

CONTACTOR 3-PH 18.5 KW,400V, 48 V AC, 50 HZ 4-POLE, 2NO + 2NC, SIZE S2, SCREW CONNECTION



Figure similar

product brandname	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S2
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Protection class IP	
• on the front	IP00
Mechanical service life (switching cycles)	
• of contactor typical	10 000 000
• of the contactor with added electronics-compatible auxiliary switch block typical	5 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
Ambient conditions	

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
Main circuit	
Number of poles for main current circuit	4
Number of NO contacts for main contacts	2
Number of NC contacts for main contacts	2
Operating current	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	60 A
— up to 690 V at ambient temperature 60 °C rated value	55 A
• at AC-2 at AC-3 at 400 V	
— per NO contact rated value	40 A
— per NC contact rated value	40 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	16 mm ²
• at 40 °C minimum permissible	16 mm ²
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	50 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	50 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V per NC contact rated value	35 A
— at 24 V per NO contact rated value	35 A
— at 110 V per NC contact rated value	1.25 A
— at 110 V per NO contact rated value	2.5 A
— at 220 V per NC contact rated value	0.5 A
— at 220 V per NO contact rated value	1 A
— at 440 V per NC contact rated value	0.05 A

— at 440 V per NO contact rated value • with 2 current paths in series at DC-3 at DC-5 — at 110 V per NC contact rated value — at 110 V per NO contact rated value — at 220 V per NC contact rated value — at 220 V per NO contact rated value — at 24 V per NC contact rated value — at 24 V per NO contact rated value — at 440 V per NC contact rated value — at 440 V per NO contact rated value	0.1 A 12.5 A 25 A 2.5 A 5 A 50 A 50 A 0.135 A 0.27 A
Operating power • at AC-1 — at 230 V rated value — at 400 V rated value • at AC-2 at AC-3 — at 230 V per NC contact rated value — at 230 V per NO contact rated value — at 400 V per NC contact rated value — at 400 V per NO contact rated value	20 kW 36 kW 9.5 kW 9.5 kW 18.5 kW 18.5 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	2.6 W
Operating frequency • at AC-1 maximum	1 000 1/h

Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC • at 50 Hz rated value	48 V
Operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz	0.8 ... 1.1
Apparent pick-up power of magnet coil at AC • at 50 Hz	145 V·A 145 V·A
Inductive power factor with closing power of the coil • at 50 Hz	0.79 0.79
Apparent holding power of magnet coil at AC • at 50 Hz	12.5 V·A 12.5 V·A
Inductive power factor with the holding power of the coil • at 60 Hz	0.36 0.36
Closing delay • at AC • at DC	4 ... 35 ms 50 ... 110 ms

Opening delay	
• at AC	10 ... 30 ms
• at DC	15 ... 30 ms
Arcing time	10 ... 15 ms
Control version of the switch operating mechanism	conventional
Residual current of the electronics for control with signal <0>	
• at AC at 230 V maximum permissible	0.018 A

Auxiliary circuit

Number of NC contacts	
• for auxiliary contacts	
— instantaneous contact	0
Number of NO contacts	
• for auxiliary contacts	
— instantaneous contact	0
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
Operating current at DC-12	
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 220 V rated value	1 A
Operating current at DC-13	
• at 24 V rated value	10 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 220 V rated value	0.3 A
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

Short-circuit protection

Design of the fuse link	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	fuse gL/gG: 160 A
— with type of assignment 2 required	fuse gL/gG: 80 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A

Installation/ mounting/ dimensions

Mounting position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

• Side-by-side mounting	Yes
Height	112 mm
Width	73 mm
Depth	115 mm
Required spacing	
• for grounded parts	
— at the side	6 mm

Connections/Terminals

Type of electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (0.75 ... 16 mm ²)
— stranded	2x (0.75 ... 25 mm ²)
— single or multi-stranded	2x (0,75 ... 16 mm ²)
— finely stranded with core end processing	2x (0.75 ... 16 mm ²)
— finely stranded without core end processing	2x (0.75 ... 16 mm ²)
• at AWG conductors for main contacts	2x (18 ... 2)
Type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²)
— single or multi-stranded	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), max. 2x (0,75 ... 4 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• at AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12

Safety related data

Failure rate [FIT]	
• with low demand rate acc. to SN 31920	100 FIT

Certificates/approvals

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	spezielle Prüfbescheinigunge n

Shipping Approval					other
 ABS	 GL	 LRS	 RINA	 RMRS	Umweltbestätigung

other	
Bestätigungen	sonstig

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=3RT1535-1AH00>

Cax online generator

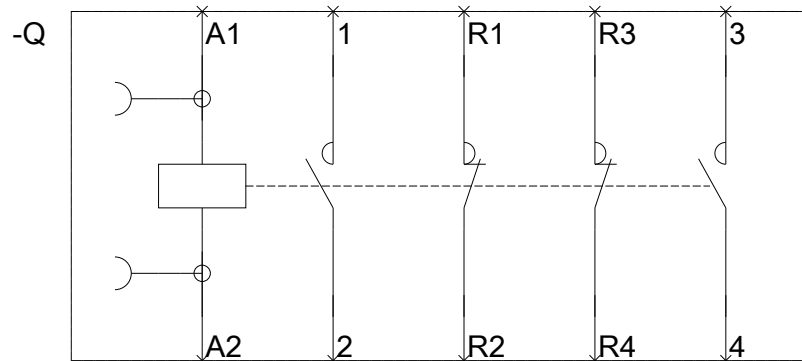
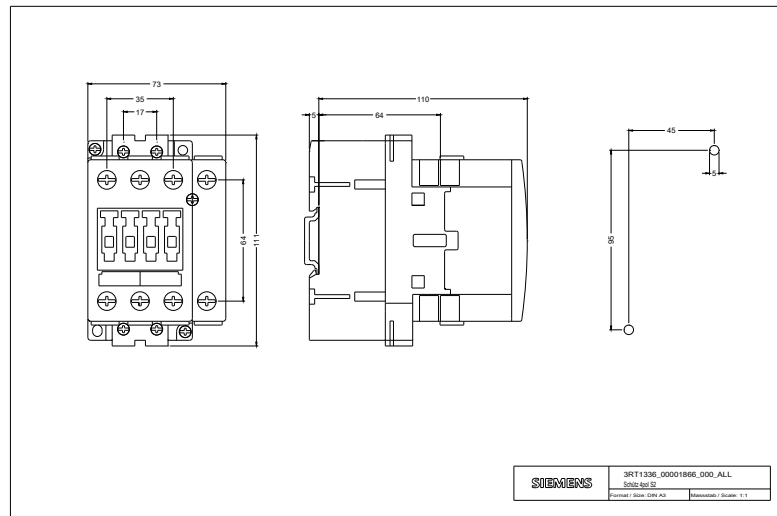
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1535-1AH00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1535-1AH00>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1535-1AH00&lang=en



last modified:

10/19/2016