

CIRCUIT BREAKER SIZE S2, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 62...73A, N-RELEASE 949A, SCREW TERMINAL, STANDARD BREAKING CAPACITY



Figure similar

product brand name	SIRIUS
Product designation	3RV2 circuit breaker
General technical data:	
Size of the circuit-breaker	S2
Size of contactor can be combined company-specific	S2
Product extension	
• Auxiliary switch	Yes
Power loss [W] total typical	21 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
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Protection class IP	
• on the front	IP20
• of the terminal	IP00

Shock resistance	
• acc. to IEC 60068-2-27	25g / 11 ms Sinus
Mechanical service life (switching cycles)	
• of the main contacts typical	20 000
• of auxiliary contacts typical	20 000
Electrical endurance (switching cycles)	
• typical	20 000
Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529
Equipment marking 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	62 ... 73 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	73 A
Operating current	
• at AC-3	
— at 400 V rated value	73 A
Operating power	
• at AC-3	
— at 230 V rated value	22 000 W
— at 400 V rated value	37 000 W
— at 500 V rated value	45 000 W
— at 690 V rated value	55 000 W
Operating frequency	
• at AC-3 maximum	15 1/h

Protective and monitoring functions:

Trip class	Class 10
Design of the overload release	thermal

Operational short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value	65 kA
• at 400 V rated value	30 kA
• at 500 V rated value	5 kA
• at 690 V rated value	2 kA
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	65 kA
• at AC at 400 V rated value	65 kA
• at AC at 500 V rated value	8 kA
• at AC at 690 V rated value	4 kA
• at 480 AC Y/277 V acc. to UL 489 rated value	20 A

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	65 A
• at 600 V rated value	62 A
Yielded mechanical performance [hp]	
• for three-phase AC motor	
— at 200/208 V rated value	20 hp
— at 220/230 V rated value	25 hp
— at 460/480 V rated value	50 hp
— at 575/600 V rated value	60 hp

Short-circuit protection

Design of the short-circuit trip	magnetic
Design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 240 V	none required
• at 400 V	160
• at 500 V	125
• at 690 V	100

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	140 mm
Width	55 mm
Depth	149 mm
Required spacing	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm

— upwards	50 mm
— downwards	50 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— at the side	10 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	10 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 (1 ... 35 mm ²), 1x (1 ... 50 mm ²)
— finely stranded with core end processing	2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²)
• at AWG conductors for main contacts	2x (18 ... 2), 1x (18 ... 1)
Tightening torque	
• for main contacts with screw-type terminals	3 ... 4.5 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
• for main contacts	M6

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	40 %
• with high demand rate acc. to SN 31920	50 %
Failure rate [FIT]	
• with low demand rate acc. to SN 31920	50 FIT

T1 value for proof test interval or service life acc. to IEC 61508	10 y
Display version • for switching status	Handle

Certificates/approvals

General Product Approval			Declaration of Conformity	Test Certificates	
				spezielle Prüfbescheinigungen	Typprüfbescheinigung/Werkszeugnis
CCC	CSA	UL	EG-Konf.	n	

other	Railway
Umweltbestätigung	Schwingen/Schocke
	n

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=3RV20314KA10>

Cax online generator

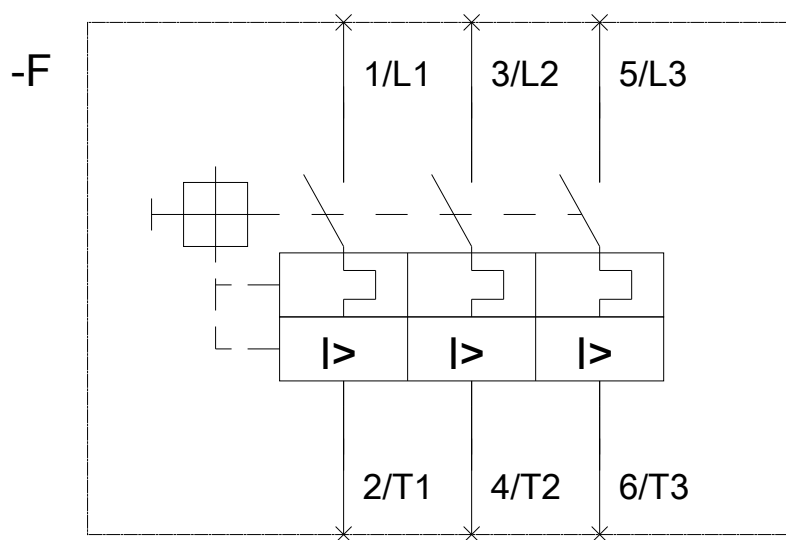
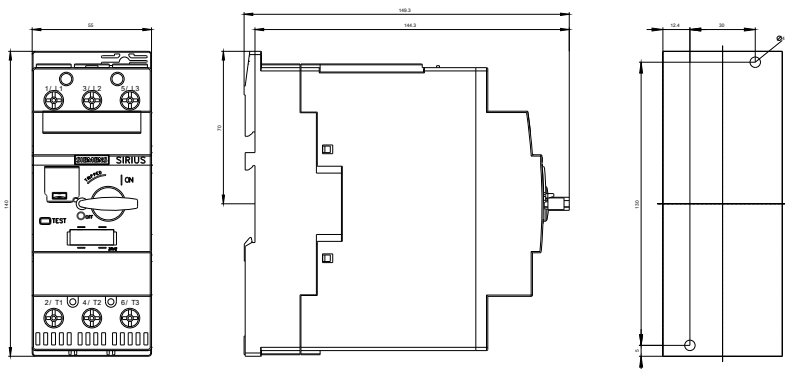
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV20314KA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV20314KA10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV20314KA10&lang=en



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