# Data sheet



RS1E-X for ET200S High Feature reversing 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	reversing starter
Product type designation	ET 200S

General technical data	
Product function	
<ul><li>on-site operation</li></ul>	Yes
Power loss [W] typical	10 W
Power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	10 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	3.33 W
Power loss [W] for rated value of the current without	5.28 W
load current share typical	
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> <li>between main and auxiliary circuit</li> </ul>	400 V
Protection class IP	IP20
Shock resistance	5g / 11 ms

Mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
Type of assignment	2
Reference code acc. to DIN 40719 extended	A
according to IEC 204-2 acc. to IEC 750	
Reference code acc. to DIN EN 81346-2	Q
Reference code acc. to DIN EN 61346-2	Q
Product function	
direct start	No
• reverse starting	Yes
Product component Motor brake output	Yes
Product feature	
<ul> <li>brake control with 230 V AC</li> </ul>	No
<ul> <li>brake control with 24 V DC</li> </ul>	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 5, 10, 15, 20
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
<ul> <li>due to conductor-earth surge acc. to IEC</li> <li>61000-4-5</li> </ul>	2 kV (U > 24 V DC)
<ul> <li>due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	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 GHz2 Hz 3 V/m, 2 GHz 2.7 GHz 1 V/m

Safety related data		
B10 value		
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	1 000 000	
Proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	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
Main circuit	
Number of poles for main current circuit	3
Design of the switching contact	electromechanical
Adjustable pick-up value current of the current-	2.4 8 A
dependent overload release	
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	10 %
frequency	
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	8 A
Operating power	
• at AC-3	
— at 400 V rated value	3 kW
Inputs/ Outputs	
Product function	
<ul> <li>digital inputs parameterizable</li> </ul>	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> <li>at DC rated value</li> </ul>	20.4 28.8 V
• at DC	24 24 V

rtical barizantal
rtical, horizontal
iggable on terminal module
0 mm
0 mm
0 mm
C

Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Relative humidity during operation	5 95 %

Communication/ Protocol		
Protocol is supported		
<ul> <li>PROFIBUS DP protocol</li> </ul>	Yes	
<ul> <li>PROFINET protocol</li> </ul>	Yes	
Design of the interface		
<ul> <li>PROFINET protocol</li> </ul>	Yes	
Product function Bus communication	Yes	
Protocol is supported		
AS-Interface protocol	No	
Product function		
<ul> <li>supports PROFlenergy measured values</li> </ul>	Yes	
<ul><li>supports PROFlenergy shutdown</li></ul>	Yes	
address range memory of address range		
• of the inputs	2 byte	
• of the outputs	2 byte	
Type of electrical connection		
<ul> <li>of the communication interface</li> </ul>	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		
<ul> <li>1 for digital input signals</li> </ul>	using control module	
<ul> <li>2 for digital input signals</li> </ul>	using control module	
Type of electrical connection		
• at the manufacturer-specific device interface	plug	

• for main energy infeed

• for load-side outgoing feeder

• for main energy transmission

• for supply voltage line-side

• for supply voltage transmission

screw-type terminals

Screw-type terminals

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

600 V

## Certificates/ approvals

## **General Product Approval**

**EMC** 

**Declaration of** Conformity













Declaration of	Test Certific-	other			
Conformity	ates			_	
Miscellaneous	Type Test Certific-	Confirmation			
	ates/Test Report		PROFO.		

**Profibus** 

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

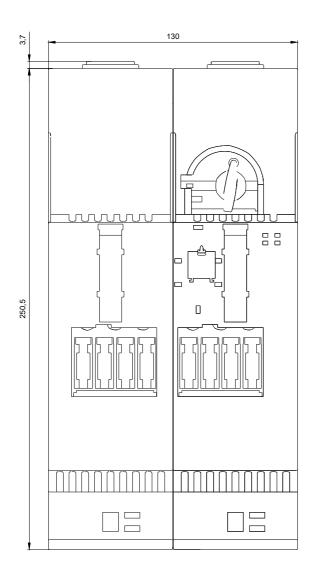
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1301-0BB10-1AB4

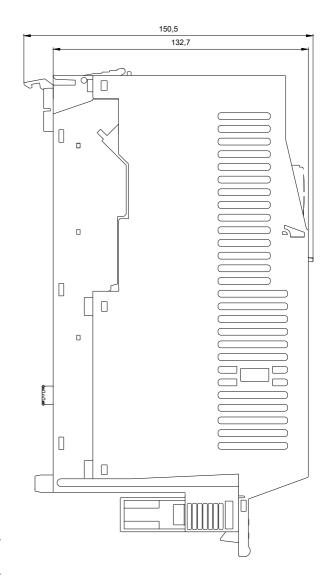
Cax online generator

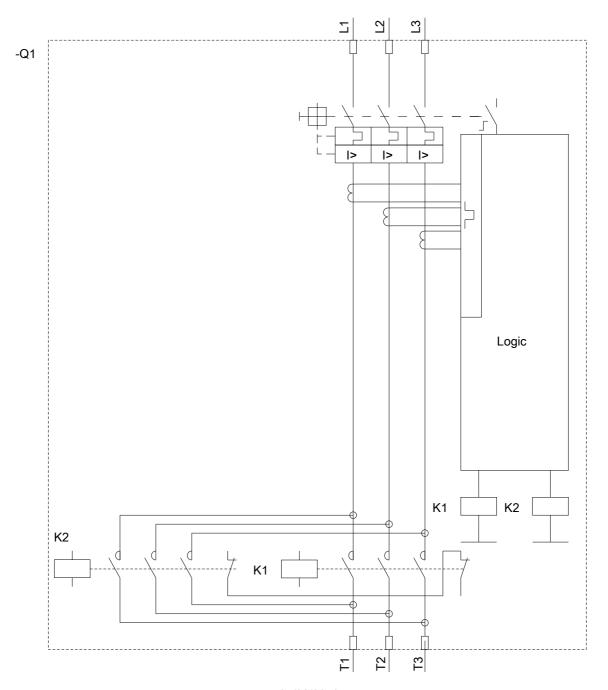
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0BB10-1AB4

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0BB10-1AB

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RK1301-0BB10-1AB4&lang=en







**last modified:** 07/26/2019