SIEMENS

Data sheet 3RV1011-1AA10

CIRCUIT-BREAKER SIZE S00, FOR MOTOR PROTECTION, CLASS 10, A-REL.1.1...1.6A, N-REL. 21A, 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

Canaval tachwisel data	
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] total typical	6 W
Insulation voltage with degree of pollution 3 rated	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 in networks with grounded star point between 	400 V
main and auxiliary circuit	
• in networks with grounded star point between	400 V
·	
main and auxiliary circuit	

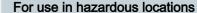
Amblent temperature • during operation -20 +60 °C • during storage -50 +80 °C • during transport -50 +80 °C Temperature compensation -20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release 1.1 1.6 A Operating voltage • rated value • rated value 690 V • at AC-3 rated value maximum 690 V Operating current rated value 50 60 Hz Operating current • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 400 V rated value 550 W — at 500 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0		
of the terminal IPD0 Mechanical service life (switching cycles) of druxiliary contacts typical 100 000 electrical endurance (switching cycles) • typical 100 000 • during state electrical shock 100 inger-safe Equipment marking acc. to DIN EN 81346-2 • during operation 20 +60 °C • during storage 50 +80 °C • during storage 50 +80 °C • during storage 50 +80 °C • during the storage 70 +80 °C Temperature compensation 20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release 11.1 1.6 A dependent overload release 600 V • at AC-3 rated value maximum 600 V Operating frequency rated value 50 60 Hz Operating current 4 • at AC-3 — at 400 V rated value 750 W — at 400 V rated value 750 W — at 400 V rated value 750 W — at 500 V rated value 750 W — at 690 V rated value 750 W Operating frequency	Protection class IP	
Mechanical service life (ewitching cycles) • of the main contacts typical • of auxiliary contacts typical • of protection Type of protection Type of protection Type of protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Q Ambient conditions Ambient temperature • during operation • during storage • during transport • during storage • during transport -50 +60 °C Temperature compensation -20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum • at AC-3 - at 400 V rated value - at 600 V rated value - at 400 V rated value - at 600 V rated va	• on the front	IP20
• of the main contacts typical • of auxiliary contacts • others are auxiliary contacts • others are auxiliary contacts	of the terminal	IP00
of auxiliary contacts typical Electrical endurance (switching cycles) • typical 100 000 Type of protection Increased safety Frotection against electrical shock Equipment marking acc. to DIN EN 81346-2 Ambient conditions Ambient conditions Ambient temperature • during operation • during storage • during transport • during transport - 50 +80 °C - 40 +60 °C Temperature compensation -20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value Operating current • at AC-3 — at 400 V rated value — at 690 V valed value — at 690 V valed value — at 400 V rated value — at 690 V rated value	Mechanical service life (switching cycles)	
Electrical endurance (switching cycles) • typical Type of protection Type of protection Type of protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Anhient conditions Ambient temperature • during operation • during storage • during transport Temperature compensation • 20 +60 °C • during transport Temperature compensation • 20 +60 °C Temperature compensation • 20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current- dependent overload release Operating voltage • rated value • at AC-3 rated value maximum • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value — at 690 V value value — at 690 V rated	 of the main contacts typical 	100 000
• typical 100 000 Type of protection Increased safety Protection against electrical shock finger-safe Equipment marking acc. to DIN EN 81346-2 Q Ambient conditions Ambient temperature • during operation -20 +60 °C • during storage -50 +80 °C • during transport -50 +80 °C Temperature compensation -20 +60 °C Main circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value - 890 ∨ • at AC-3 rated value maximum - 690 ∨ Operating current rated value - 1.6 A Operating current - 1.6 A Operating current - 1.6 A Operating power • at AC-3 at 230 ∨ rated value - 250 W — at 500 ∨ rated value - 750 W Operating frequency - 1.5 √ W — at 500 ∨ rated value - 750 W Operating frequency - 1.5 √ W — at 500 ∨ rated value - 750 W Operating frequency - 1.5 √ W Operating frequency - 1.5 √ W — 1.5 √ W Operating frequency - 1.5 √ W Operating fr	 of auxiliary contacts typical 	100 000
Type of protection Increased safety Protection against electrical shock finger-safe Equipment marking acc. to DIN EN 81346-2 Q Ambient conditions Ambient temperature • during operation -20 +60 °C • during storage -50 +80 °C • during transport -50 +80 °C • during transport -20 +60 °C Temperature compensation -20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value 690 V • at AC-3 rated value maximum 690 V Operating current rated value 1.6 A Operating current • at AC-3 - at 400 V rated value 1.6 A Operating power • at AC-3 - at 230 V rated value 550 W - at 500 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	Electrical endurance (switching cycles)	
Protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Ambient conditions Ambient temperature • during operation • during storage • during transport • during transport • at AC-3 rated value current of the current- • dependent overload release Operating frequency rated value • at AC-3 rated value maximum • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value • at AC-3 rated value • at	• typical	100 000
Equipment marking acc. to DIN EN 81346-2 Q	Type of protection	Increased safety
Ambient conditions Ambient temperature • during operation • during storage • during transport -50 +80 °C -50 +80 °	Protection against electrical shock	finger-safe
Amblent temperature • during operation -20 +60 °C • during storage -50 +80 °C • during transport -50 +80 °C Temperature compensation -20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release 1.1 1.6 A Operating voltage • rated value • rated value 690 V • at AC-3 rated value maximum 690 V Operating current rated value 50 60 Hz Operating current • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 400 V rated value 550 W — at 500 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	Equipment marking acc. to DIN EN 81346-2	Q
• during operation • during storage • during transport • 550 +80 °C • during transport • 550 +80 °C Temperature compensation ### Accompany and the current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating current rated value • at AC-3 — at 400 V rated value • at AC-3 — at 230 V rated value — at 500 V rated value — at 690 V rated value Operating frequency • at AC-3 — at 400 V rated value — at 500 V rated value — at 690 V rated value • at AC-3 — at 400 V rated value • at AC-3 — at 400 V rated value — at 500 V rated value — at 690 V rated value • at AC-3 maximum ##################################	Ambient conditions	
	Ambient temperature	
during transport	during operation	-20 +60 °C
Temperature compensation -20 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current- dependent overload release Operating voltage • rated value • at AC-3 rated value maximum 690 V Operating frequency rated value 50 60 Hz Operating current rated value 1.6 A Operating current • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 230 V rated value 250 W — at 500 V rated value 550 W — at 500 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	during storage	-50 +80 °C
Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release 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 1.6 A Operating current • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 400 V rated value 250 W — at 500 V rated value 550 W — at 500 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	during transport	-50 +80 °C
Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 1.6 A Operating current rated value • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 230 V rated value 250 W — at 400 V rated value 550 W — at 690 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts	Temperature compensation	-20 +60 °C
Adjustable pick-up value current of the current- dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value • at AC-3 rated value • at AC-3 Operating current rated value 1.6 A Operating current • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 400 V rated value 250 W — at 400 V rated value 550 W — at 400 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts • for auxiliary contacts	Main circuit	
dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value • at AC-3 — at 400 V rated value • at AC-3 — at 230 V rated value — at 400 V rated value 550 W — at 500 V rated value 750 W Operating frequency • at AC-3 rated value 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts • og 0 V 690 V 69	Number of poles for main current circuit	3
rated value at AC-3 rated value maximum 690 V Operating frequency rated value 50 60 Hz Operating current rated value 1.6 A Operating current at AC-3 — at 400 V rated value 1.6 A Operating power at AC-3 — at 230 V rated value 250 W — at 400 V rated value 550 W — at 500 V rated value 750 W Operating frequency at AC-3 maximum 15 1/h Auxillary circuit Number of CO contacts for auxiliary contacts for auxiliary contacts		1.1 1.6 A
at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 1.6 A Operating current at AC-3 — at 400 V rated value 1.6 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 — at 690 V rated value T50 W Operating frequency at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts for auxiliary contacts 0	Operating voltage	
Operating frequency rated value Operating current rated value 1.6 A Operating current • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 230 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 — at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	• rated value	690 V
Operating current rated value Operating current at AC-3 — at 400 V rated value Operating power at AC-3 — at 230 V rated value — at 400 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value — at 690 V rated value — at AC-3 maximum To W Operating frequency at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts for auxiliary contacts 0	 at AC-3 rated value maximum 	690 V
Operating current • at AC-3 — at 400 V rated value 1.6 A Operating power • at AC-3 — at 230 V rated value — at 400 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value — at 690 V rated value T50 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts • for auxiliary contacts	Operating frequency rated value	50 60 Hz
• at AC-3 — at 400 V rated value 1.6 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 — at 690 V rated value Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	Operating current rated value	1.6 A
- at 400 V rated value Operating power ■ at AC-3 — at 230 V rated value — at 400 V rated value 550 W — at 500 V rated value — at 690 V rated value 750 W Operating frequency ■ at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts ■ for auxiliary contacts ■ for auxiliary contacts 0	Operating current	
Operating power • at AC-3 — at 230 V rated value	• at AC-3	
at AC-3 — at 230 V rated value — at 400 V rated value 550 W — at 500 V rated value 750 W — at 690 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts • for auxiliary contacts 0	— at 400 V rated value	1.6 A
 — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value T50 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0 		
— at 400 V rated value 550 W — at 500 V rated value 750 W — at 690 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	• at AC-3	
— at 500 V rated value 750 W — at 690 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts • for auxiliary contacts	— at 230 V rated value	250 W
— at 690 V rated value 750 W Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	— at 400 V rated value	550 W
Operating frequency • at AC-3 maximum 15 1/h Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	— at 500 V rated value	750 W
• at AC-3 maximum Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	— at 690 V rated value	750 W
Auxiliary circuit Number of CO contacts • for auxiliary contacts 0	Operating frequency	
Number of CO contacts ● for auxiliary contacts 0	• at AC-3 maximum	15 1/h
• for auxiliary contacts 0	Auxiliary circuit	
Protective and monitoring functions	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
Operational short-circuit current breaking capacity	thermal
(Ics) at AC	
• at 240 V rated value	100 000 A
• at 400 V rated value	100 000 A
● at 500 V rated value	100 000 A
• at 690 V rated value	2 000 A
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
Breaking capacity short-circuit current (Icn)	
• at 1 current path at DC at 150 V rated value	10 kA
 with 2 current paths in series at DC at 300 V rated value 	10 kA
• with 3 current paths in series at DC at 450 V	10 kA
rated value	10.00
rated value	
rated value UL/CSA ratings	1.6 A
rated value UL/CSA ratings Full-load current (FLA) for three-phase AC motor	
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value	1.6 A
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value	1.6 A
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp]	1.6 A
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor	1.6 A 1.6 A
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value	1.6 A 1.6 A
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor	1.6 A 1.6 A 0.1 hp
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value	1.6 A 1.6 A 0.1 hp 0.75 hp
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value	1.6 A 1.6 A 0.1 hp 0.75 hp
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value	1.6 A 1.6 A 0.1 hp 0.75 hp 0.75 hp
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection Product function Short circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit	1.6 A 1.6 A 0.1 hp 0.75 hp 0.75 hp
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection Product function Short circuit protection Design of the short-circuit trip	1.6 A 1.6 A 0.1 hp 0.75 hp 0.75 hp
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection Product function Short circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit	1.6 A 1.6 A 0.1 hp 0.75 hp 0.75 hp
rated value JL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection Product function Short circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit protection of the main circuit	1.6 A 1.6 A 0.1 hp 0.75 hp 0.75 hp Test magnetic
rated value UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value • at 600 V rated value Yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for three-phase AC motor — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection Product function Short circuit protection Design of the short-circuit trip Design of the fuse link for IT network for short-circuit protection of the main circuit • at 240 V	1.6 A 1.6 A 0.1 hp 0.75 hp 0.75 hp Tes magnetic

