SIEMENS

Data sheet 3RT1456-6NF36

CONTACTOR, 275A/AC-1

Figure similar

product brand name		SIRIUS
Product designation		power contactor

General technical data:		
Insulation voltage		
• Rated value	V	1 000
Degree of pollution		3
Surge voltage resistance Rated value	kV	8
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
Thermal short-time current restricted to 10 s	A	1 480
Protection class IP		
• on the front		IP00
• of the terminal		IP00
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	275
— up to 690 V at ambient temperature 40 °C Rated value	A	275
— up to 690 V at ambient temperature 60 °C Rated value	A	250
• at AC-3		
— at 400 V Rated value	A	97
— at 690 V Rated value	A	97
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	250
— at 110 V Rated value	A	18
• at DC-3 at DC-5		
— at 24 V Rated value	A	250
— 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	250
— at 110 V Rated value	A	250
• at DC-3 at DC-5		
— at 110 V Rated value	A	250
— at 24 V Rated value	A	250
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	A	250
— at 110 V Rated value	A	250
• at DC-3 at DC-5		
— at 110 V Rated value	A	250
— at 24 V Rated value	A	250
Operating power		
• at AC-1 at 400 V Rated value	kW	165
• at AC-2 at 400 V Rated value	kW	55
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	95
— at 690 V at 60 °C Rated value	kW	285
— at 690 V Rated value	kW	285
• at AC-3		
— at 230 V Rated value	kW	30
— at 400 V Rated value	kW	55

— at 500 V Rated value	kW	55
— at 690 V Rated value	kW	90

Control circuit/ Control:		
Type of voltage of the control supply voltage		AC/DC
Control supply voltage with AC		
• at 50 Hz Rated value	V	96 ... 127
• at 60 Hz Rated value	V	96 ... 127
Control supply voltage for DC		
• Rated value	V	96 ... 127
• Rated value	Hz	40
Control supply voltage frequency 2 Rated value	Hz	60
Operating range factor control supply voltage rated value of the magnet coil with AC		
• at 50 Hz		0.8 ... 1.1
• at 60 Hz		0.8 ... 1.1
Operating range factor control supply voltage rated value of the magnet coil for DC		0.8 ... 1.1
Design of the surge suppressor		with varistor
Apparent pick-up power of the magnet coil with AC	V·A	280
Apparent holding power of the magnet coil with AC	V·A	7
Closing power of the magnet coil for DC	W	320
Holding power of the magnet coil for DC	W	2.8
Inductive power factor		
• with closing power of the coil		0.8
• with the holding power of the coil		0.4

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

UL/CSA ratings:		
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600

Short-circuit:		
Design of the fuse link		
• for short-circuit protection of the main circuit		
— with type of assignment 1 required		fuse gL/gG: 355 A
— with type of assignment 2 required		fuse gL/gG: 350 A
• for short-circuit protection of the auxiliary switch required		fuse gL/gG: 10 A

Installation/ mounting/ dimensions:		
Mounting type		screw fixing
• Side-by-side mounting		Yes
Height	mm	172
Width	mm	120
Depth	mm	170
Required spacing		
• for grounded parts		
— at the side	mm	10

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 AWG conductors for main contacts		4 ... 250 kcmil
• 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		S6

Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +55

• during storage	°C	-55 ... +80

Certificates/ approvals:

General Product Approval			Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
CSA	UL	EAC	Type Examination	EG-Konf.	Special Test Certificate

Shipping Approval				other	
ABS	DNV	GL	RMRS	Confirmation	Environmental Confirmations

other

other

Further information

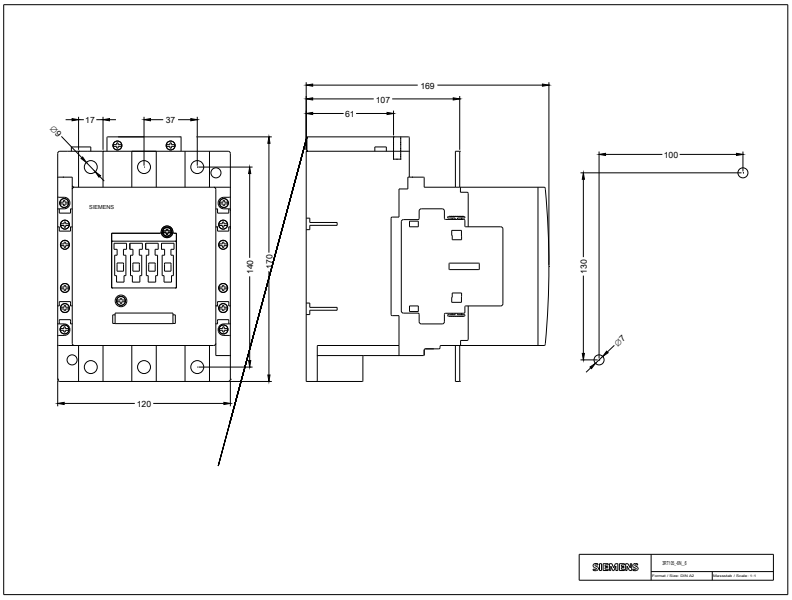
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

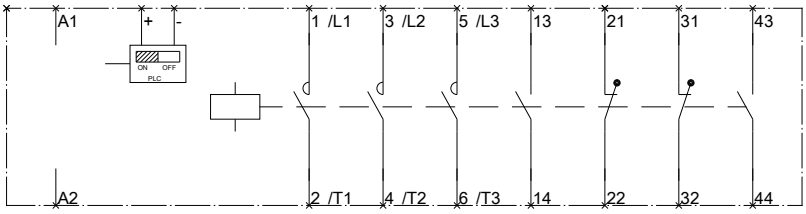
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT14566NF36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RT14566NF36/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=3RT14566NF36&lang=en





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