

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

General technical data:		
Product brand name		SIRIUS
Product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
Trip class		CLASS 10
Protection class IP / frontal/front side		IP20
Degree of pollution		3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-50 ... 80
• during the operating phase	°C	-20 ... 60
• during transport	°C	-50 ... 80
Resistance against shock		25g / 11 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Real loss power / total / typical	W	10
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F
Mechanical switching cycle as operating period		
• of the main contacts / typical		100,000
• of the auxiliary contacts / typical		100,000
Type of the driving mechanism / Motor drive		No
design of the operating mechanism		selector switch
Product function		
• Overload protection		Yes
• Short-circuit to earth recognition		No
• Phase disturbance recognition		Yes
Product component		
• auxiliary switch		No

• Undervoltage release mechanism		No
• trip indicator		No
Product extension / optional / Motor drive		No

Main circuit:		
Number of poles / for main current circuit		3
Operating voltage / at 3 AC / rated value / maximum	V	690
Operating current / at AC-3 / at 400 V / rated value	A	29
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
Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum	1/h	15
Arrangement of electrical connectors / for main current circuit		Top and bottom
Adjustable response current		
• of the current-dependent overload release	A	27 ... 32
Service power / at AC-3 / at 230 V / rated value	W	7,500
Continuous current / rated value	A	32

Auxiliary circuit:		
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
Number of change-over switches / for auxiliary contact		0

Inputs/ Outputs:		
Number of digital inputs		0

Short-circuit:		
Breaking capacity limit short-circuit current (I_{cu})		
• at 400 V / rated value	A	55,000
• at 500 V / rated value	A	10,000
• at 690 V / rated value	A	4,000
Design of the overcurrent release and short-circuit release		thermomagnetic

Installation/mounting/dimensions:		
built in orientation		any
Type of fixing/fixation		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Width	mm	45

Height	mm	119
Depth	mm	91
distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• downwards	mm	50
• sideways	mm	0
distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• sideways	mm	30
• downwards	mm	50
distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• downwards	mm	50
• sideways	mm	30

Connections:

Product function		
• removable terminal for main circuit		No
• removable terminal for auxiliary and control circuit		No
design of the electrical connection		
• for main current circuit		spring-loaded terminals
Type of the connectable conductor cross-section		
• for main contacts		
• unifilar		2x (1 ... 10 mm ²)
• stranded wire		2x (1 ... 10 mm ²)
• stranded wire		
• with conductor end processing		2x (1 ... 6 mm ²)
• without conductor final cutting		2x (1 ... 6 mm ²)
• at AWG-conductors / for main contacts		2x (18 ... 8)

Certificates/approvals:

verification of suitability		CE / UL / CSA
• für Staubexplosionsschutz für Zone 21/22		no
• for gas explosion protection for zone 1/2		no

Safety:

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

Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT

50

Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%

40

%

40

Protection against electrical shock

finger-safe

Further information:

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

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

Global Industry Mall (Online ordering system)

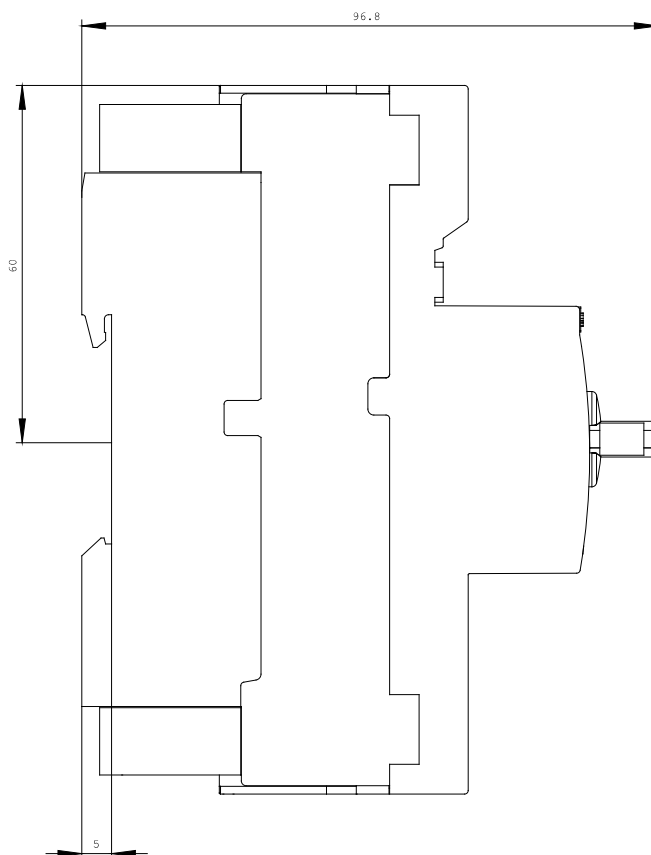
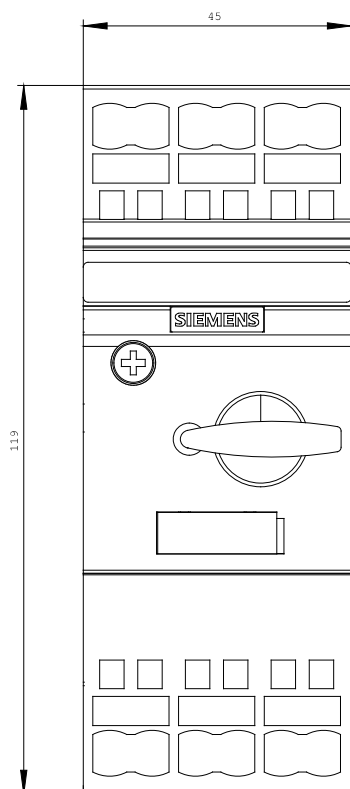
<http://www.siemens.com/industrial-controls/mall>

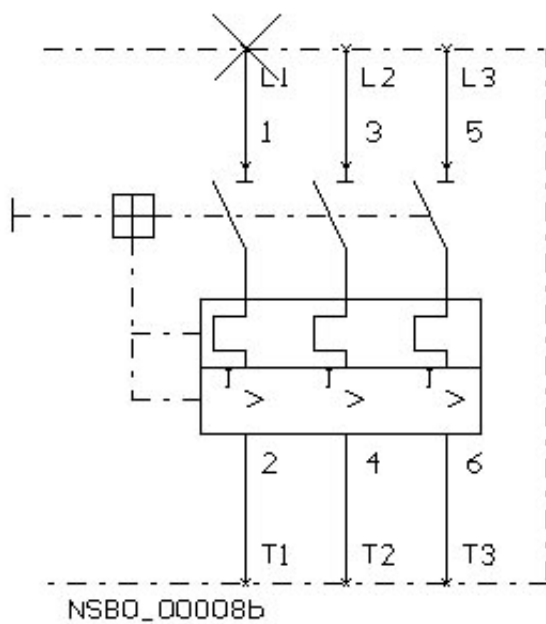
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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:

Apr 26, 2010