



Figure similar

Fail-safe direct-on-line starter High Feature; Electronic switching; Electronic overload protection up to 0.09 kW / 400 V; Adjustment range 0.1 .. 0.4 A; PROFlenergy; Option: 3DI/LC module

product brand name	SIMATIC
product category	Motor starter
product designation	Direct-on-line starter
product type designation	ET 200SP
General technical data	
equipment variant according to IEC 60947-4-2	3
product function	Fail-safe direct-on-line starter
<ul style="list-style-type: none"> • on-site operation • intrinsic device protection • remote firmware update • for power supply reverse polarity protection 	Yes Yes Yes Yes
insulation voltage rated value	500 V
degree of pollution	2
overvoltage category	III
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
<ul style="list-style-type: none"> • between main and auxiliary circuit 	500 V
shock resistance	6g / 11 ms
vibration resistance	15 mm to 6 Hz; 2g to 500 Hz
operating frequency maximum	1 1/s
mechanical service life (operating cycles) of the main contacts typical	30 000 000
type of assignment	1
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	04/15/2016
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 4,4'-isopropylidendiphenol (Bisphenol A, - 80-05-7 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7
product function	
<ul style="list-style-type: none"> • direct start • reverse starting 	Yes No
product component motor brake output	No
product function short circuit protection	Yes
design of short-circuit protection	fuse
maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • at 400 V rated value • at 500 V rated value • at 500 V according to UL 60947 rated value 	55 kA 55 kA 100 kA
maximum short-circuit current breaking capacity (Icu) in the IT network	

<ul style="list-style-type: none"> at 400 V rated value at 500 V rated value 	55 kA 55 kA
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1	class A
EMC immunity according to IEC 60947-1	Class A
conducted interference	
<ul style="list-style-type: none"> due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 due to high-frequency radiation according to IEC 61000-4-6 	3 kV 4 kV 2 kV Class A
field-based interference according to IEC 61000-4-3	20 V/m
electrostatic discharge according to IEC 61000-4-2	8 kV air discharge
conducted HF interference emissions according to CISPR11	Class A for industrial environment
field-bound HF interference emission according to CISPR11	Class A for industrial environment
Safety related data	
safety device type according to IEC 61508-2	Type B
safe state	Load circuit open
B10d value	10 100 000
Safety Integrity Level (SIL) according to IEC 61508	3
performance level (PL) according to EN ISO 13849-1	e
category according to EN ISO 13849-1	4
stop category according to EN 60204-1	0
diagnostics test interval by internal test function maximum	600 s
PFH according to IEC 61508 relating to SIL	3.6E-9 1/h
PFDavg with low demand rate according to IEC 61508	4.1E-7
hardware fault tolerance according to IEC 61508	1
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	Hybrid
adjustable current response value current of the current-dependent overload release	0.1 ... 0.4 A
minimum load [%]	50 %; from smallest adjustable rated current
type of the motor protection	solid-state
operating voltage rated value	48 ... 500 V
relative symmetrical tolerance of the operating voltage	10 %
operating frequency 1 rated value	50 Hz
operating frequency 2 rated value	60 Hz
relative symmetrical tolerance of the operating frequency	5 %
relative positive tolerance of the operating frequency	5 %
relative negative tolerance of the operating frequency	5 %
operational current at AC at 400 V rated value	0.4 A
ampacity when starting maximum	4 A
operating power for 3-phase motors at 400 V at 50 Hz	0.06 ... 0.12 kW
Inputs/ Outputs	
number of digital inputs	5
<ul style="list-style-type: none"> note safety-related 	4 via 3DI/LC module 1
type of input characteristic	Type 1 in accordance with EN 61131-2
input voltage at digital input	
<ul style="list-style-type: none"> at DC rated value with signal <0> at DC for signal <1> at DC 	24 V 0 ... 5 V 15 ... 30
input current at digital input for signal <1> typical	0.009 A
Supply voltage	
type of voltage of the supply voltage	DC
supply voltage 1 at DC rated value	
<ul style="list-style-type: none"> minimum permissible 	20.4 V

<ul style="list-style-type: none"> • maximum permissible 	28.8 V
supply voltage at DC rated value	24 V
consumed current for rated value of supply voltage	
<ul style="list-style-type: none"> • in standby mode of operation 	95 mA
<ul style="list-style-type: none"> • during operation 	160 mA
<ul style="list-style-type: none"> • at switching on of motor 	250 mA
power loss [W] for rated value of supply voltage	
<ul style="list-style-type: none"> • in switching state OFF with bypass circuit 	2.3 W
<ul style="list-style-type: none"> • in switching state ON with bypass circuit 	3.8 W
inrush current peak at 24 V	25 A; Observe the manual for group configuration
duration of inrush current peak at 24 V	0.145 ms

