

RS1-X FOR ET 200S ELECTRO-MECH. REVERS. STARTER,
EXPANDABLE SETTING RANGE 0.55...0.80A AC-3, 0.21KW/400V

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

General technical data

Product function	
<ul style="list-style-type: none"> on-site operation 	Yes
Power loss [W] typical	10 W
Insulation voltage	
<ul style="list-style-type: none"> 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 style="list-style-type: none"> between main and auxiliary circuit 	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 style="list-style-type: none"> of the main contacts typical 	100 000
Type of assignment	2
Equipment marking	
<ul style="list-style-type: none"> acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 	A
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 	Q
<ul style="list-style-type: none"> acc. to DIN EN 81346-2 	Q
Product function	
<ul style="list-style-type: none"> direct start 	No
<ul style="list-style-type: none"> reverse starting 	Yes
Product component Motor brake output	Yes
Product feature	
<ul style="list-style-type: none"> brake control with 230 V AC 	No
<ul style="list-style-type: none"> brake control with 24 V DC 	No
<ul style="list-style-type: none"> brake control with 180 V DC 	No
<ul style="list-style-type: none"> 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)	50 kA
<ul style="list-style-type: none"> at 400 V rated value 	

Electromagnetic compatibility

EMC emitted interference	CISPR11, ambience A (industrial sector)
<ul style="list-style-type: none"> acc. to IEC 60947-1 	
EMI immunity acc. to IEC 60947-1	corresponds to degree of severity 3, ambience A (industrial sector)
Conducted interference	2 kV on voltage supply, inputs and outputs 2 kV (U > 24 V DC) 1 kV (U > 24 V DC)
<ul style="list-style-type: none"> due to burst acc. to IEC 61000-4-4 	
<ul style="list-style-type: none"> due to conductor-earth surge acc. to IEC 61000-4-5 due to conductor-conductor surge acc. to IEC 61000-4-5 	
Field-bound parasitic coupling acc. 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

B10 value	1 000 000
<ul style="list-style-type: none"> with high demand rate acc. to SN 31920 	
Proportion of dangerous failures	50 % 75 %
<ul style="list-style-type: none"> with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 	
Failure rate [FIT]	100 FIT
<ul style="list-style-type: none"> 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	No No
<ul style="list-style-type: none"> digital inputs parameterizable digital outputs parameterizable 	
Number of digital inputs	0
Number of sockets	0 0
<ul style="list-style-type: none"> for digital output signals for digital input signals 	

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	0.55 ... 0.8 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	0.21 kW
Operating power for three-phase motors at 400 V at 50 Hz	0.21 ... 0.21 kW

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 frequency	10 %
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	
<ul style="list-style-type: none"> • maximum 	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation 	0 ... 60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
Relative humidity during operation	5 ... 95 %
Communication/ Protocol	
Protocol is supported	
<ul style="list-style-type: none"> • PROFIBUS DP protocol 	Yes
<ul style="list-style-type: none"> • PROFINET protocol 	Yes
Design of the interface	
<ul style="list-style-type: none"> • PROFINET protocol 	Yes
Product function Bus communication	Yes
Protocol is supported	
<ul style="list-style-type: none"> • AS-interface protocol 	No
Product function	
<ul style="list-style-type: none"> • supports PROFIenergy measured values 	No
<ul style="list-style-type: none"> • supports PROFIenergy shutdown 	No
Address space memory of address range	
<ul style="list-style-type: none"> • of inputs 	1 byte
<ul style="list-style-type: none"> • of outputs 	1 byte
Type of electrical connection	
<ul style="list-style-type: none"> • of the communication interface 	via backplane bus
<ul style="list-style-type: none"> • for communication transmission 	via backplane bus
Connections/Terminals	
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	screw-type terminals
Type of electrical connection	
<ul style="list-style-type: none"> • 1 for digital input signals 	using control module
<ul style="list-style-type: none"> • 2 for digital input signals 	using control module
Type of electrical connection	
<ul style="list-style-type: none"> • at the manufacturer-specific device interface 	plug
<ul style="list-style-type: none"> • for main energy infeed 	screw-type terminals
<ul style="list-style-type: none"> • for load-side outgoing feeder 	Screw-type terminals
<ul style="list-style-type: none"> • for main energy transmission 	via energy bus
<ul style="list-style-type: none"> • for supply voltage line-side 	via backplane bus
<ul style="list-style-type: none"> • for supply voltage transmission 	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



CCC



CSA



UL



ATEX



IECEX

Declaration of Conformity

Test Certificates

other



EG-Konf.

[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=3RK1301-0HB00-1AA2>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0HB00-1AA2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0HB00-1AA2>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0HB00-1AA2&lang=en

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