



Figure similar

DS1-X for ET 200S Standard DOL starter expandable Setting range 2.8...4 A AC-3, 1.5 kW / 400 V Electromechanical starter for brake control module

product brand name	SIMATIC
product designation	Motor starters
design of the product	direct starter
product type designation	ET 200S
General technical data	
product function on-site operation	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	10 W
• at AC in hot operating state per pole	3.33 W
• without load current share typical	4.12 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 protective separation between main and auxiliary circuit	400 V
shock resistance	5g / 11 ms
vibration resistance	2g
operating frequency maximum	750 1/h
mechanical service life (operating cycles) of the main contacts typical	100 000
type of coordination	1
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/26/2016
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
Weight	0.883 kg
product function	
• direct start	Yes
• reverse starting	No
product component motor brake output	Yes
product feature	
• 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
product extension braking module for brake control	Yes
product function short circuit protection	Yes
design of short-circuit protection	circuit-breakers
maximum short-circuit current breaking capacity (Icu)	

• at 400 V rated value	50 kA
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1	CISPR11, ambience A (industrial sector)
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3, ambience A (industrial sector)
conducted interference	
• due to burst according to IEC 61000-4-4	2 kV on voltage supply, inputs and outputs
• due to conductor-earth surge according to IEC 61000-4-5	2 kV (U > 24 V DC)
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV (U > 24 V DC)
field-based interference according 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	
proportion of dangerous failures	
• with low demand rate according to SN 31920	50 %
• with high demand rate according to SN 31920	75 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
IEC 61508	
T1 value for proof test interval or service life according to IEC 61508	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
Main circuit	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	2.8 ... 4 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
relative positive tolerance of the operating frequency	10 %
relative negative tolerance of the operating frequency	10 %
operating range relative to the operating voltage at AC at 50 Hz	200 ... 440 V
operational current	
• at AC-3 at 400 V rated value	4 A
operating power at AC-3 at 400 V rated value	1.5 kW
operating power for 3-phase motors at 400 V at 50 Hz	1.5 ... 1.5 kW
Inputs/ Outputs	
product function	
• digital inputs parameterizable	No
• digital outputs parameterizable	No
number of digital inputs	0
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 at DC rated value	20.4 ... 28.8 V
control supply voltage 1 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 — without bypass circuit	4.1184 W			
	4.118 W			
Installation/ mounting/ dimensions				
mounting position	vertical, horizontal			
fastening method	pluggable on terminal module			
height	265 mm			
width	45 mm			
depth	120 mm			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature • during operation • during storage • during transport	0 ... 60 °C -40 ... +70 °C -40 ... +70 °C			
relative humidity during operation	5 ... 95 %			
Communication/ Protocol				
protocol is supported • PROFIBUS DP protocol • PROFINET protocol	Yes Yes			
design of the interface PROFINET protocol	Yes			
product function bus communication	Yes			
protocol is supported AS-Interface protocol	No			
product function • supports PROFIenergy measured values • supports PROFIenergy shutdown	No No			
address space memory of address range • of the inputs • of the outputs	1 byte 1 byte			
type of electrical connection • of the communication interface • for communication transmission	via backplane bus via backplane bus			
Connections/ Terminals				
type of electrical connection for main current circuit	screw-type terminals			
type of electrical connection • 1 for digital input signals • 2 for digital input signals	using control module using control module			
type of electrical connection • at the manufacturer-specific device interface • for main energy infeed • for load-side outgoing feeder • for main energy transmission • for supply voltage line-side • for supply voltage transmission	plug 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 according to CSA and UL rated value	600 V			
Approvals Certificates				
General Product Approval				
EMV				
 CCC  EG-Konf.   UL   RCM				
For use in hazardous locations	Test Certificates	other	Dangerous goods	Environment



Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RK1301-1EB00-0AA2>

Cax online generator

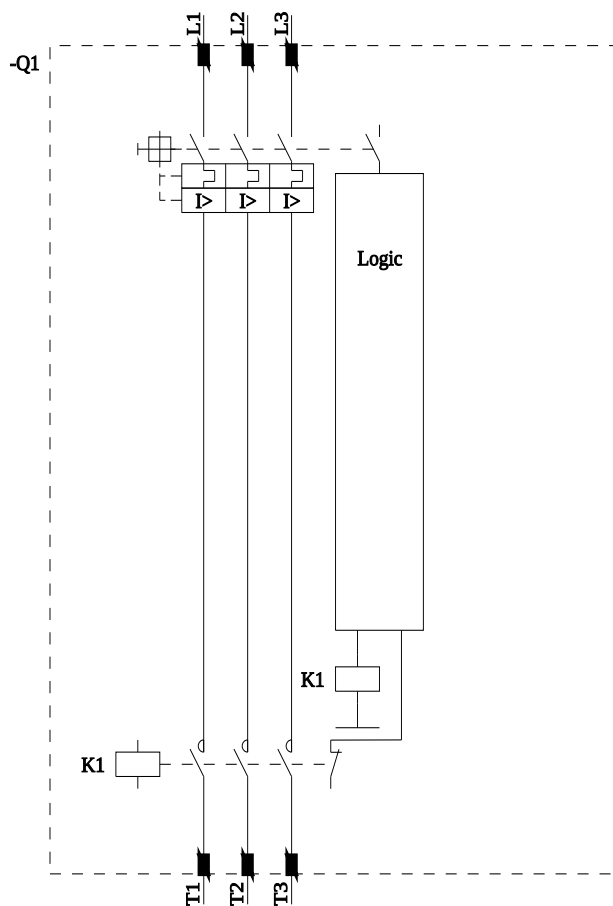
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-1EB00-0AA2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-1EB00-0AA2>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-1EB00-0AA2&lang=en



last modified:

4/1/2025