Response times

ON-delay time	35 ms
OFF-delay time	35 ... 50 ms
OFF-delay time with safety-related request	
<ul style="list-style-type: none"> • when switched off via control inputs maximum 	55 ms
<ul style="list-style-type: none"> • when switched off via supply voltage maximum 	120 ms

Power Electronics

operational current	
<ul style="list-style-type: none"> • at 40 °C rated value 	0.4 A
<ul style="list-style-type: none"> • at 50 °C rated value 	0.4 A
<ul style="list-style-type: none"> • at 55 °C rated value 	0.4 A
<ul style="list-style-type: none"> • at 60 °C rated value 	0.4 A

Installation/ mounting/ dimensions

mounting position	Vertical, horizontal (observe derating)
fastening method	pluggable in BaseUnit
height	142 mm
width	30 mm
depth	150 mm
required spacing with side-by-side mounting	
<ul style="list-style-type: none"> • upwards 	50 mm
<ul style="list-style-type: none"> • downwards 	50 mm

Ambient conditions

installation altitude at height above sea level maximum	4 000 m; For derating see manual
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +60 °C; For derating see manual
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
environmental category during operation according to IEC 60721	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices)
relative humidity during operation	10 ... 95 %
air pressure according to SN 31205	900 ... 1 060 hPa

Communication/ Protocol

protocol is supported	
<ul style="list-style-type: none"> • PROFIBUS DP protocol 	Yes
<ul style="list-style-type: none"> • PROFINET protocol 	Yes
product function bus communication	Yes
protocol is supported AS-Interface protocol	No
product function	
<ul style="list-style-type: none"> • supports PROFenergy measured values 	Yes
<ul style="list-style-type: none"> • supports PROFenergy shutdown 	Yes
address space memory of address range	
<ul style="list-style-type: none"> • of the inputs 	4 byte
<ul style="list-style-type: none"> • of the outputs 	2 byte
type of electrical connection of the communication interface	Plug contact to Base Unit

Connections/ Terminals

type of electrical connection	
<ul style="list-style-type: none"> • 1 for digital input signals 	Pluggable module - accessory
<ul style="list-style-type: none"> • 2 for digital input signals 	Plug contact to Base Unit
type of electrical connection	
<ul style="list-style-type: none"> • for main energy infeed 	Plug contact to Base Unit

<ul style="list-style-type: none"> • for load-side outgoing feeder • for supply voltage line-side 	Plug contact to Base Unit
	Plug contact to Base Unit
wire length for motor unshielded maximum	200 m
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor at 480 V rated value	0.4 A
operating voltage at AC at 60 Hz according to CSA and UL rated value	480 V
Certificates/ approvals	
General Product Approval	EMC



[Confirmation](#)



For use in hazardous locations	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	Marine / Shipping
---------------------------------------	--	----------------------------------	--------------------------	--------------------------



[Type Examination Certificate](#)



EG-Konf.

[Type Test Certificates/Test Report](#)



Marine / Shipping	other
--------------------------	--------------



LRS

[Confirmation](#)



