

Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.11...0.16 A N-release 2.1 A Screw terminal Standard switching capacity



Figure similar

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	Yes
• Auxiliary switch	Yes
Power loss [W] total typical	5 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• in networks with grounded star point between main and auxiliary circuit	400 V
• in networks with grounded star point between main and auxiliary circuit	400 V

Protection class IP	
• on the front	IP20
• of the terminal	IP00
Mechanical service life (switching cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Type of protection	Increased safety
Certificate of suitability ATEX	Yes
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	Q

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
Temperature compensation	-20 ... +60 °C
Relative humidity during operation	10 ... 95 %

Main circuit

Number of poles for main current circuit	3
Adjustable pick-up value current of the current-dependent overload release	0.11 ... 0.16 A
Operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
Operating frequency rated value	50 ... 60 Hz
Operating current rated value	0.16 A
Operating current	
• at AC-3	
— at 400 V rated value	0.16 A
Operating power	
• at AC-3	
— at 230 V rated value	25 W
— at 400 V rated value	40 W
— at 500 V rated value	60 W
— at 690 V rated value	60 W
Operating frequency	
• at AC-3 maximum	15 1/h

Auxiliary circuit	
Number of CO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Protective and monitoring functions	
Product function	
<ul style="list-style-type: none"> • Ground fault detection 	No
<ul style="list-style-type: none"> • Phase failure detection 	Yes
Trip class	CLASS 10
Design of the overload release	thermal
Operational short-circuit current breaking capacity (Ics) at AC	
<ul style="list-style-type: none"> • at 240 V rated value 	100 000 A
<ul style="list-style-type: none"> • at 400 V rated value 	100 000 A
<ul style="list-style-type: none"> • at 500 V rated value 	100 000 A
<ul style="list-style-type: none"> • at 690 V rated value 	100 000 A
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • at AC at 240 V rated value 	100 kA
<ul style="list-style-type: none"> • at AC at 400 V rated value 	100 kA
<ul style="list-style-type: none"> • at AC at 500 V rated value 	100 kA
<ul style="list-style-type: none"> • at AC at 690 V rated value 	100 kA
Breaking capacity short-circuit current (Icn)	
<ul style="list-style-type: none"> • at 1 current path at DC at 150 V rated value 	10 kA
<ul style="list-style-type: none"> • with 2 current paths in series at DC at 300 V rated value 	10 kA
<ul style="list-style-type: none"> • with 3 current paths in series at DC at 450 V rated value 	10 kA
Response value current	
<ul style="list-style-type: none"> • of instantaneous short-circuit trip unit 	2.1 A
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V rated value 	0.16 A
<ul style="list-style-type: none"> • at 600 V rated value 	0.16 A
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	
<ul style="list-style-type: none"> • at 240 V 	none required
<ul style="list-style-type: none"> • at 400 V 	None required
<ul style="list-style-type: none"> • at 500 V 	None required
<ul style="list-style-type: none"> • at 690 V 	None required

Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Height	90 mm
Width	45 mm
Depth	75 mm

Connections/Terminals	
Product function <ul style="list-style-type: none"> removable terminal for auxiliary and control circuit 	No
Type of electrical connection <ul style="list-style-type: none"> for main current circuit 	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections <ul style="list-style-type: none"> for main contacts <ul style="list-style-type: none"> single or multi-stranded finely stranded with core end processing 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x (1 ... 4 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
Type of connectable conductor cross-sections <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> single or multi-stranded 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
Tightening torque <ul style="list-style-type: none"> 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
Size of the screwdriver tip	Pozidriv 2
Design of the thread of the connection screw <ul style="list-style-type: none"> for main contacts 	M3

Safety related data	
B10 value <ul style="list-style-type: none"> with high demand rate acc. to SN 31920 	5 000
Proportion of dangerous failures <ul style="list-style-type: none"> with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 	50 % 50 %
Failure rate [FIT] <ul style="list-style-type: none"> with low demand rate acc. to SN 31920 	50 FIT
Display version <ul style="list-style-type: none"> for switching status 	Rocker switch

