



CIRCUIT BREAKER, SIZE S2, FOR MOTOR PROTECTION, CLASS 20, A-RELEASE 42...52A, N-RELEASE 741A, SCREW TERMINAL, STANDARD BREAKING CAPACITY

Figure similar

product brand name		SIRIUS
Product designation		3RV2 circuit breaker

General technical data:

Active power loss total typical	W	17
Insulation voltage	V	690
• with degree of pollution 3 Rated value		
Shock resistance		25g / 11 ms Sinus
• acc. to IEC 60068-2-27		
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
• of the main contacts typical		50 000
• of the auxiliary contacts typical		50 000
Electrical endurance (switching cycles)		
• typical		50 000
Temperature compensation	°C	-20 ... +60
Size of contactor can be combined company-specific		S2
Protection class IP		
• on the front		IP20
• of the terminal		IP00
Equipment marking		
• acc. to DIN EN 81346-2		Q

Main circuit:

Number of poles for main current circuit		3
Adjustable response value current of the current-dependent overload release	A	42 ... 52

Operating voltage		
• Rated value	V	690
• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 ... 60
Operating current Rated value	A	52
Operating current		
• at AC-3		
— at 400 V Rated value	A	52
Operating power		
• at AC-3		
— at 230 V Rated value	W	15 000
— at 500 V Rated value	W	30 000
— at 690 V Rated value	W	45 000
Operating frequency		
• at AC-3 maximum	1/h	15

Auxiliary circuit:

Product expansion Auxiliary switch		Yes
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Protective and monitoring functions:

Trip class		CLASS 20
Design of the overload circuit breaker		thermal
Operational short-circuit current breaking capacity (Ics) with AC		
• at 240 V Rated value	A	100
• at 400 V Rated value	kA	30
• at 500 V Rated value	kA	4
• at 690 V Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)		
• with AC at 240 V Rated value	kA	100
• with AC at 400 V Rated value	kA	65
• with AC at 500 V Rated value	kA	8
• with AC at 690 V Rated value	kA	4
Response value current of the instantaneous short-circuit release	A	741

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	A	52
• at 600 V Rated value	A	52
yielded mechanical performance [hp]		
• for single-phase AC motor at 110/120 V Rated value	metric hp	5

- for single-phase AC motor at 230 V Rated value
- for three-phase AC motor at 200/208 V Rated value
- for three-phase AC motor at 220/230 V Rated value
- for three-phase AC motor at 460/480 V Rated value
- for three-phase AC motor at 575/600 V Rated value

metric hp	10
metric hp	15
metric hp	20
metric hp	40
metric hp	50

Short-circuit:

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 • at 400 V • at 500 V • at 690 V 		none required 160 125 100

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	mm	140
Width	mm	55
Depth	mm	149
Required spacing		
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards 	mm mm mm mm mm mm mm mm mm mm mm mm mm	0 0 50 50 0 0 0 50 10 50 0 0

— upwards	mm	50
— downwards	mm	50
— at the side	mm	10

Connections/ Terminals:

Type of electrical connection		screw-type terminals
<ul style="list-style-type: none"> • for main current circuit 		
Arrangement of electrical connectors for main current circuit		Top and bottom
Product function		No
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 		
Type of connectable conductor cross-section		
<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 • for AWG conductors for main contacts 		2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²) 2x (18 ... 2), 1x (18 ... 1)
Tightening torque		
<ul style="list-style-type: none"> • for main contacts with screw-type terminals 	N·m	3 ... 4.5
Design of screwdriver shaft		Diameter 5 to 6 mm
Design of the thread of the connection screw		
<ul style="list-style-type: none"> • for main contacts 		M6

Safety related data:

Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
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Mechanical data:

Size of the circuit-breaker		S2
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Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
<ul style="list-style-type: none"> • during operation 	°C	-20 ... +60
<ul style="list-style-type: none"> • during storage 	°C	-50 ... +80
<ul style="list-style-type: none"> • during transport 	°C	-50 ... +80
Relative humidity during operation	%	10 ... 95

Display:

Display version		
<ul style="list-style-type: none"> • for switching status 		Handle

Certificates/ approvals:



CSA



UL

[Confirmation](#)[Environmental
Confirmations](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

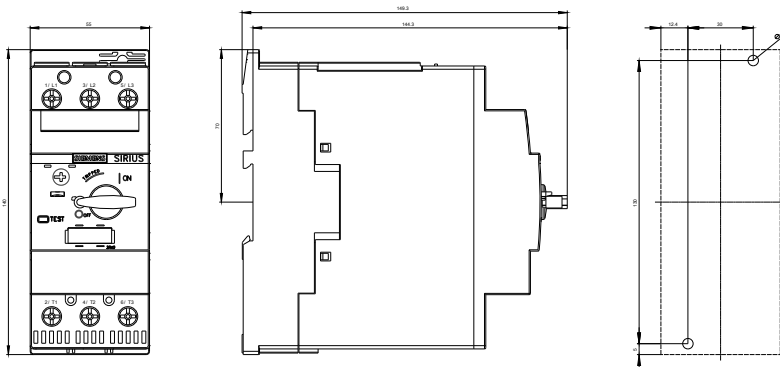
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV20314WB10>

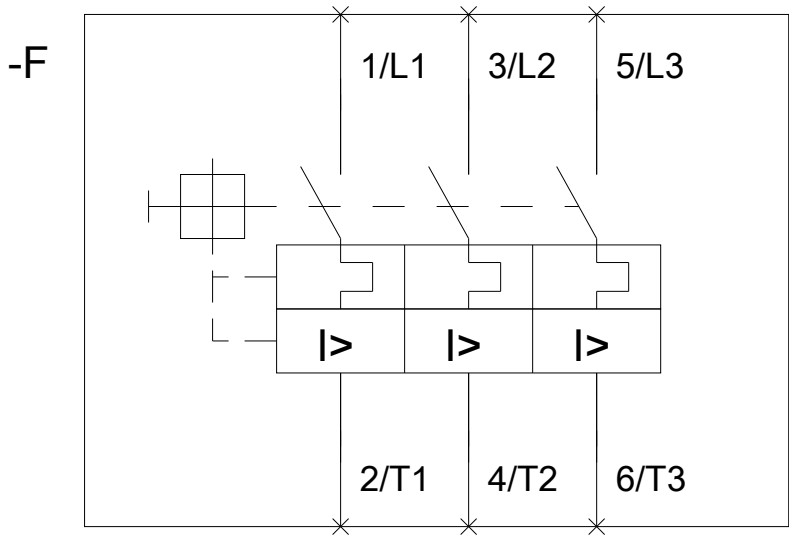
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV20314WB10/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV20314WB10&lang=en





last modified:

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