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	81 mm
Connections/Terminals	
Product function	
 removable terminal for auxiliary and control circuit 	No
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	
— single or multi-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	
— single or multi-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 2
Safety related data	
B10 value	
 with high demand rate acc. to SN 31920 	5 000
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	50 %
 with high demand rate acc. to SN 31920 	50 %
Failure rate [FIT]	
 with low demand rate acc. to SN 31920 	50 FIT
Display version	
• for switching status	Rocker switch

Certificates/approvals

General Product Approval















IECEx

Declaration	of
Conformity	

Test Certificates Marine / Shipping













other

Marine / Shipping









Miscellaneous

Environmental Confirmations

other

Confirmation



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=3RV1011-1AA10

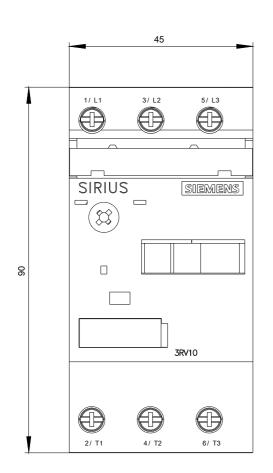
Cax online generator

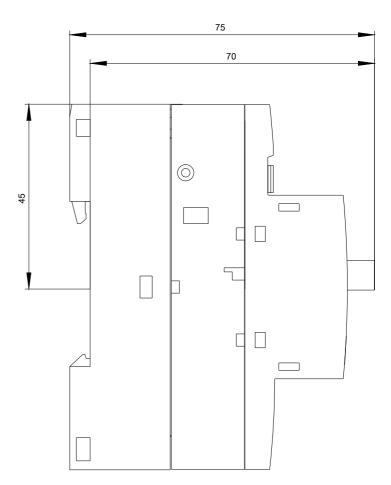
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1AA10

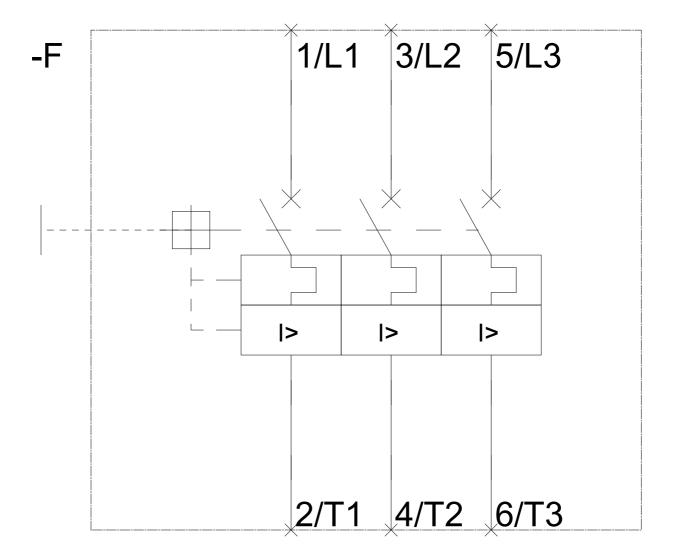
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1AA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1AA10&lang=en







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