



CIRCUIT-BREAKER SZ S0,
FOR MOTOR PROTECTION, CLASS 10,
A-RELEASE 27...32A, N-RELEASE 400A,
SPRING-L. CONNECTION,
STANDARD SW. CAPACITY,

General technical data:		
product brand name		SIRIUS
product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
Number of poles / for main current circuit		3
Product function		
• removable terminal for auxiliary and control circuit		No
• overload protection		Yes
• phase disturbance recognition		Yes
• short-circuit to earth recognition		No
Product component		
• auxiliary switch		No
• undervoltage release mechanism		No
• trip indicator		No
Product extension		
• auxiliary switch		Yes
• optional / motor drive		No
Impulse voltage resistance / rated value	kV	6
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe

Installation altitude / at a height over sea level / maximum	m	2,000
Resistance against shock		25g / 11 ms
Ambient temperature		
• during transport	°C	-50 ... +80
• during storage	°C	-50 ... +80
• during operating	°C	-20 ... +60
Active power loss / total / typical	W	12.2

Main circuit:

Operating voltage / rated value	V	690
Service power / at AC-3		
• at 400 V / rated value	W	15,000
• at 500 V / rated value	W	18,500
• at 690 V / rated value	W	30,000
Operational current / at AC-3 / at 400 V / rated value	A	32
Mechanical operating cycles as operating time / of the main contacts / typical		100,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	15

Auxiliary circuit:

Number of change-over switches / for auxiliary contacts		0
Mechanical operating cycles as operating time / of the auxiliary contacts / typical		100,000

Protection function:

Trip class		CLASS 10
Adjustable response current / of the current-dependent overload release	A	27 ... 32
Breaking capacity limit short-circuit current (Icu)		
• at 400 V / rated value	A	55,000
• at 500 V / rated value	A	10,000
• at 690 V / rated value	A	4,000

Safety:

Proportion of dangerous failures		
• with high demand rate / according to SN 31920	%	40
• with low demand rate / according to SN 31920	%	40
Failure rate (FIT value) / with low demand rate / according to SN 31920	FIT	50
B10 value / with high demand rate / according to SN 31920		50,000
T1 value / for proof test interval or service life / according to IEC 61508	a	10

Installation/mounting/dimensions:

Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
mounting position		any
Depth	mm	96
Height	mm	119
Width	mm	45

Connections:

