on terminal module

Miles Mile		000
depth 150 mm	height	290 mm
Ambient conditions installation altitude at height above sea level maximum ablent temperature during operation during storage during storage during transport relative humidity during operation 5 95 % Communication/ Protocol Protocol Is supported PROFIBUS DP protocol PROFIBUS DP protocol PROFIBUS DP protocol Protocol is supported PROFIBUS DP protocol Protocol is supported PROFIBUS DP protocol Protocol is supported PROFIBUS DP protocol PROFIBUS DP protocol Protocol is supported AS-Interface plug sackplane bus Protocol is supported AS-Interface plug sackplane plug sackplan		
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UL/CSA ratings operating voltage at AC at 60 Hz according to CSA and UL rated value 600 V	for supply voltage line-side	via backplane bus
operating voltage at AC at 60 Hz according to CSA and UL rated value 600 V	for supply voltage transmission	via backplane bus
rated value		
Certificates/ approvals	operating voltage at AC at 60 Hz according to CSA and UL	600 V
	Certificates/ approvals	

General Product Approval





Confirmation









Type Examination Certificate





Type Test Certificates/Test Report

Confirmation

Transport 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=3RK1301-0CB13-1AA4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0CB13-1AA4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0CB13-1AA4

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0CB13-1AA4&lang=en

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