



Circuit breaker size S00 for motor protection, CLASS 10 A-release 4.5...6.3 A N-release 82 A Screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC

product brand name	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	
• at AC in hot operating state	7.25 W
• at AC in hot operating state per pole	2.4 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
• of auxiliary contacts typical	100 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibittance (Date)	01/01/2013
Net Weight	300 g
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 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	4.5 ... 6.3 A
type of voltage for main current circuit	AC
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	6.3 A
operational current	

• at AC-3 at 400 V rated value	6.3 A
• at AC-3e at 400 V rated value	6.3 A
operating power	
• at AC-3 — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	1.5 kW 2.2 kW 3 kW 5.5 kW
• at AC-3e — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value	1.5 kW 2.2 kW 3 kW 5.5 kW
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
type of voltage for auxiliary and control circuit	AC/DC
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 110 V	2 A
• at 120 V	2 A
• at 125 V	2 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 60 V	0.15 A
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	3 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	3 kA
• at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	82 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	6.3 A
• at 600 V rated value	6.3 A
yielded mechanical performance [hp]	
• for single-phase AC motor — at 110/120 V rated value — at 230 V rated value	0.25 hp 0.5 hp
• for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value	1 hp 1.5 hp

— at 460/480 V rated value	3 hp	
— at 575/600 V rated value	5 hp	
contact rating of auxiliary contacts according to UL	C300 / R300	
Short-circuit protection		
product function short circuit protection	Yes	
design of the short-circuit trip	magnetic	
design of the fuse link	fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current I _k < 400 A)	
• for short-circuit protection of the auxiliary switch required		
design of the fuse link for IT network for short-circuit protection of the main circuit		
• at 240 V		none required
• at 400 V		gG 50 A
• at 500 V	gG 40 A	
• at 690 V	gG 40 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
• for live parts at 400 V		
— downwards		20 mm
— upwards		20 mm
— at the side		9 mm
• for grounded parts at 500 V		
— 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
• for grounded parts at 690 V		
— 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	screw-type terminals	
• for main current circuit		
• for auxiliary and control 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 (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x (1 ... 4 mm²)
— finely stranded with core end processing	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 mm ²), 2x (0.75 ... 2.5 mm ²)
tightening torque	
- for main contacts with screw-type terminals - for auxiliary contacts with screw-type terminals	0.8 ... 1.2 N·m 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 - of the auxiliary and control contacts	M3 M3

Safety related data	
product function suitable for safety function	Yes
suitability for use	
- safety-related switching on - safety-related switching OFF	No 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 - with high demand rate according to SN 31920	40 % 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	
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
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	Rocker switch

Approvals Certificates	
Environment	General Product Approval

[Environmental Con-
firmations](#)



For use in hazardous locations	Maritime application

Maritime application	other
	Confirmation
	Miscellaneous

Further information	
Information on the packaging	
https://support.industry.siemens.com/cs/ww/en/view/109813875	
Information for data generation and storage	

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RV1011-1GA15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1GA15>

