

CIRCUIT-BREAKER, 1.8...2.5 A, N-RELEASE 33 A, SIZE S00,
MOTOR PROTECTION, CLASS 10, SCREW CONNECTION
STANDARD BREAKING CAPACITY MULTI-UNIT PACKING
PACKING = 24 ITEMS

product brand name	SIRIUS
Product designation	Circuit breaker
Design of the product	For motor protection

General technical data

Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00
Product extension Auxiliary switch	Yes
Power loss [W] total typical	6 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 - in networks with grounded star point between main and auxiliary circuit	400 V 400 V
Protection class IP - on the front - of the terminal	IP20 IP00
Mechanical service life (switching cycles) - of the main contacts typical - of auxiliary contacts typical	100 000 100 000
Electrical endurance (switching cycles) typical	100 000
Type of protection	Increased safety
Protection against electrical shock	finger-safe
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 - during storage	-20 ... +60 °C -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	1.8 ... 2.5 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	2.5 A
Operating current	
• at AC-3	
— at 400 V rated value	2.5 A
Operating power	
• at AC-3	
— at 230 V rated value	370 W
— at 400 V rated value	750 W
— at 500 V rated value	1 100 W
— at 690 V rated value	1 500 W
Operating frequency	
• at AC-3 maximum	15 1/h

Auxiliary circuit

Number of CO contacts	
• for auxiliary contacts	0

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	100 000 A
• at 400 V rated value	100 000 A
• at 500 V rated value	10 000 A
• at 690 V rated value	2 000 A
Maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	100 kA
• at AC at 500 V rated value	10 kA
• at AC at 690 V rated value	2 kA
Breaking capacity short-circuit current (Icn)	

• at 1 current path at DC at 150 V rated value	10 kA
• with 2 current paths in series at DC at 300 V rated value	10 kA
• with 3 current paths in series at DC at 450 V rated value	10 kA

UL/CSA ratings

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	2.5 A
• at 600 V rated value	2.5 A
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 230 V rated value	0.166 hp
• for three-phase AC motor	
— at 200/208 V rated value	0.5 hp
— at 220/230 V rated value	0.5 hp
— at 460/480 V rated value	1 hp
— at 575/600 V rated value	1.5 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	gL/gG 35 A
• at 500 V	gL/gG 25 A
• at 690 V	gL/gG 25 A

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	90 mm
Width	45 mm
Depth	81 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 — finely stranded with core end processing	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x (1 ... 4 mm ²) 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
Type of connectable conductor cross-sections • for auxiliary contacts — single or multi-stranded	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
Tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals	0.8 ... 1.2 N·m 0.8 ... 1.2 N·m
Design of the thread of the connection screw • for main contacts	M3

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 • with high demand rate acc. to SN 31920	50 % 50 %
Failure rate [FIT] • with low demand rate acc. to SN 31920	50 FIT
Display version • for switching status	Rocker switch

Certificates/approvals	
General Product Approval	For use in hazardous locations



Declaration of Conformity	Test Certificates	Shipping Approval			
 EG-Konf.	spezielle Prüfbescheinigungen n	 ABS	 BUREAU VERITAS	 DNV	 LRS

Shipping Approval	other				
 RINA	 RMRS	Bestätigungen	Umweltbestätigung	sonstig	 VDE

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=3RV1011-1CA10-Z W97>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1CA10-Z W97>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1CA10-Z W97>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1CA10-Z W97&lang=en

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