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Data sheet 3RT1025-1AP04

Figure similar

CONTACTOR, AC-3 7.5 KW/400 V, AC 230 V, 50 HZ, 3-POLE, 2 NO + 2 NC, SIZE S0, SCREW CONNECTION

product brand name		SIRIUS
Product designation		power contactor

General technical data:

Degree of pollution		3
Mechanical service life (switching cycles)		
• of the 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
Protection class IP		
• on the front		IP20
• of the terminal		IP20
Equipment marking		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

Main circuit:

Number of poles for main current circuit		3
Number of NC contacts for main contacts		0
Number of NO contacts for main contacts		3
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	A	40

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— up to 690 V at ambient temperature 40 °C Rated value	A	40
— up to 690 V at ambient temperature 60 °C Rated value	A	35
• at AC-3		
— at 400 V Rated value	A	17
• at AC-4 at 400 V Rated value	A	15.5
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	4.5
• at DC-3 at DC-5		
— at 24 V Rated value	A	20
— at 110 V Rated value	A	2.5
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	35
• at DC-3 at DC-5		
— at 110 V Rated value	A	15
— at 24 V Rated value	A	35
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	35
• at DC-3 at DC-5		
— at 110 V Rated value	A	35
— at 24 V Rated value	A	35
Operating power		
• at AC-1 at 400 V Rated value	kW	23
• at AC-2 at 400 V Rated value	kW	7.5
• at AC-4 at 400 V Rated value	W	7 500
Operating power		
• at AC-3		
— at 400 V Rated value	kW	7.5
— at 500 V Rated value	kW	10
— at 690 V Rated value	kW	11

Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
• at 50 Hz Rated value	V	230

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• Rated value	Hz	50
Operating range factor control supply voltage rated value of the magnet coil with AC		
• at 50 Hz		0.8 ... 1.1
Apparent pick-up power of the magnet coil with AC	V·A	61
Apparent holding power of the magnet coil with AC	V·A	7.8
Inductive power factor		
• with closing power of the coil		0.82
• with the holding power of the coil		0.24
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		
— instantaneous contact		2
Number of NO contacts		
• for auxiliary contacts		
— instantaneous contact		2
Operating current at AC-15		
• at 230 V Rated value	A	6
• at 400 V Rated value	A	3
Operating current		
• at DC-12 at 220 V Rated value	A	1
• at DC-13 at 220 V Rated value	A	0.3
Operating current		
• at DC-12		
— at 60 V Rated value	A	6
— at 110 V Rated value	A	3
• at DC-13		
— at 24 V Rated value	A	10
— at 60 V Rated value	A	2
— at 110 V Rated value	A	1
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit:		
Design of the fuse link		
• for short-circuit protection of the main circuit		
— with type of assignment 1 required		fuse gL/gG: 63 A
— with type of assignment 2 required		fuse gL/gG: 25 A
• for short-circuit protection of the auxiliary switch required		fuse gL/gG: 10 A
Installation/ mounting/ dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

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• Side-by-side mounting		Yes
Height	mm	85
Width	mm	45
Depth	mm	140
Required spacing		
• for grounded parts		
— at the side	mm	6

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-section		
• for main contacts		
— solid		2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), max. 2x 10 mm²
— single or multi-stranded		2x (1 ... 2,5 mm²), 2x (2,5 ... 6 mm²), max. 2x 10 mm²
— finely stranded with core end processing		2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)
• for AWG conductors for main contacts		2x (16 ... 12), 2x (14 ... 10), 1x 8
• 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)
• for AWG conductors for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14), 1x 12

Mechanical data:		
Size of contactor		S0

Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +60

Certificates/ approvals:

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General Product Approval				Functional Safety/Safety of Machinery	Declaration of Conformity
CCC	CSA	UL	EAC	Type Examination	EG-Konf.

Test Certificates		Shipping Approval			
Type Test Certificates/Test Report	Special Test Certificate	ABS	DNV	GL	LRS

Shipping Approval		other		
RINA	RMRS	Environmental Confirmations	Confirmation	other

Further information

Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10251AP04

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RT10251AP04/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10251AP04&lang=en

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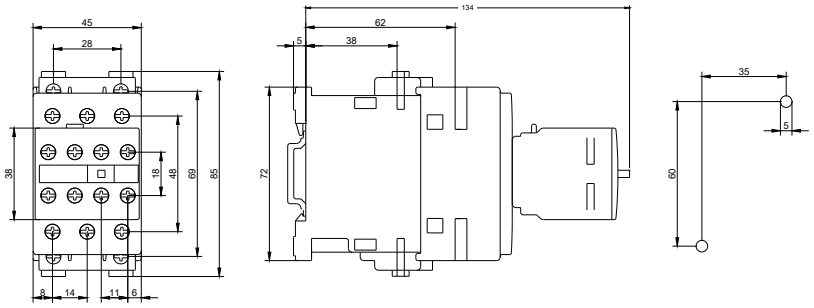

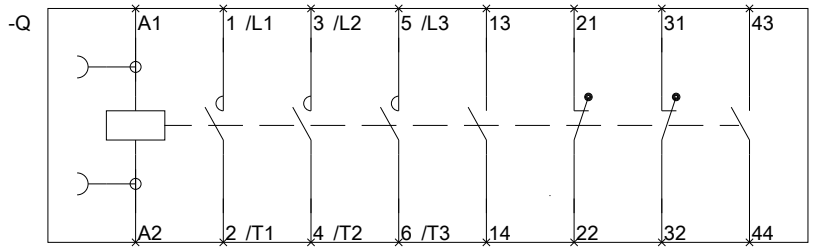

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