3RV2021-4FA10-Z W96

Data sheet



Circuit breaker size S0 for motor protection, Class 10 A-release 34...40 A N-release 480 A Screw terminal Standard switching capacity Multi-unit packaging Pack = 24 units

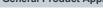


product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	S0
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
at AC in hot operating state	16.25 W
 at AC in hot operating state per pole 	5.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (operating cycles)	
 of the main contacts typical 	100 000
 of auxiliary contacts typical 	100 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1
Weight	0.193 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-20 +40 °C
during storage	-50 +80 °C
during transport	-50 +80 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	34 40 A
operating voltage	
• rated value	20 690 V
at AC-3 rated value maximum	690 V
	50 60 Hz

operational current rated value	40 A
operational current	
at AC-3 at 400 V rated value	40 A
operating power	
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 690 V rated value	39 kW
operating frequency	
at AC-3 maximum	15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	
 ground fault detection 	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
 at AC at 240 V rated value 	100 kA
• at AC at 400 V rated value	20 kA
 at AC at 500 V rated value 	6 kA
• at AC at 690 V rated value	3 kA
operating short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value	100 kA
• at 400 V rated value	10 kA
• at 500 V rated value	3 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	480 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	40 A
at 600 V rated value	40 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	3 hp
— at 230 V rated value	7.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	30 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 400 V	gG 63 A
• at 500 V	gG 63 A
• at 690 V	gG 63 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
	·
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
fastening method height	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm
fastening method height width	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm
fastening method height width depth	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm

— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	· ·
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	5 (1)
— downwards	30 mm
— upwards	30 mm
— upwards — at the side	9 mm
• for live parts at 500 V	311111
— downwards	30 mm
— upwards	30 mm
— upwards — at the side	9 mm
• for grounded parts at 690 V	5 111111
— downwards	70 mm
	70 mm
— upwards — backwards	0 mm
	30 mm
— at the side — forwards	0 mm
	VIIIII
• for live parts at 690 V	70 mm
— downwards	70 mm
— upwards	
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
• for main current circuit	screw-type terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
for AWG cables for main contacts	2x (16 12), 2x (14 8)
tightening torque	
for main contacts with screw-type terminals	2 2.5 N·m
design of screwdriver shaft	Diameter 5 to 6 mm
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
for main contacts	M4
Safety related data	
product function suitable for safety function	Yes
suitability for use	
safety-related switching on	No
safety-related switching OFF	Yes
service life maximum	10 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
with high demand rate according to SN 31920	50 %
B10 value with high demand rate according to SN 31920	5 000
failure rate [FIT] with low demand rate according to SN	50 FIT
31920	
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	-
safety device type according to IEC 61508-2	Type A

T1 value	
 for proof test interval or service life according to IEC 61508 	10 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, for vertical contact from the front
Display	
display version for switching status	Handle
Approvals Certificates	
General Product Approval	





Confirmation







<u>KC</u>

General Product Approval

For use in hazardous locations

Test Certificates

Marine / Shipping







Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping











Confirmation

other

other

Railway

Environment

Miscellaneous



Confirmation

Special Test Certificate







Environment

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?mlfb=3RV2021-4FA10-Z W96

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-4FA10-Z W96

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4FA10-Z W96

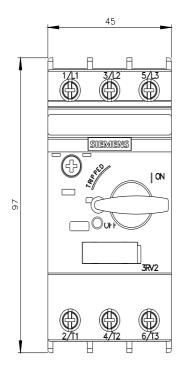
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

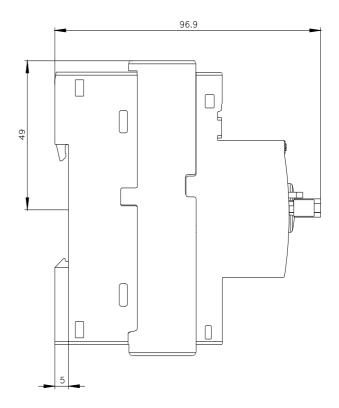
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-4FA10-Z W96&lang=en

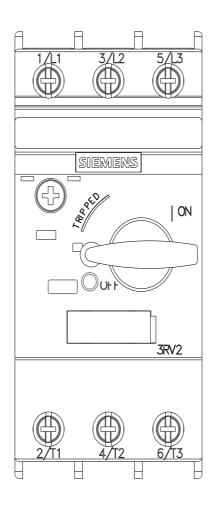
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-4FA10-Z W96/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-4FA10-Z W96&objecttype=14&gridview=view1









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