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

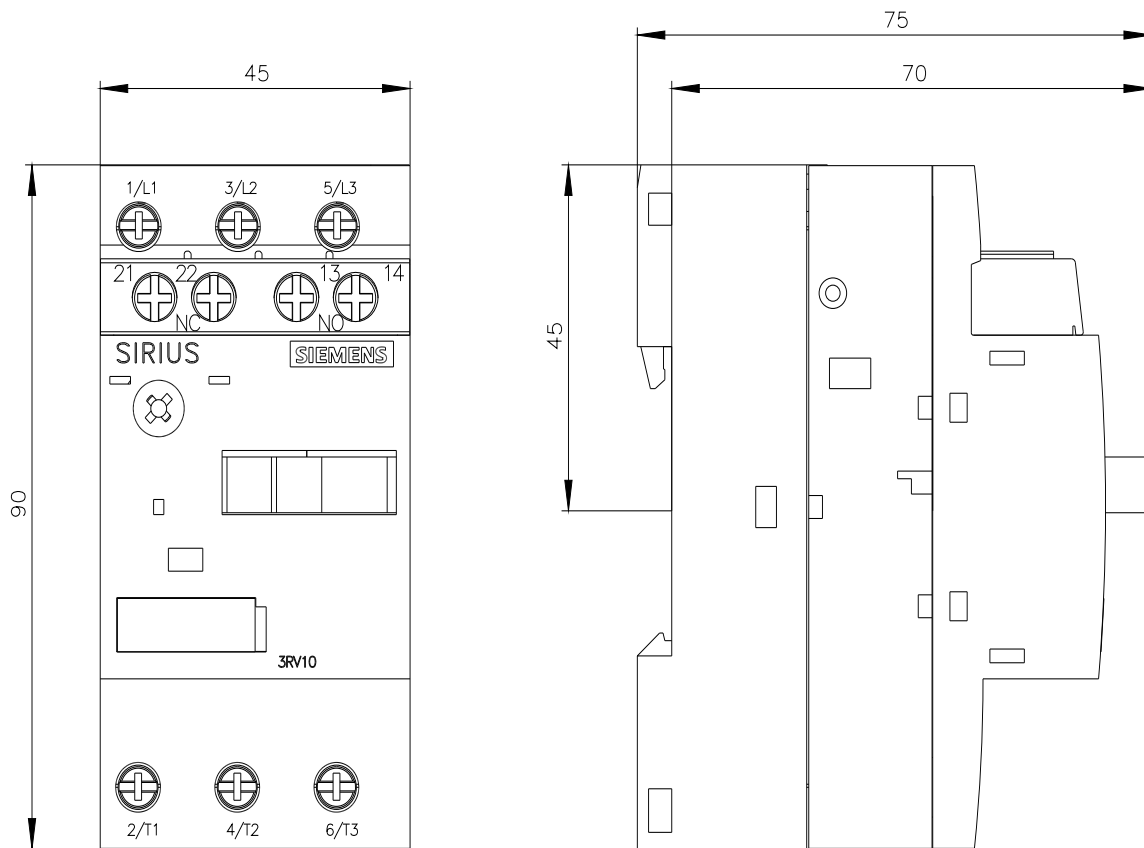
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1GA15&lang=en

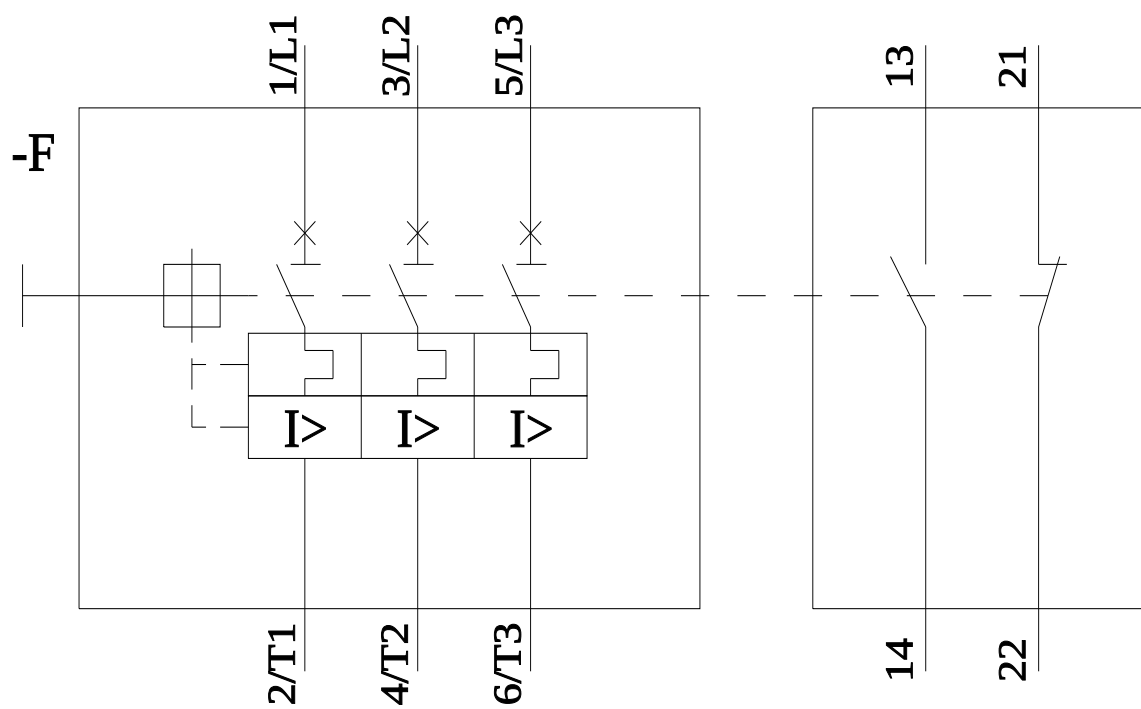
Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1GA15>

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>





last modified:

11/11/2025