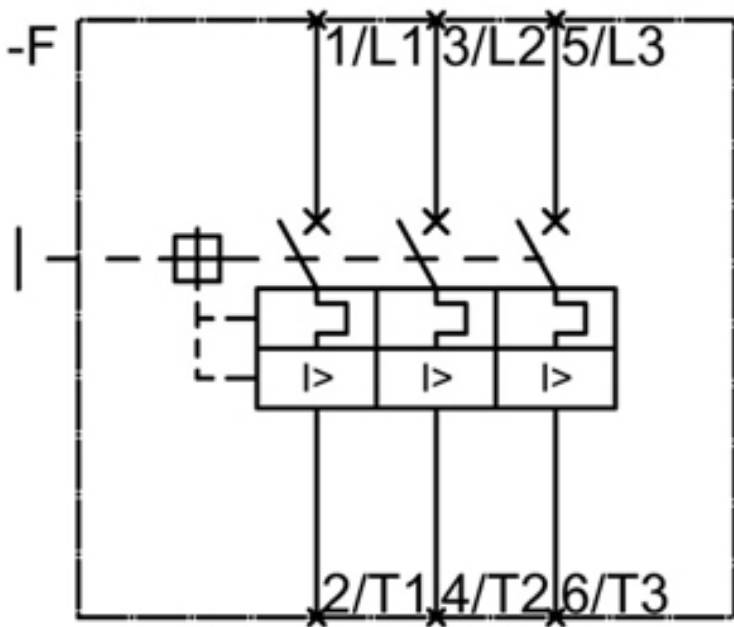
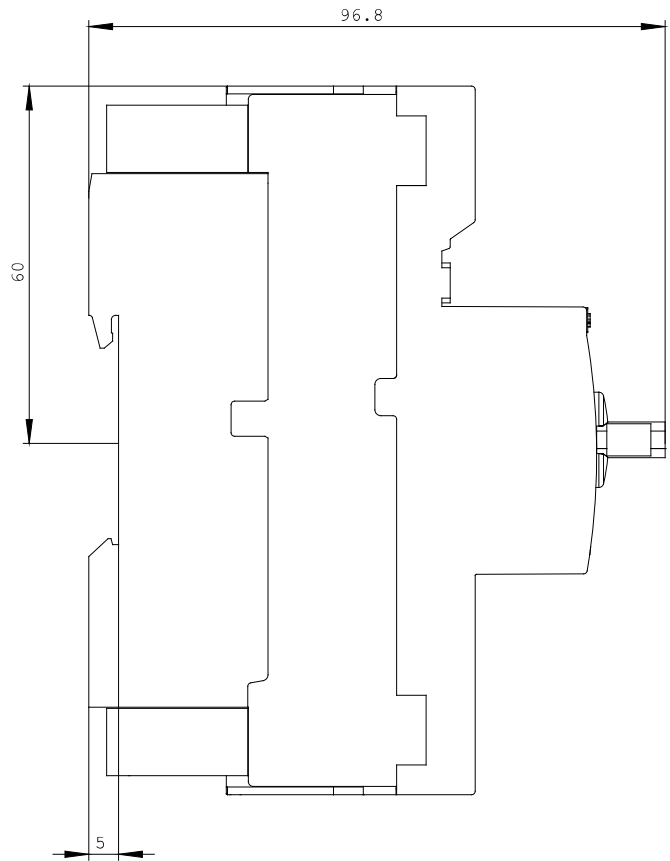
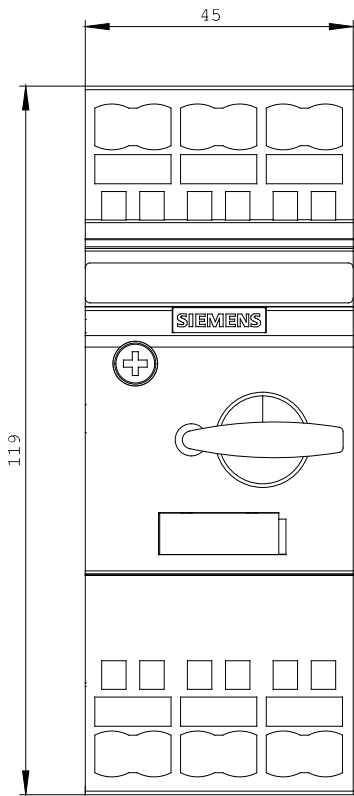
Arrangement of electrical connectors / for main current circuit		Top and bottom
Design of the electrical connection • for main current circuit		spring-loaded terminals
Type of the connectable conductor cross-section • for main contacts • solid • finely stranded • without conductor final cutting • with conductor end processing • for AWG conductors / for main contacts		2x (1 ... 10 mm ²) 2x (1 ... 6 mm ²) 2x (1 ... 6 mm ²) 2x (18 ... 8)

UL/CSA ratings:

yielded mechanical performance (hp) • for single-phase squirrel cage motors • at 110/120 V / rated value • at 230 V / rated value • for three-phase squirrel cage motors • at 200/208 V / rated value • at 220/230 V / rated value • at 460/480 V / rated value	hp hp hp hp hp	2 5 7.5 10 20
Operating current (FLA) / for three-phase squirrel cage motors • at 480 V / rated value	A	27

Certificates/approvals:

General Product Approval**For use in hazardous locations****Declaration of Conformity****Test Certificates**[other](#)[Special Test Certificate](#)[Type Test Certificates/Test Report](#)**Shipping Approval****Shipping Approval****other**[other](#)**Further information:****Information- and Downloadcenter (Catalogs, Brochures,...)**<http://www.siemens.com/industrial-controls/catalogs>**Industry Mall (Online ordering system)**<http://www.siemens.com/industrial-controls/mall>**Cax online generator:**<http://www.siemens.com/cax>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<http://support.automation.siemens.com/WW/view/en/3RV2021-4EA20/all>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4EA20



last change:

Feb 14, 2013