Certificates/approvals

General Product Approval	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)



Marine / Shipping	other
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[Confirmation](#)

[Miscellaneous](#)



Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1011-0AA10>

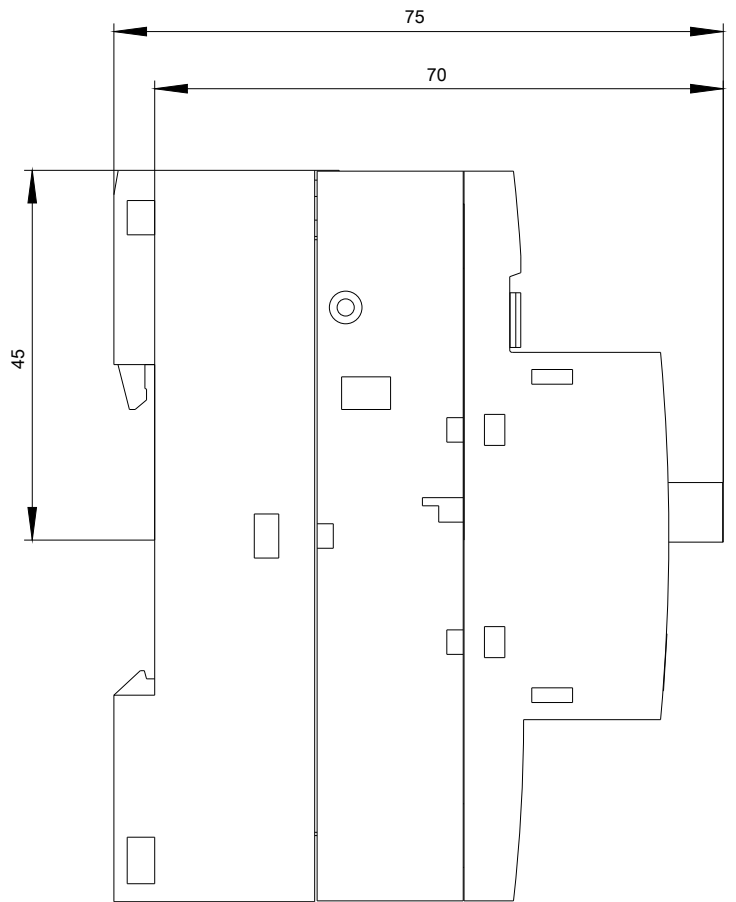
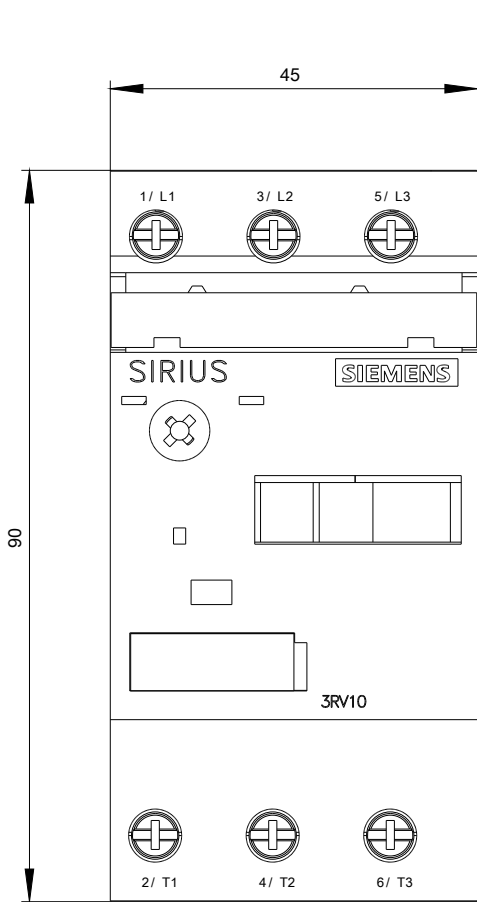
Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0AA10>

