



DS1-X for ET 200S Standard DOL starter expandable Setting range 0.14...0.2 A, AC-3, up to 0.06 kW / 400 V Electromechanical starter for brake control module

Figure similar

<b>product brand name</b>	SIMATIC
<b>product designation</b>	Motor starters
<b>design of the product</b>	direct starter
<b>product type designation</b>	ET 200S
<b>General technical data</b>	
<b>trip class</b>	CLASS 10
product function on-site operation	Yes
power loss [W] for rated value of the current at AC in hot operating state	9 W
• per pole	3 W
<b>power loss [W] for rated value of the current without load current share typical</b>	4.12 W
insulation voltage rated value	500 V
<b>degree of pollution</b>	3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)
<b>surge voltage resistance rated value</b>	6 kV
maximum permissible voltage for safe isolation between main and auxiliary circuit	400 V
<b>shock resistance</b>	5g / 11 ms
<b>vibration resistance</b>	2g
<b>operating frequency maximum</b>	750 1/h
mechanical service life (switching cycles) of the main contacts typical	100 000
<b>type of assignment</b>	2
<b>reference code acc. to IEC 81346-2</b>	Q
Substance Prohibitance (Date)	26.10.2016 00:00:00
<b>product function</b>	
• direct start	Yes
• reverse starting	No
<b>product component motor brake output</b>	Yes
<b>product feature</b>	
• 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
<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>breaking capacity maximum short-circuit current (Icu)</b>	

<ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>	50 kA
<b>Electromagnetic compatibility</b>	
EMC emitted interference acc. to IEC 60947-1	CISPR11, ambience A (industrial sector)
<b>EMC 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> <li>• due to conductor-earth surge acc. to IEC 61000-4-5</li> <li>• due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	2 kV on voltage supply, inputs and outputs 2 kV (U > 24 V DC) 1 kV (U > 24 V DC)
<b>field-based interference 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
<b>Safety related data</b>	
B10 value with high demand rate acc. to SN 31920	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>	50 % 75 %
<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 class IP on the front acc. to IEC 60529</b>	IP20
<b>touch protection on the front acc. to IEC 60529</b>	finger-safe
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>design of the switching contact</b>	electromechanical
<b>adjustable current response value current of the current-dependent overload release</b>	0.14 ... 0.2 A
<b>type of the motor protection</b>	bimetal
operating voltage rated value	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 %
operating range relative to the operating voltage at AC at 50 Hz	200 ... 440 V
<b>operational current</b>	
<ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> </ul>	0.2 A
operating power at AC-3 at 400 V rated value	0.06 kW
operating power for 3-phase motors at 400 V at 50 Hz	0.06 ... 0.06 kW
<b>Inputs/ Outputs</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>• digital inputs parameterizable</li> <li>• digital outputs parameterizable</li> </ul>	No No
<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>	0 0
<b>Supply voltage</b>	
<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> <li>• maximum permissible</li> </ul>	20.4 V 28.8 V
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	DC
control supply voltage at DC rated value	20.4 ... 28.8 V
<b>control supply voltage 1</b>	
<ul style="list-style-type: none"> <li>• at DC rated value</li> <li>• at DC</li> </ul>	20.4 ... 28.8 V 24 ... 24 V

