

RS1-X for ET 200S Standard reversing starter expandable Setting range 0.55...0.8 A, AC-3, 0.21 kW / 400 V Electromechanical starter for brake control module



Figure similar

Product brand name	SIMATIC
Product designation	Motor starters
Design of the product	reversing starter
Product type designation	ET 200S

General technical data	
Trip class	CLASS 10
Product function	Yes
<ul style="list-style-type: none"> <li>on-site operation</li> </ul>	Yes
Power loss [W] for rated value of the current	
<ul style="list-style-type: none"> <li>at AC in hot operating state</li> </ul>	10 W
<ul style="list-style-type: none"> <li>at AC in hot operating state per pole</li> </ul>	3.33 W
Power loss [W] for rated value of the current without load current share typical	4.12 W
Insulation voltage	
<ul style="list-style-type: none"> <li>rated value</li> </ul>	500 V
Degree of pollution	3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)
maximum permissible voltage for safe isolation	

<ul style="list-style-type: none"> <li>• between main and auxiliary circuit</li> </ul>	400 V
<b>Protection class IP</b>	IP20
<b>Shock resistance</b>	5g / 11 ms
<b>Vibration resistance</b>	2g
<b>Operating frequency maximum</b>	750 1/h
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of the main contacts typical</li> </ul>	100 000
<b>Type of assignment</b>	2
<b>Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</b>	A
<b>Reference code acc. to DIN EN 81346-2</b>	Q
<b>Reference code acc. to DIN EN 61346-2</b>	Q
<b>Product function</b>	
<ul style="list-style-type: none"> <li>• direct start</li> </ul>	No
<ul style="list-style-type: none"> <li>• reverse starting</li> </ul>	Yes
<b>Product component Motor brake output</b>	Yes
<b>Product feature</b>	
<ul style="list-style-type: none"> <li>• brake control with 230 V AC</li> </ul>	No
<ul style="list-style-type: none"> <li>• brake control with 24 V DC</li> </ul>	No
<ul style="list-style-type: none"> <li>• brake control with 180 V DC</li> </ul>	No
<ul style="list-style-type: none"> <li>• brake control with 500 V DC</li> </ul>	No
<b>Product extension braking module for brake control</b>	Yes
<b>Product function Short circuit protection</b>	Yes
<b>Design of short-circuit protection</b>	circuit-breakers
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
<ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>	50 kA

#### Electromagnetic compatibility

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

<b>B10 value</b>	
<ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>	1 000 000
<b>Proportion of dangerous failures</b>	

<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul>	<p>50 %</p> <p>75 %</p>
<b>Failure rate [FIT]</b>	
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> </ul>	100 FIT
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y
<b>Protection against electrical shock</b>	finger-safe

### Main circuit

<b>Number of poles for main current circuit</b>	3
<b>Design of the switching contact</b>	electromechanical
<b>Adjustable pick-up value current of the current-dependent overload release</b>	0.55 ... 0.8 A
<b>Type of the motor protection</b>	bimetal
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	200 ... 400 V
<b>Operating frequency 1 rated value</b>	50 Hz
<b>Operating frequency 2 rated value</b>	60 Hz
<b>Relative positive tolerance of the operating frequency</b>	10 %
<b>Relative negative tolerance of the operating frequency</b>	10 %
<b>Operating range relative to the operating voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	200 ... 440 V
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V rated value</li> </ul>	0.8 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V rated value</li> </ul>	0.21 kW
Operating power for three-phase motors at 400 V at 50 Hz	0.21 ... 0.21 kW

### Inputs/ Outputs

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• digital inputs parameterizable</li> <li>• digital outputs parameterizable</li> </ul>	<p>No</p> <p>No</p>
<b>Number of digital inputs</b>	0
<b>Number of sockets</b>	
<ul style="list-style-type: none"> <li>• for digital output signals</li> <li>• for digital input signals</li> </ul>	<p>0</p> <p>0</p>

### Supply voltage

<b>Type of voltage of the supply voltage</b>	DC
<b>Supply voltage 1 at DC</b>	24 ... 24 V

<b>Supply voltage 1 at DC rated value</b>	
<ul style="list-style-type: none"> <li>• minimum permissible</li> </ul>	20.4 V
<ul style="list-style-type: none"> <li>• maximum permissible</li> </ul>	28.8 V

### Control circuit/ Control

<b>Type of voltage of the control supply voltage</b>	DC
<b>Control supply voltage at DC</b>	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	20.4 ... 28.8 V
<b>Control supply voltage 1</b>	
<ul style="list-style-type: none"> <li>• at DC rated value</li> </ul>	20.4 ... 28.8 V
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	24 ... 24 V
<b>Power loss [W] in auxiliary and control circuit</b>	
<ul style="list-style-type: none"> <li>• in switching state OFF <ul style="list-style-type: none"> <li>— with bypass circuit</li> </ul> </li> </ul>	0.3744 W
<ul style="list-style-type: none"> <li>— without bypass circuit</li> </ul>	0.374 W
<ul style="list-style-type: none"> <li>• in switching state ON <ul style="list-style-type: none"> <li>— with bypass circuit</li> </ul> </li> </ul>	4.1184 W
<ul style="list-style-type: none"> <li>— without bypass circuit</li> </ul>	4.118 W

