## **SIEMENS**

Data sheet 3RV1011-0KA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.9...1.25 A N-release 16 A Screw terminal Standard switching capacity

	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV1
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	5.5 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	1.8 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
mechanical service life (operating cycles)	
of the main contacts typical	100 000
<ul> <li>of auxiliary contacts typical</li> </ul>	100 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	01/01/2013
SVHC substance name	Lead - 7439-92-1
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
ambient temperature  • during operation	-20 +60 °C
-	-20 +60 °C -50 +80 °C
during operation	
<ul><li>during operation</li><li>during storage</li></ul>	-50 +80 °C
<ul><li>during operation</li><li>during storage</li><li>during transport</li></ul>	-50 +80 °C -50 +80 °C
<ul> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>relative humidity during operation</li> </ul>	-50 +80 °C -50 +80 °C
during operation     during storage     during transport relative humidity during operation  Main circuit	-50 +80 °C -50 +80 °C 10 95 %
during operation     during storage     during transport relative humidity during operation  Main circuit number of poles for main current circuit adjustable current response value current of the current-	-50 +80 °C -50 +80 °C 10 95 %
during operation     during storage     during transport relative humidity during operation  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release	-50 +80 °C -50 +80 °C 10 95 %
during operation     during storage     during transport relative humidity during operation      Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage	-50 +80 °C -50 +80 °C 10 95 % 3 0.9 1.25 A
during operation     during storage     during transport relative humidity during operation  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage     rated value	-50 +80 °C -50 +80 °C 10 95 % 3 0.9 1.25 A
during operation     during storage     during transport relative humidity during operation  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage     rated value     at AC-3 rated value maximum	-50 +80 °C -50 +80 °C 10 95 % 3 0.9 1.25 A 20 690 V 690 V
during operation     during storage     during transport relative humidity during operation  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage     rated value     at AC-3 rated value maximum     at AC-3e rated value maximum	-50 +80 °C -50 +80 °C 10 95 % 3 0.9 1.25 A 20 690 V 690 V
during operation     during storage     during transport relative humidity during operation  Main circuit  number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage     rated value     at AC-3 rated value maximum     at AC-3e rated value maximum operating frequency rated value	-50 +80 °C -50 +80 °C 10 95 % 3 0.9 1.25 A 20 690 V 690 V 690 V 50 60 Hz
during operation     during storage     during transport relative humidity during operation      Main circuit      number of poles for main current circuit     adjustable current response value current of the current-dependent overload release     operating voltage	-50 +80 °C -50 +80 °C 10 95 % 3 0.9 1.25 A 20 690 V 690 V 690 V 50 60 Hz

operating power	
• at AC-3	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.37 kW
— at 500 V rated value	0.6 kW
— at 690 V rated value	0.8 kW
• at AC-3e	
— at 230 V rated value	0.2 kW
— at 400 V rated value	0.37 kW
— at 500 V rated value	0.6 kW
— at 690 V rated value	0.8 kW
operating frequency	
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	
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	100 kA
at AC at 500 V rated value	100 kA
at AC at 690 V rated value	2 kA
operating short-circuit current breaking capacity (Ics) at AC	
at 240 V rated value	100 kA
at 400 V rated value	100 kA
at 500 V rated value	100 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	16 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	1.25 A
at 600 V rated value	1.25 A
yielded mechanical performance [hp]	1.2071
• for 3-phase AC motor	
— at 460/480 V rated value	1 hp
— at 575/600 V rated value	0.5 hp
Short-circuit protection	0.0 Hp
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the short-circuit trip  design of the fuse link for IT network for short-circuit protection of the main circuit	magnetic
• at 240 V	none required
• at 400 V	gL/gG 20 A
• at 500 V	gL/gG 16 A
• at 690 V	gL/gG 16 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	90 mm
width	45 mm
depth	75 mm
required spacing	
• for grounded parts at 400 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
— at the side	V IIIII

• for live parts at 400 V	
— downwards	20 mm
— upwards	20 mm
·	
— at the side	9 mm
• for grounded parts at 500 V	00
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
● for live parts at 500 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	Top and bottom
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
tightening torque	
for main contacts with screw-type terminals	0.8 1.2 N·m
for auxiliary contacts with screw-type terminals	0.8 1.2 N·m
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	1 OZIGITY SIZO Z
• for main contacts	M3
Safety related data	WIO
	Yes
product function suitable for safety function	165
suitability for use	No
safety-related switching on	No V
safety-related switching OFF	Yes
service life maximum	10 a
test wear-related service life necessary	Yes
proportion of dangerous failures	40.07
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 31920	50 FIT
ISO 13849	
	3
device type according to ISO 13849-1	
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	Time A
safety device type according to IEC 61508-2	Type A
Electrical Safety	

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529

Display

display version for switching status

Approvals Certificates

## General Product Approval





Confirmation





<u>KC</u>

General Product Approval

For use in hazardous locations

**Test Certificates** 

Marine / Shipping







Type Test Certificates/Test Report

Special Test Certificate



## Marine / Shipping



**Miscellaneous** 



Confirmation









other



Special Test Certificate

Railway

Environmental Confirmations

Environment

## **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=3RV1011-0KA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0KA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0KA10

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

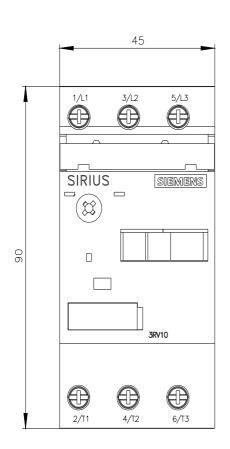
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV1011-0KA10\&lang=en}}$ 

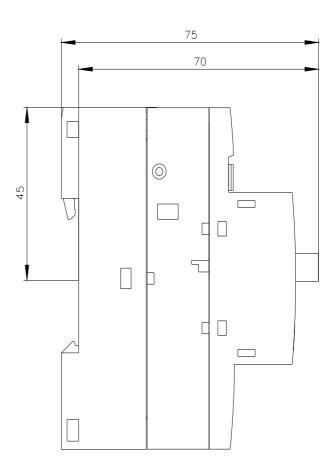
Characteristic: Tripping characteristics, I²t, Let-through current

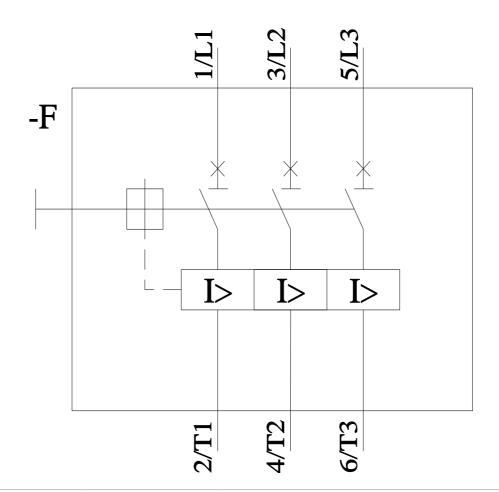
 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0KA10/char}$ 

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0KA10&objecttype=14&gridview=view1







last modified:

4/12/2024