<b>power loss [W] in auxiliary and control circuit</b>		
<ul style="list-style-type: none"> <li>● <b>in switching state OFF</b> <ul style="list-style-type: none"> <li>— with bypass circuit</li> <li>— without bypass circuit</li> </ul> </li> <li>● <b>in switching state ON</b> <ul style="list-style-type: none"> <li>— with bypass circuit</li> <li>— without bypass circuit</li> </ul> </li> </ul>	<p>0.3744 W</p> <p>0.374 W</p> <p>4.1184 W</p> <p>4.118 W</p>	
<b>Installation/ mounting/ dimensions</b>		
<b>mounting position</b>	vertical, horizontal	
<b>fastening method</b>	pluggable on terminal module	
<b>height</b>	265 mm	
<b>width</b>	45 mm	
<b>depth</b>	120 mm	
<b>Ambient conditions</b>		
installation altitude at height above sea level maximum	2 000 m	
<b>ambient temperature</b>		
<ul style="list-style-type: none"> <li>● during operation</li> <li>● during storage</li> <li>● during transport</li> </ul>	<p>0 ... 60 °C</p> <p>-40 ... +70 °C</p> <p>-40 ... +70 °C</p>	
relative humidity during operation	5 ... 95 %	
<b>Communication/ Protocol</b>		
<b>protocol is supported</b>		
<ul style="list-style-type: none"> <li>● PROFIBUS DP protocol</li> <li>● PROFINET protocol</li> </ul>	<p>Yes</p> <p>Yes</p>	
design of the interface PROFINET protocol	Yes	
<b>product function bus communication</b>	Yes	
protocol is supported AS-Interface protocol	No	
<b>product function</b>		
<ul style="list-style-type: none"> <li>● supports PROFenergy measured values</li> <li>● supports PROFenergy shutdown</li> </ul>	<p>No</p> <p>No</p>	
<b>address space memory of address range</b>		
<ul style="list-style-type: none"> <li>● of the inputs</li> <li>● of the outputs</li> </ul>	<p>1 byte</p> <p>1 byte</p>	
<b>type of electrical connection</b>		
<ul style="list-style-type: none"> <li>● of the communication interface</li> <li>● for communication transmission</li> </ul>	<p>via backplane bus</p> <p>via backplane bus</p>	
<b>Connections/ Terminals</b>		
type of electrical connection for main current circuit	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>	<p>using control module</p> <p>using control module</p>	
<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>	<p>plug</p> <p>screw-type terminals</p> <p>Screw-type terminals</p> <p>via energy bus</p> <p>via backplane bus</p> <p>via backplane bus</p>	
<b>UL/CSA ratings</b>		
operating voltage at AC at 60 Hz acc. to CSA and UL rated value	600 V	
<b>Certificates/ approvals</b>		
<b>General Product Approval</b>	<b>EMC</b>	<b>For use in hazardous locations</b>



Declaration of  
Conformity

Test Certificates

other



EG-Konf.

[Type Test Certificates/Test Report](#)

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### Further information

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=3RK1301-0BB00-0AA2>

Cax online generator

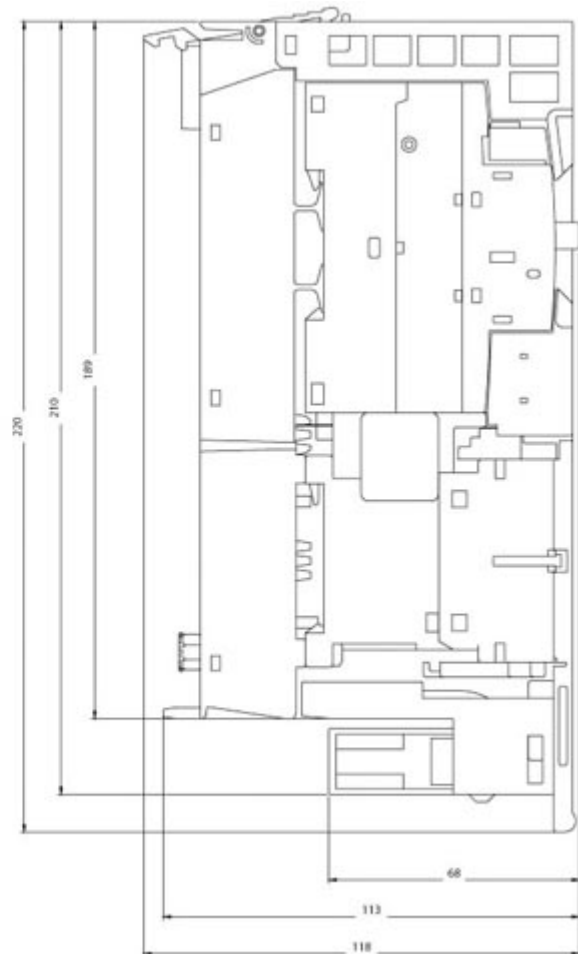
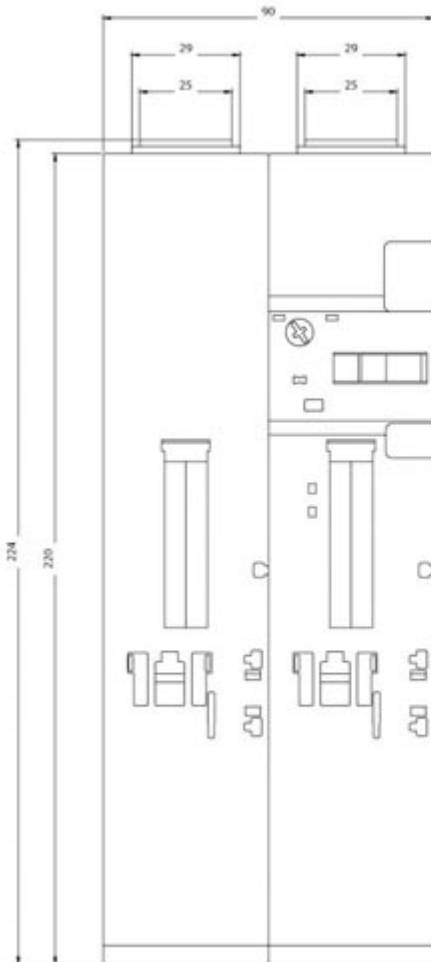
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0BB00-0AA2>

