



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

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 / on the front		IP00
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-50 ... 80
• during operating	°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
Active power loss / total / typical	W	12.2
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F

Mechanical operating cycles as operating time		
• 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
• 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 AC-3 / 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
Frequency of operation / 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 non-delayed short-circuit release	A	400 ... 400
• 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 contacts		0

Inputs/ Outputs:		
Number of digital inputs		0

Short-circuit:**Breaking capacity limit short-circuit current (I_{cu})**

- at 400 V / rated value
- at 500 V / rated value
- at 690 V / rated value

A	55,000
A	10,000
A	4,000

Design of the overcurrent release and short-circuit release

thermomagnetic

Installation/mounting/dimensions:**Built in orientation**

any

Type of mounting

screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715

Width

mm 45

Height

mm 97

Depth

mm 91

Distance, to be maintained, to the ranks assembly

- forwards
- backwards
- upwards
- downwards
- sideways

mm	0
mm	0
mm	50
mm	50
mm	0

Distance, to be maintained, to earthed part

- forwards
- backwards
- upwards
- sideways
- downwards

mm	0
mm	0
mm	50
mm	30
mm	50

Distance, to be maintained, conductive elements

- forwards
- backwards
- upwards
- downwards
- sideways

mm	0
mm	0
mm	50
mm	50
mm	30

Connections:**Product function**

- removable terminal for main circuit
- removable terminal for auxiliary and control circuit

No
No

Design of the electrical connection

- for main current circuit

ring cable connection


Certificates/approvals:

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

General Product Approval		For use in hazardous locations
		ROSTEST
CQC	CSA	UL
		DEKRA EXAM, DMT

Test Certificates
Manufacturer other

Shipping Approval						
						
ABS	GL	LRS	PRS	RINA	RMRS	

other
Manufacturer other

VDE

UL/CSA ratings

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

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	%	40
• with high demand rate / according to SN 31920	%	40
Protection against electrical shock		finger-safe

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

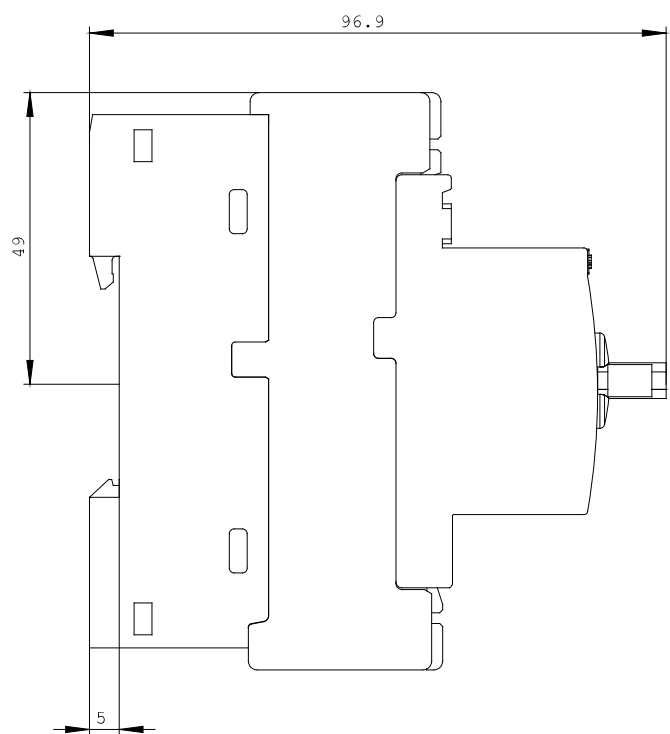
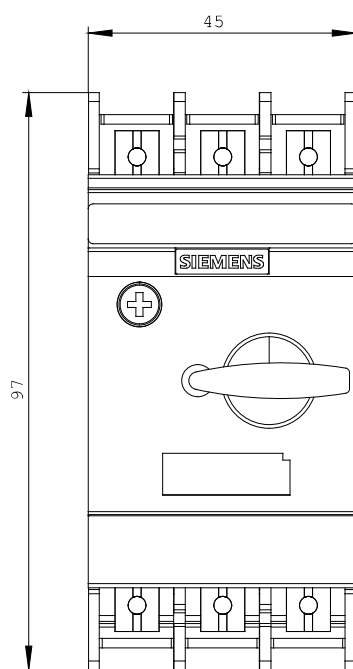
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV2021-4EA40/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4EA40





last change:

Oct 17, 2011