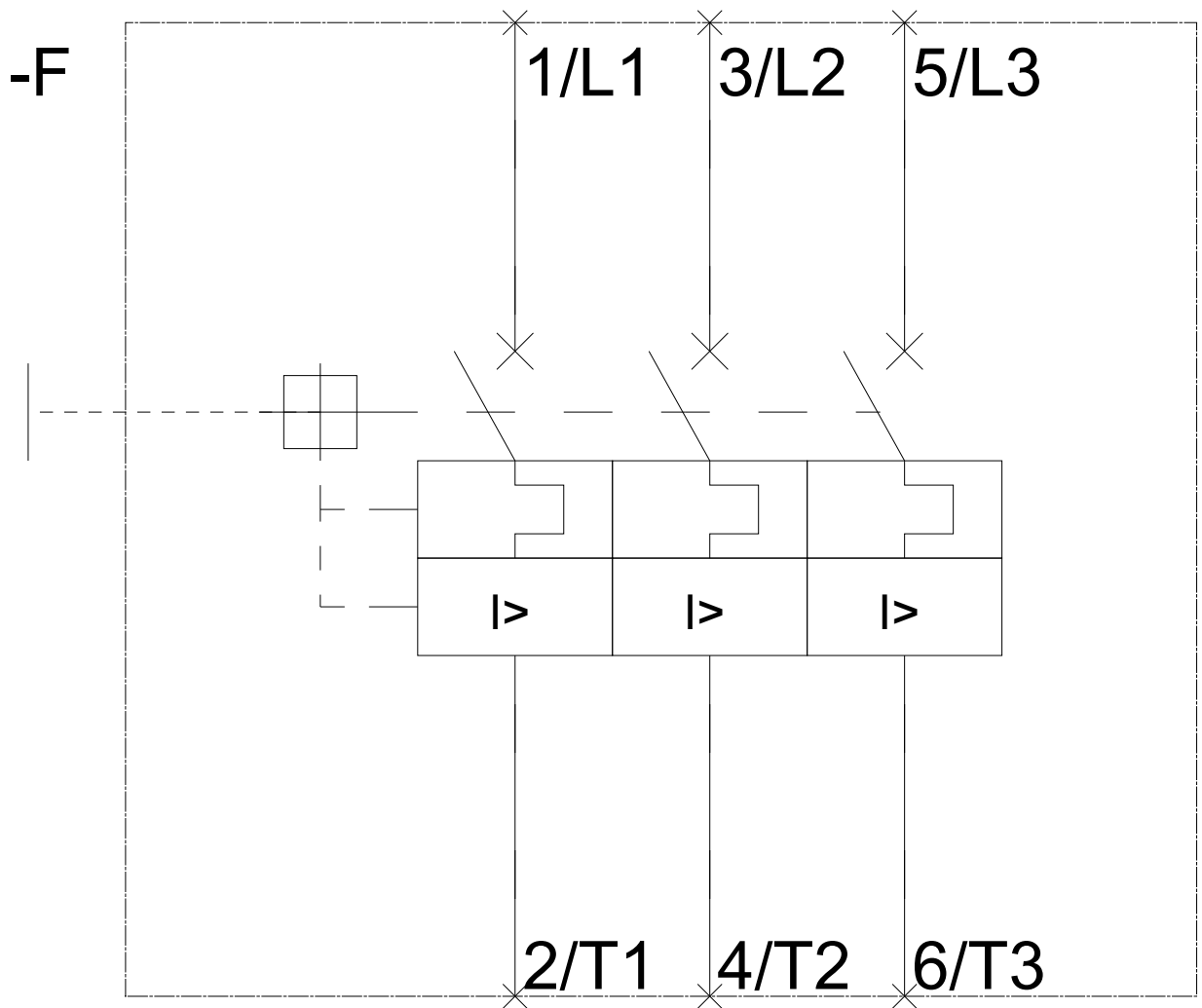
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0AA10>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0AA10&lang=en

Characteristic: Tripping characteristics, I^t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0AA10/char>

Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0AA10&objecttype=14&gridview=view1>





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