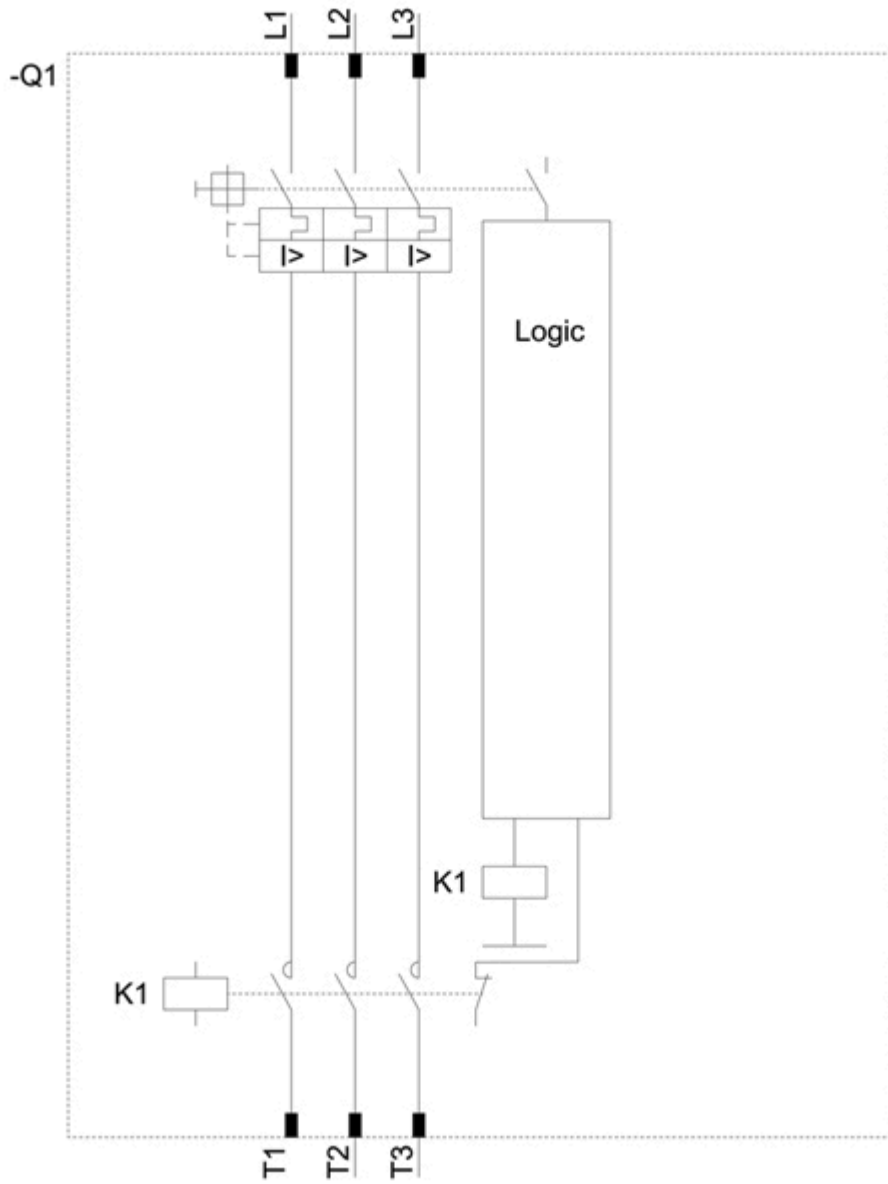
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0BB00-0AA2>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RK1301-0BB00-0AA2&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0BB00-0AA2&lang=en)





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