### Installation/ mounting/ dimensions

<b>Mounting position</b>	vertical, horizontal
<b>Mounting type</b>	pluggable on terminal module
<b>Height</b>	265 mm
<b>Width</b>	90 mm
<b>Depth</b>	120 mm

### Ambient conditions

<b>Installation altitude at height above sea level</b>	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2 000 m
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	0 ... 60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +70 °C
Relative humidity during operation	5 ... 95 %

### Communication/ Protocol

<b>Protocol is supported</b>	
<ul style="list-style-type: none"> <li>• PROFIBUS DP protocol</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• PROFINET protocol</li> </ul>	Yes
<b>Design of the interface</b>	
<ul style="list-style-type: none"> <li>• PROFINET protocol</li> </ul>	Yes
<b>Product function Bus communication</b>	Yes
<b>Protocol is supported</b>	
<ul style="list-style-type: none"> <li>• AS-Interface protocol</li> </ul>	No
<b>Product function</b>	

<ul style="list-style-type: none"> <li>• supports PROFIenergy measured values</li> <li>• supports PROFIenergy shutdown</li> </ul>	No
<b>address range memory of address range</b> <ul style="list-style-type: none"> <li>• of the inputs</li> <li>• of the outputs</li> </ul>	1 byte 1 byte
<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• of the communication interface</li> <li>• for communication transmission</li> </ul>	via backplane bus via backplane bus

### Connections/ Terminals

<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>	screw-type terminals
<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• 1 for digital input signals</li> <li>• 2 for digital input signals</li> </ul>	using control module using control module
<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• at the manufacturer-specific device interface</li> <li>• for main energy infeed</li> <li>• for load-side outgoing feeder</li> <li>• for main energy transmission</li> <li>• for supply voltage line-side</li> <li>• for supply voltage transmission</li> </ul>	plug screw-type terminals Screw-type terminals via energy bus via backplane bus via backplane bus

### UL/CSA ratings

<b>Operating voltage</b> <ul style="list-style-type: none"> <li>• at AC at 60 Hz acc. to CSA and UL rated value</li> </ul>	600 V
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### Certificates/ approvals

<b>General Product Approval</b>	<b>EMC</b>	<b>For use in hazardous locations</b>
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<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>other</b>
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Confirmation](#)

## Further information

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

[www.siemens.com/sirius/catalogs](http://www.siemens.com/sirius/catalogs)

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RK1301-0HB00-1AA2>

### Cax online generator

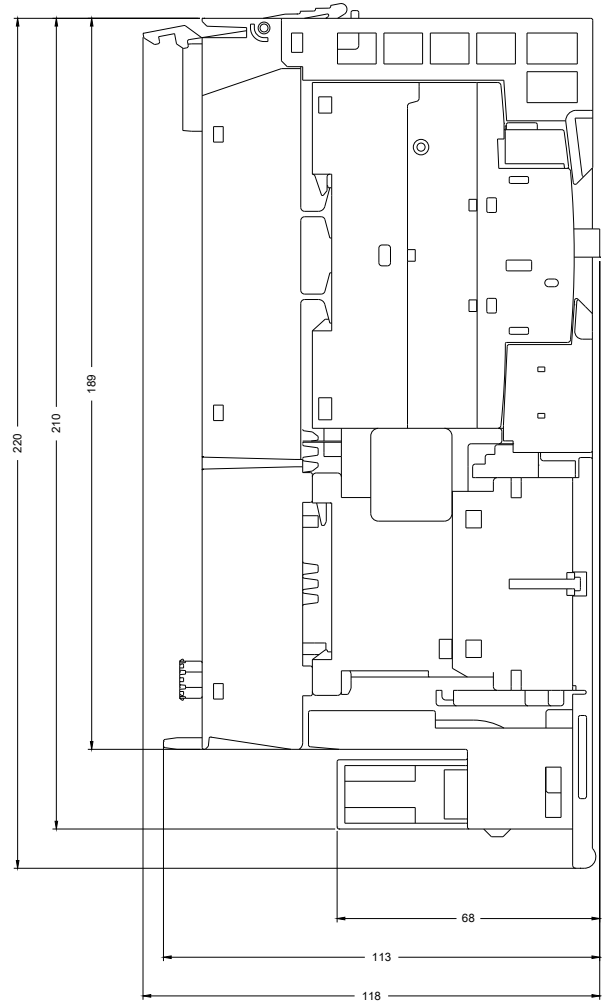
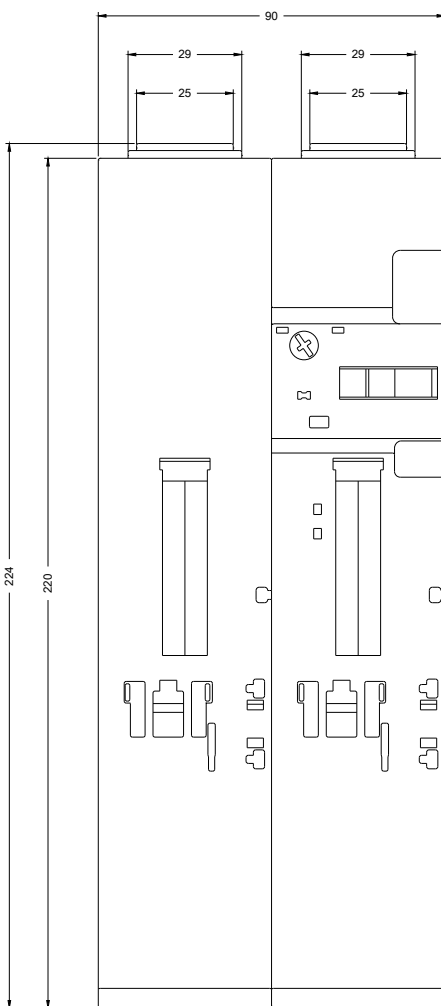
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RK1301-0HB00-1AA2>

