SIEMENS

Data sheet 3RT1016-1BB42

Figure similar

Power contactor, AC-3 9 A, 4 kW / 400 V 1 NC, 24 V DC 3-pole, Size S00 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2016-1BB42<<

product brand name	SIRIUS
product designation	power contactor
General technical data	
size of contactor	S00
degree of pollution	3
protection class IP	
● on the front	IP20
● of the terminal	IP20
mechanical service life (switching cycles)	
● of contactor typical	30 000 000
● of the contactor with added electronically optimized auxiliary switch block typical	5 000 000
● of the contactor with added auxiliary switch block typical	10 000 000
reference code acc. to IEC 81346-2	Q
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
● ambient temperature during operation	-25 ... +60 °C
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operational current	
● at AC-1 at 400 V at ambient temperature 40 °C rated value	22 A
● at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	22 A
— up to 690 V at ambient temperature 60 °C rated value	20 A
● at AC-3	
— at 400 V rated value	9 A
● at AC-4 at 400 V rated value	8.5 A
operational current	
● at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A

● with 2 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
● with 3 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
operational current	
● at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.15 A
● with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
● with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
operating power	
● at AC-1	
— at 400 V rated value	13 kW
● at AC-2 at 400 V rated value	4 kW
● at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4.5 kW
— at 690 V rated value	5.5 kW
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
● rated value	24 V
operating range factor control supply voltage rated value of magnet coil at DC	
● initial value	0.85
● full-scale value	1.1
closing power of magnet coil at DC	3.3 W
holding power of magnet coil at DC	3.3 W
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous contact	0
operational current at AC-12 maximum	10 A
operational current at AC-15	
● at 230 V rated value	6 A
● at 400 V rated value	3 A
operational 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
operational 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: 35 A
— with type of assignment 2 required	fuse gL/gG: 20 A
● for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A

required	
Installation/ mounting/ dimensions	
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
● side-by-side mounting	Yes
height	57.5 mm
width	45 mm
depth	72 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 circuit	screw-type terminals
type of connectable conductor cross-sections	
● for main contacts	
— solid	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)
— solid or 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 cables for main contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12
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)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
● at AWG cables for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12

Certificates/ approvals

General Product Approval				EMC	Declaration of Conformity
CSA	CCC	UL	EAC	RCM	Miscellaneous

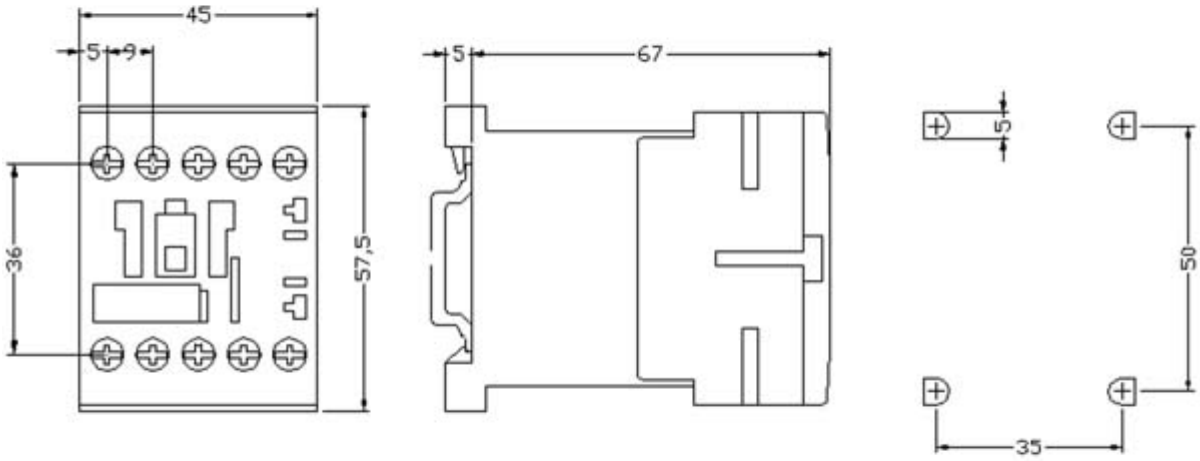
Declaration of Conformity	Test Certificates			Marine / Shipping	
EG-Konf.	Special Test Certificate	Type Test Certificates/Test Report	Miscellaneous	ABS	LRS

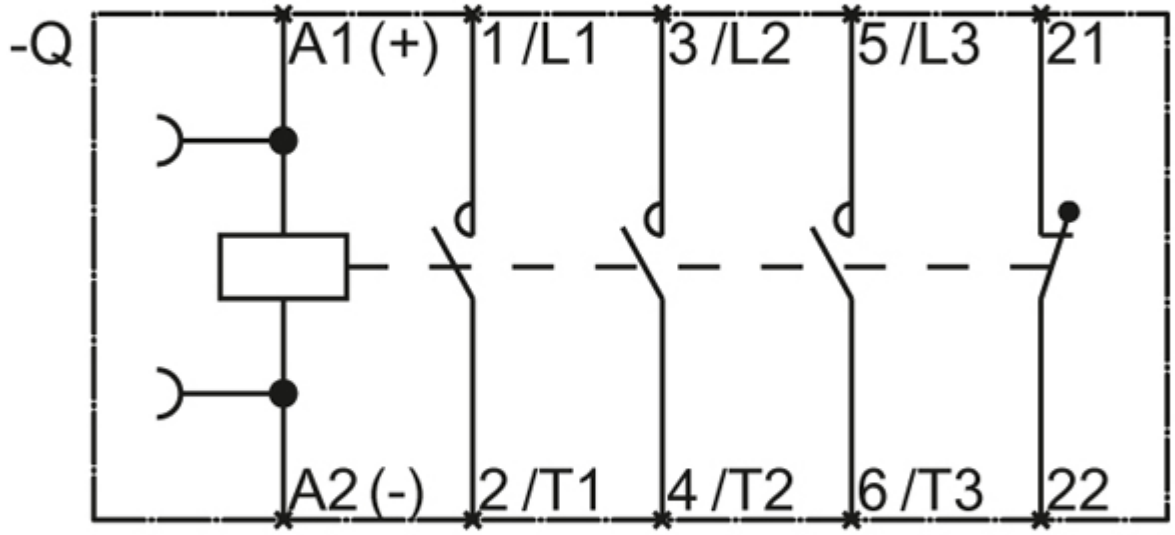
Marine / Shipping				other	
PRS	RINA	RMRS	DNV-GL	Confirmation	Miscellaneous

other	Railway
Miscellaneous	Special Test Certificate

Further information

Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1016-1BB42
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1016-1BB42
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1BB42
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1BB42&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1BB42/char
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1016-1BB42&objecttype=14&gridview=view1





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