Profibus

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

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

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=3RK1308-0CA00-0CP0>

Cax online generator

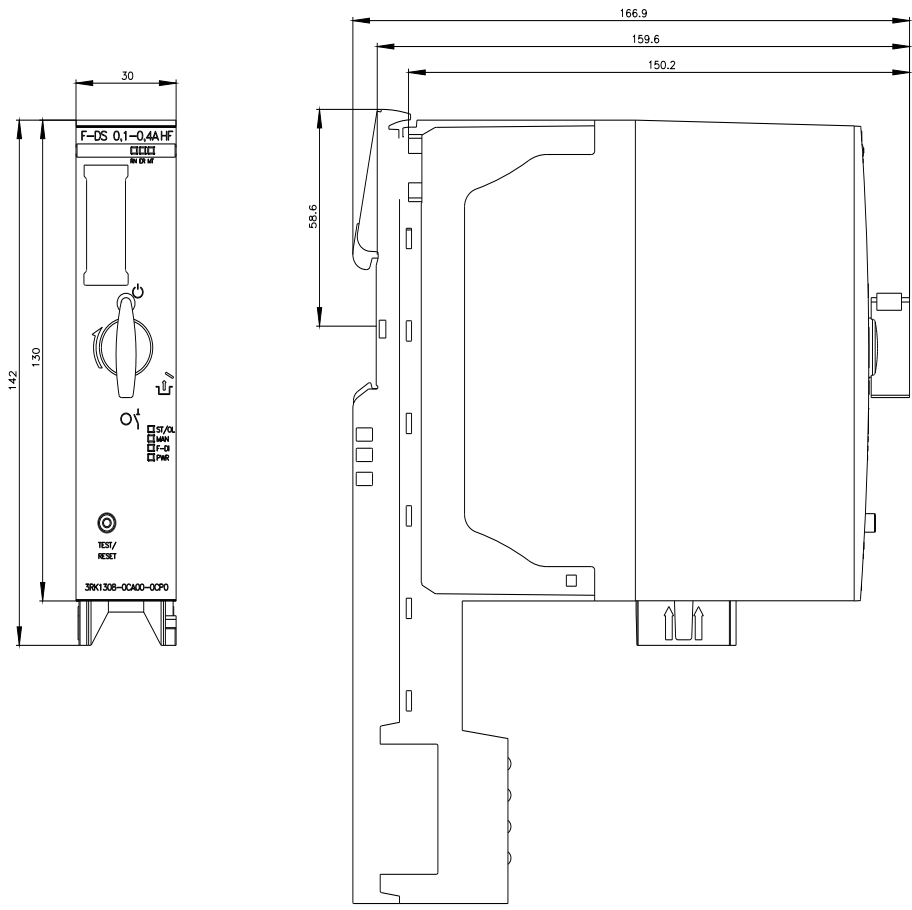
<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3RK1308-0CA00-0CP0>

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

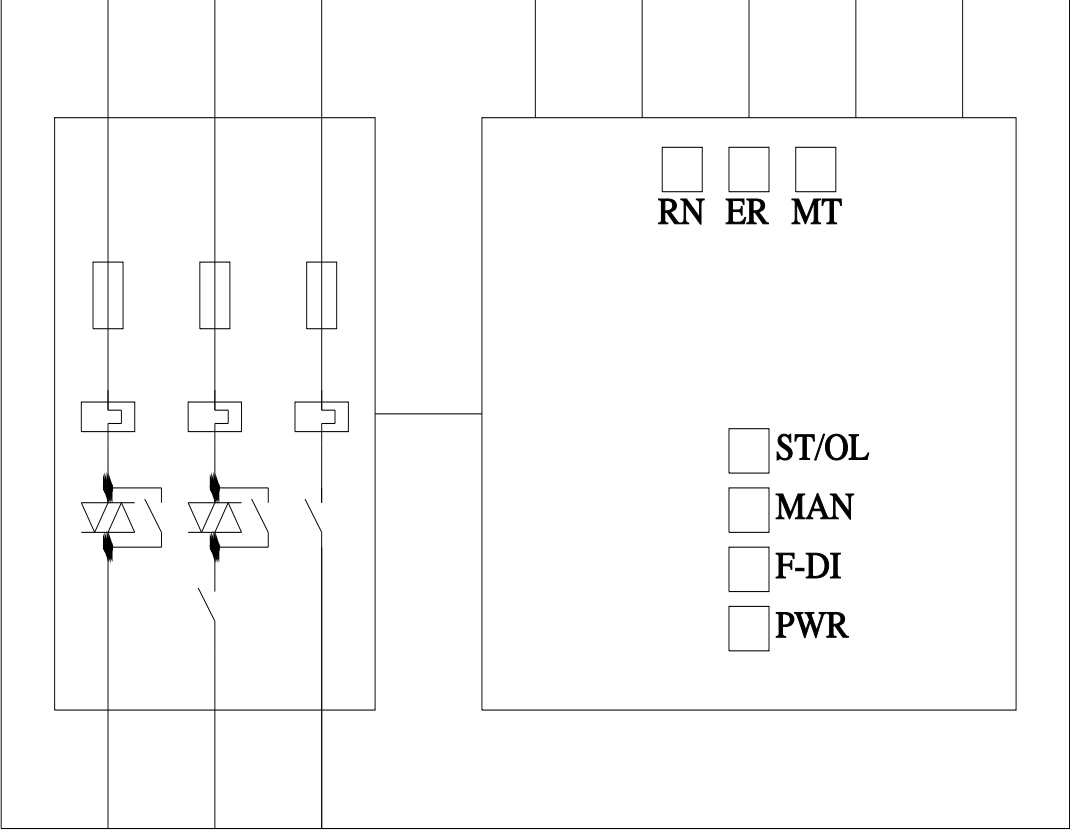
<https://support.industry.siemens.com/cs/ww/en/ps/3RK1308-0CA00-0CP0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1308-0CA00-0CP0&lang=en



-Q



last modified:

9/1/2023