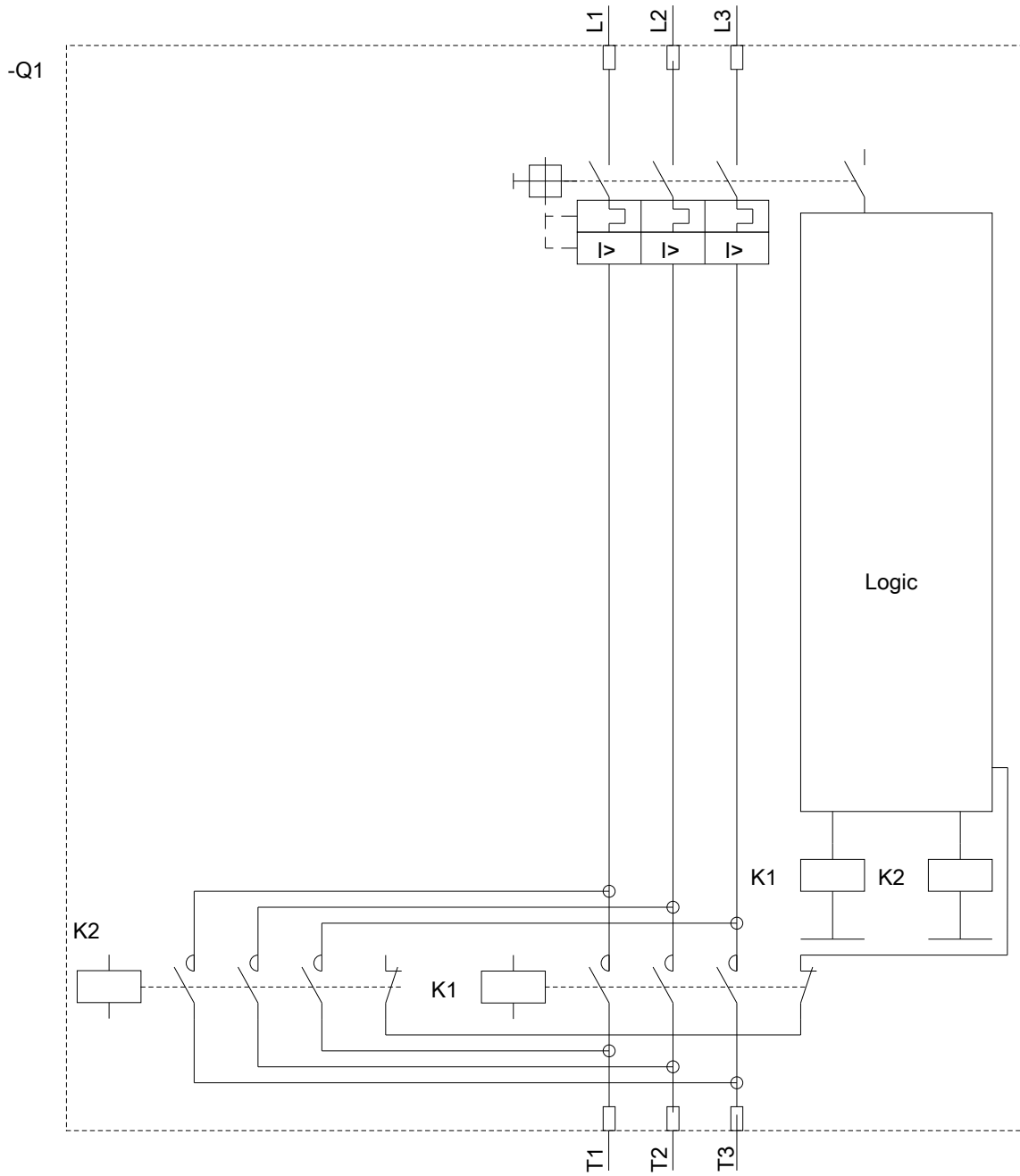
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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?mfb=3RK1301-0HB00-1AA2&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RK1301-0HB00-1AA2&lang=en)





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