Data sheet

RS1-X FOR ET 200S ELECTRO-MECH. REVERS. STARTER, EXPANDABLE SETTING RANGE 2.2...3.2A AC-3, 1.1KW/400V



Figure similar

Product brand name	Sirius
Product designation	motor starter ET 200S
Design of the product	reversing starter

General technical data		
Product function		
• on-site operation	Yes	
Power loss [W] typical	10 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		
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V	
Protection class IP	IP20	
Shock resistance	5g / 11 ms	
Vibration resistance	2g	
Operating frequency maximum	750 1/h	

Mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
Type of assignment	1
Equipment marking	
<ul> <li>acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</li> </ul>	A
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	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 10
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 %
• with high demand rate acc. to SN 31920	75 %

Ecilure rate (EIT)	
Failure rate [FIT]	100 FIT
• with low demand rate acc. to SN 31920	
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe
Inputs/ Outputs	
Product function	
<ul> <li>digital inputs parameterizable</li> </ul>	No
<ul> <li>digital outputs parameterizable</li> </ul>	No
Number of digital inputs	0
Number of sockets	
<ul> <li>for digital output signals</li> </ul>	0
• for digital input signals	0
Main circuit	
Number of poles for main current circuit	3
Design of the switching contact	electromechanical
Adjustable pick-up value current of the current- dependent overload release	2.2 3.2 A
Type of the motor protection	bimetal
Operating voltage	
• rated value	200 400 V
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
Operating range relative to the operating voltage at AC	
● at 50 Hz	200 440 V
Operating power	
● at AC-3	
— at 400 V rated value	1.1 kW
Operating power for three-phase motors at 400 V at	1.1 1.1 kW
50 Hz	
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
Power loss [W] in auxiliary and control circuit	
• in switching state OFF	
— with bypass circuit	0.3744 W
— without bypass circuit	0.374 W
● in switching state ON	
— with bypass circuit	4.1184 W
— without bypass circuit	4.118 W
Power Electronics	
Relative negative tolerance of the operating	10 %
frequency	
Relative positive tolerance of the operating frequency	10 %
Installation/ mounting/ dimensions	
Mounting position	vertical, horizontal
Mounting type	pluggable on terminal module
Height	265 mm
Width	90 mm
Depth	120 mm
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
<ul><li>during operation</li></ul>	0 60 °C
during storage	-40 +70 °C
during transport	-40 +70 °C
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>	No
<ul><li>supports PROFlenergy shutdown</li></ul>	No
Address space memory of address range	
radiood opado momory or addrood rango	

• of outputs	1 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	
<ul> <li>at the manufacturer-specific device interface</li> </ul>	plug
<ul> <li>for main energy infeed</li> </ul>	screw-type terminals
<ul> <li>for load-side outgoing feeder</li> </ul>	Screw-type terminals
<ul> <li>for main energy transmission</li> </ul>	via energy bus
<ul> <li>for supply voltage line-side</li> </ul>	via backplane bus
<ul> <li>for supply voltage transmission</li> </ul>	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**

For use in hazardous locations













**IECE**x

Declaration of Conformity

Test Certificates

other



Type Test
Certificates/Test
Report

Confirmation

## Further information

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

http://www.siemens.com/industrial-controls/catalogs

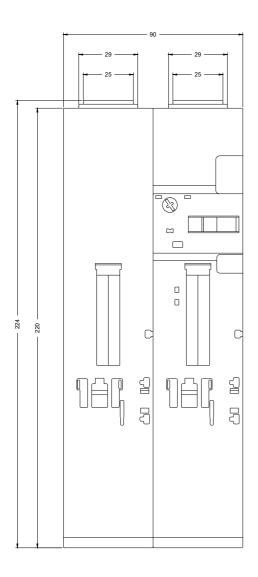
Industry Mall (Online ordering system)

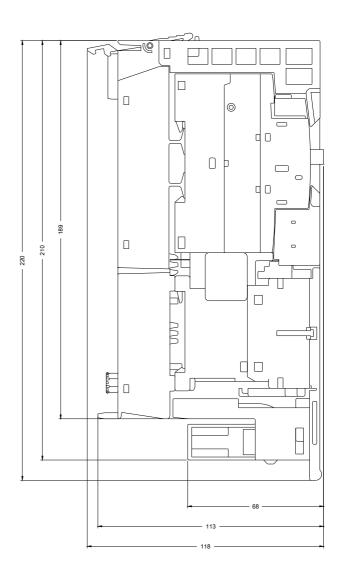
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK1301-1DB00-1AA2

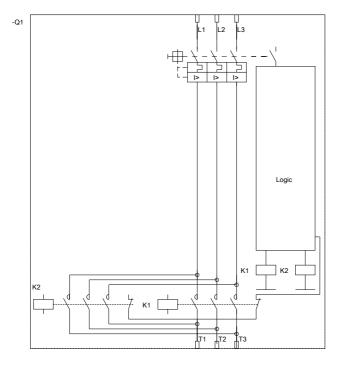
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-1DB00-1AA2

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RK1301-1DB00-1AA2&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RK1301-1DB00-1AA2&lang=en</a>







DI 0.0 DI 0.1 DI 0.2	Bereit Schütz ein Leistungsschalter ausg
DO 0.0 DO 0.1 DO 0.2	Motor Rechts Motor links Bremse
DI 0.0 DI 0.1 DI 0.2	Ready Contactor on Circuit breaker tripped
DO 0.0 DO 0.1 DO 0.2	Motor right Motor left Brake

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