



Failsafe reversing starter High Feature; Electronic switching; Electronic overload protection up to 0.09 kW / 400 V; Adjustment range 0.1 .. 0.4 A; PROFIenergy; Option: 3DI/LC module

product brand name	SIMATIC
product category	Motor starter
product designation	Reversing starter
product type designation	ET 200SP
General technical data	
equipment variant according to IEC 60947-4-2	3
product function	Fail-safe reversing 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
operating frequency maximum	1 1/s
mechanical service life (operating cycles) of the main contacts typical	30 000 000
type of assignment	1
utilization category	
<ul style="list-style-type: none"> according to IEC 60947-4-2 	AC-53a: 0,4 A: (8-0,7: 70-32)
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	04/15/2016
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 4,4'-isopropylidenediphenol (Bisphenol A, BPA) - 80-05-7
product function	
<ul style="list-style-type: none"> direct start reverse starting 	Yes Yes
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	
product function suitable for safety function	Yes
suitability for use	
<ul style="list-style-type: none"> • safety-related switching on • safety-related switching OFF 	No Yes
safe state	Load circuit open
test wear-related service life necessary	Yes
function test interval maximum	0.083 a
diagnostics test interval by internal test function maximum	600 s
stop category according to IEC 60204-1	0
proportion of dangerous failures with high demand rate according to SN 31920	50 %
B10 value with high demand rate according to SN 31920	1 000 000
IEC 62061	
Safety Integrity Level (SIL) according to IEC 62061	3
ISO 13849	
performance level (PL) according to ISO 13849-1	e
category according to ISO 13849-1	4
overdimensioning according to ISO 13849-2 necessary	No
IEC 61508	
Safety Integrity Level (SIL) according to IEC 61508	SIL 3
safety device type according to IEC 61508-2	Type B
PFH according to IEC 61508 relating to SIL	6E-9 1/h
PFDAvg with low demand rate according to IEC 61508	8E-7
Safe failure fraction (SFF)	99.5 %
hardware fault tolerance according to IEC 61508	1
T1 value	
<ul style="list-style-type: none"> • of service life according to IEC 61508 	20 a
Electrical Safety	
touch protection against electrical shock	finger-safe
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe
ATEX	
Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX	SIL1
hardware fault tolerance according to IEC 61508 relating to ATEX	1
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
• note	4 via 3DI/LC module
• safety-related	1
type of input characteristic	Type 1 in accordance with EN 61131-2
input voltage at digital input	
• at DC rated value	24 V
• with signal <0> at DC	0 ... 5 V
• for signal <1> at DC	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	
• minimum permissible	20.4 V
• maximum permissible	28.8 V
supply voltage at DC rated value	24 V
consumed current for rated value of supply voltage	
• in standby mode of operation	95 mA
• during operation	160 mA
• at switching on of motor	250 mA
power loss [W] for rated value of supply voltage	
• in switching state OFF with bypass circuit	2.3 W
• 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	
• when switched off via control inputs maximum	55 ms
• when switched off via supply voltage maximum	120 ms
Power Electronics	
operational current	
• at 40 °C rated value	0.4 A
• at 50 °C rated value	0.4 A
• at 55 °C rated value	0.4 A
• 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	
• upwards	50 mm
• downwards	50 mm
Ambient conditions	
installation altitude at height above sea level maximum	4 000 m; For derating see manual
ambient temperature	
• during operation	-25 ... +60 °C; For derating see manual
• during storage	-40 ... +70 °C
• 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 • PROFINET protocol 	Yes 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 • supports PROFenergy shutdown 	Yes Yes
address space memory of address range	
<ul style="list-style-type: none"> • of the inputs • of the outputs 	4 byte 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 • 2 for digital input signals 	Pluggable module - accessory Plug contact to Base Unit
type of electrical connection	
<ul style="list-style-type: none"> • for main energy infeed • for load-side outgoing feeder • for supply voltage line-side 	Plug contact to Base Unit 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

Approvals Certificates

General Product Approval



[Confirmation](#)



EMV	For use in hazardous locations	Functional Safety	Test Certificates	Marine / Shipping
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[KC](#)



[Type Examination Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping	other	Environment	Industrial Communication
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[Confirmation](#)

[Environmental Confirmations](#)



