



EA Electric Automation

Automation specialists

Reference: 3RV2021-4FA10

CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 34...40A, N-RELEASE 480A, SCREW TERMINAL, STANDARD SWITCHING CAPACITY,

Buy it at Electric Automation Network



product brand name	SIRIUS	
Product designation	3RV2 circuit breaker	
General technical data:		
Size of the circuit-breaker	50	
Size of contactor can be combined company-specific	S00, S0	
Product extension		
Auxiliary switch	Yes	
Power loss [W] total typical	14 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	400 V	
in networks with grounded star point between main and auxiliary circuit	400 V	
Protection class IP		
on the front	IP20	
of the terminal	IP20	
Shock resistance		
acc. to IEC 60068-2-27	25g / 11 ms	
Mechanical service life (switching cycles)		

of axillary contacts typical100 000Electrical endurance (switching cycles)100 000typical100 000Type of protectionIncreased safetyCartificat of suitability relating to ATEXon equestProtection against electrical shockfinger-safeGaujement marking acc. to DIN EN B13460200 0mAmbient conditions:200 0mInstalation altitude at height above sea level maxim200 nmAufort on partition200 - +40 °Cduring operation50 - +40 °Cduring strange- 50 - +60 °Cduring strange- 60 °Cduring strange- 60 °Cstrange- 60 °Cstrange- 60 °Cstrange- 60 °Cstrange- 60 °Cstrange- 60 °Cstrange- 60 °C <trr>strang</trr>	of the main contacts typical	100 000
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Operating frequency 15 1/h Auxiliary circuit:	— at 500 V rated value	22 000 W
at AC-3 maximum 15 1/h Auxiliary circuit:	— at 690 V rated value	39 000 W
Auxiliary circuit:	Operating frequency	
	at AC-3 maximum	15 1/h
Number of NC contacts	Auxiliary circuit:	
	Number of NC contacts	

for auxiliary contacts	0
Number of NO contacts	
for auxiliary contacts	0
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 kA
at 400 V rated value	10 kA
at 500 V rated value	3 kA
at 690 V rated value	2 kA
Maximum short-circuit current breaking capacity (Icu)	
at AC at 240 V rated value	100 kA
at AC at 400 V rated value	20 kA
at AC at 500 V rated value	6 kA
at AC at 690 V rated value	3 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 $% \left({{{\rm{T}}_{\rm{T}}}} \right)$	10 kA
UL/CSA ratings:	
Full-load current (FLA) for three-phase AC motor	
at 480 V rated value	40 A
at 600 V rated value	40 A
Yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	3 hp
— at 230 V rated value	7.5 hp
for three-phase AC motor	
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	30 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 400 V	gL/gG 63 A
at 500 V	gL/gG 63 A
at 690 V	gL/gG 63 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	97 mm
Witd>	45 mm
Depth	96 mm
Required spacing	
with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	70 mm
— downwards	70 mm
— at the side	0 mm
for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	70 mm
— at the side	30 mm
— downwards	70 mm
for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	70 mm
— downwards	70 mm
— at the side	30 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	2x (1 2,5 mm²), 2x (2,5 10 mm²)

- finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
at AWG conductors for main contacts	2x (16 12), 2x (14 8)
Tightening torque	
for main contacts with screw-type terminals	2 2.5 N·m
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
for main contacts	M4
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	50 %
with high demand rate acc. to SN 31920	50 %
Failure rate [FIT]	
with low demand rate acc. to SN 31920	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 у
Display version	
for switching status	Handle