SIEMENS

Data sheet 3RT1535-1AB00

CONTACTOR,AC-3 18.5 KW,400V, AC 24 V, 50 HZ 4-POLE, 2 NO + 2 NC, SIZE S2, SCREW CONNECTION



Figure similar

Product brand name	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	IP20
• of the terminal	IP00
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
• of the contactor with added electronics-	5 000 000
compatible auxiliary switch block typical	
 of the contactor with added auxiliary switch 	10 000 000
block typical	

Ambient temperature ● during operation • during storage -25 ... +60 °C -55 ... +80 °C Main circuit Number of poles for main current circuit 4

• during storage	-50 100 0
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 mm²
 at 40 °C minimum permissible 	16 mm²
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	0.1 A
• with 2 current paths in series at DC-3 at DC-5	

— at 24 V per NC contact rated value	50 A
— at 24 V per NO contact rated value	50 A
— at 110 V per NC contact rated value	12.5 A
— at 110 V per NO contact rated value	25 A
— at 220 V per NC contact rated value	2.5 A
— at 220 V per NO contact rated value	5 A
— at 440 V per NC contact rated value	0.135 A
— at 440 V per NO contact rated value	0.27 A
Operating power	
• at AC-1	
— at 230 V rated value	20 kW
— at 400 V rated value	36 kW
• at AC-2 at AC-3	
— at 230 V per NC contact rated value	9.5 kW
— at 230 V per NO contact rated value	9.5 kW
— at 400 V per NC contact rated value	18.5 kW
— at 400 V per NO contact rated value	18.5 kW
Power loss [W] at AC-3 at 400 V for rated value of	2.6 W
the operating current per conductor	
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	24 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	145 V·A
● at 50 Hz	145 V·A
Inductive power factor with closing power of the coil	0.79
● at 50 Hz	0.79
Apparent holding power of magnet coil at AC	12.5 V·A
● at 50 Hz	12.5 V·A
Inductive power factor with the holding power of the coil	0.36
• at 60 Hz	0.36
	0.30
Closing delay	
• at AC	4 35 ms
Opening delay	
• at AC	10 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— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 160 A

fuse gL/gG: 80 A

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	arc	und	led	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 mm²)
— stranded	2x (0.75 25 mm²)
— single or multi-stranded	2x (0,75 16 mm²)
 finely stranded with core end processing 	2x (0.75 16 mm²)
 finely stranded without core end 	2x (0.75 16 mm²)
processing	
 at AWG conductors for main contacts 	2x (18 2)
Type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 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 Functional Safety/Safety Of Machinery Declaration of Certificates







Type Examination
Certificate



Special Test Certificate

Marine / Shipping





LRS









other

Environmental Confirmations

Confirmation

Miscellaneous

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=3RT1535-1AB00

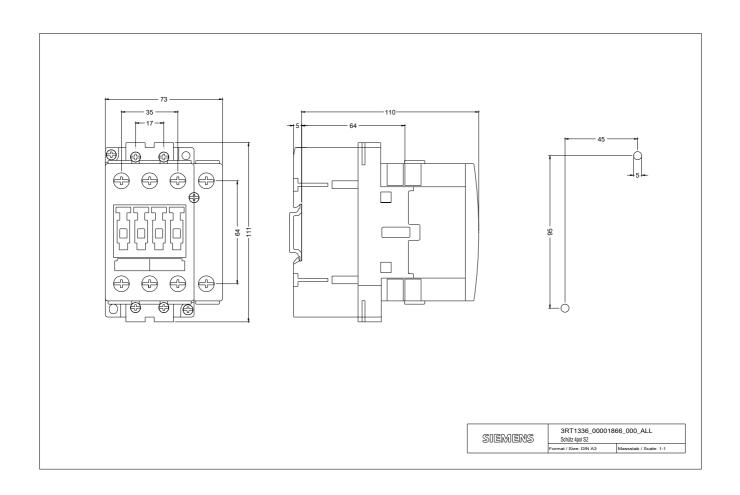
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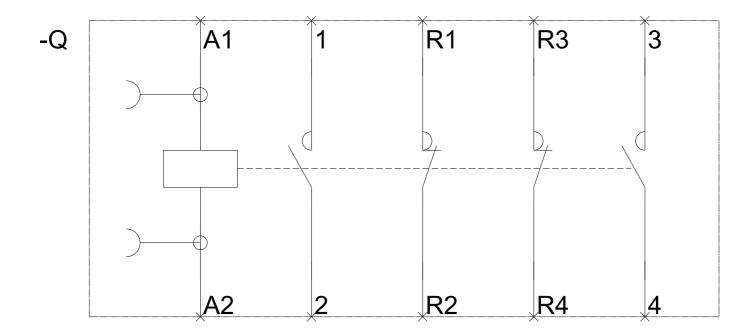
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1535-1AB00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1535-1AB00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1535-1AB00&lang=en





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