Further information

Information on the packaging

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

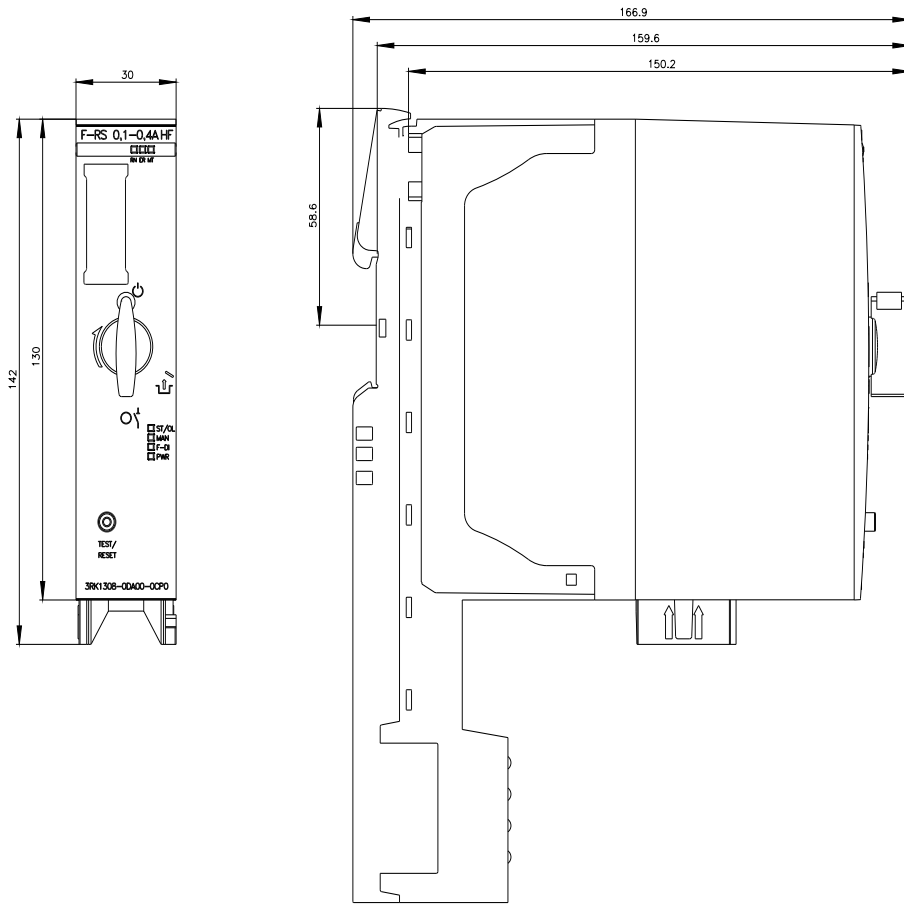
Information- and Downloadcenter (Catalogs, Brochures,...)

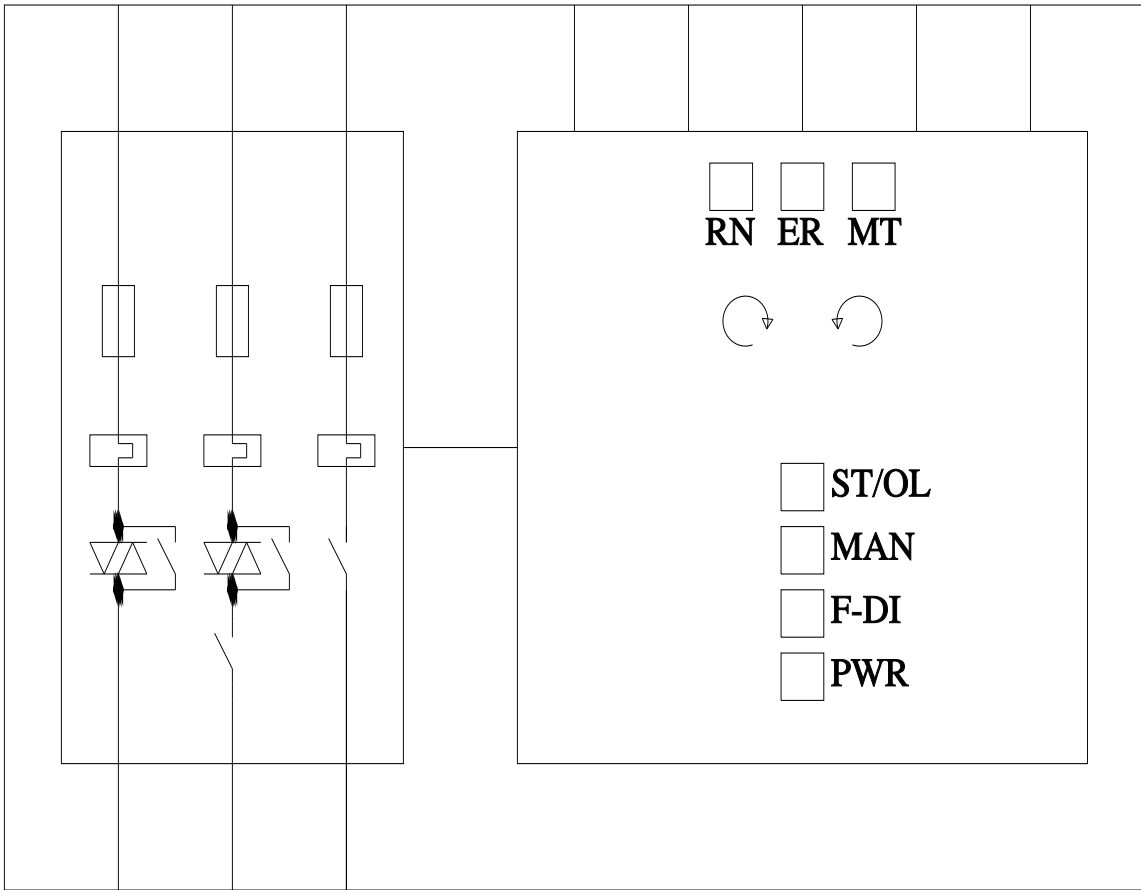
<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RK1308-ODA00-0CP0>

Cax online generator





last modified:

6/22/2024 