SIEMENS

Data sheet 3RV2011-0EA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.28...0.4 A N-release 5.2 A screw terminal Standard switching capacity



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	S00
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 	5.5 W
 at AC in hot operating state per pole 	1.8 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)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	0.28 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-20 +60 °C
during storage	-50 +80 °C
during transport	-50 +80 °C
relative humidity during operation	10 95 %
Environmental footprint	
global warming potential [CO2 eq] total	74.698 kg
global warming potential [CO2 eq] during manufacturing	1.98 kg
global warming potential [CO2 eq] during sales	0.134 kg
global warming potential [CO2 eq] during operation	72.7 kg
global warming potential [CO2 eq] after end of life	-0.116 kg
Siemens Eco Profile (SEP)	Siemens EcoTech
Main circuit	

number of noise for well-	
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	0.28 0.4 A
operating voltage	
• rated value	20 690 V
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	0.4 A
operational current	0.171
at AC-3 at 400 V rated value	0.4 A
at AC-3e at 400 V rated value	0.4 A
operating power	U.T.A
• at AC-3	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.09 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.2 kW
at AC-3e at AC-3e	V.L IVI
at AC-3e — at 230 V rated value	0.1 kW
— at 400 V rated value	0.09 kW
	0.1 kW
— at 500 V rated value	
— at 690 V rated value	0.2 kW
operating frequency	AF AIL
• at AC-3 maximum	15 1/h
at AC-3e 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	N.
around fault defection	No
ground fault detection	V
phase failure detection	Yes
phase failure detection trip class	CLASS 10
phase failure detection trip class design of the overload release	
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu)	CLASS 10 thermal
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value	CLASS 10 thermal 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value	CLASS 10 thermal 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value	CLASS 10 thermal 100 kA 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value	CLASS 10 thermal 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC	CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value	CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value	CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 240 V rated value at 400 V rated value at 500 V rated value	CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value	CLASS 10 thermal 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit	CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings	CLASS 10 thermal 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor	CLASS 10 thermal 100 kA 5.2 A
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value	CLASS 10 thermal 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value at 600 V rated value	CLASS 10 thermal 100 kA 5.2 A
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection	CLASS 10 thermal 100 kA 5.2 A
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection	CLASS 10 thermal 100 kA 5.2 A
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip	CLASS 10 thermal 100 kA 5.2 A
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection	CLASS 10 thermal 100 kA 5.2 A 0.4 A 0.4 A
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip	CLASS 10 thermal 100 kA 5.2 A 0.4 A 0.4 A
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions	CLASS 10 thermal 100 kA 5.2 A Ves magnetic
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 500 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position	CLASS 10 thermal 100 kA
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method	CLASS 10 thermal 100 kA 5.2 A 0.4 A 0.4 A Yes magnetic any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height	CLASS 10 thermal 100 kA 5.2 A 0.4 A 0.4 A Yes magnetic any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm

 with side-by-side mounting at the side 	0 mm
 for grounded parts at 400 V 	
— 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	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
● for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
for live parts at 690 V	V 11111
— downwards	50 mm
	50 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 (0,75 2,5 mm²), 2x 4 mm²
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for main contacts	2x (18 14), 2x 12
tightening torque	
for main contacts with screw-type terminals	0.8 1.2 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	M3
Safety related data	
product function suitable for safety function	Yes
suitability for use	160
-	No
safety-related switching on safety-related switching OFF	No You
safety-related switching OFF service life maximum	Yes
service life maximum	10.3
toot waar ralated comics life necessary:	10 a
test wear-related service life necessary	10 a Yes
proportion of dangerous failures	Yes
proportion of dangerous failures • with low demand rate according to SN 31920	Yes 40 %
 proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 	Yes 40 % 50 %
 proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 	Yes 40 % 50 % 5 000
proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN	Yes 40 % 50 %
proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920	Yes 40 % 50 % 5 000
proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849	Yes 40 % 50 % 5 000 50 FIT
proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920	Yes 40 % 50 % 5 000

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











Miscellaneous

other

other

Railway

Environment

Confirmation



Special Test Certific-

Confirmation



Siemens EcoTech



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=3RV2011-0EA10

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2011-0EA10}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0EA10

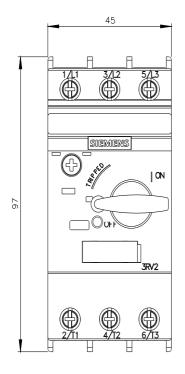
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

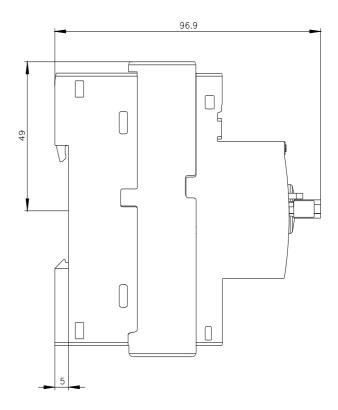
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0EA10&lang=en

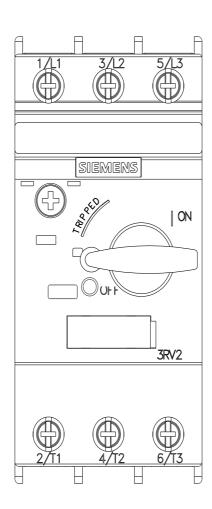
Characteristic: Tripping characteristics, I²t, Let-through current

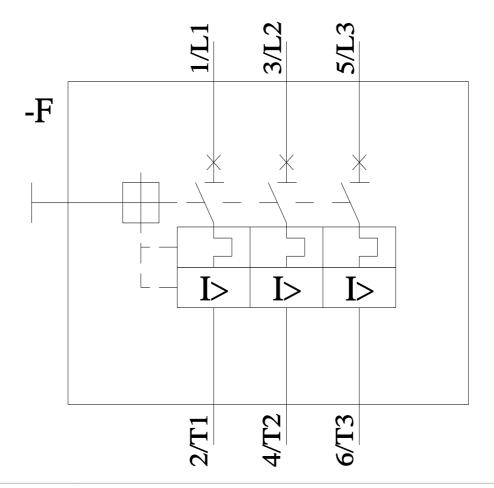
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0EA10/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0EA10&objecttype=14&gridview=view1









last modified: 11/6/2024 🖸