# SIEMENS

### Data sheet

## 3RT1456-6NP36

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)	_	
<ul> <li>of the contactor typical</li> </ul>		10 000 000
<ul> <li>of the contactor with added electronics-</li> </ul>		5 000 000
compatible auxiliary switch block typical		
• of the contactor with added auxiliary switch		10 000 000
block typical		
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	А	275
Rated value		
— up to 690 V at ambient temperature 40 $^\circ C$	А	275
Rated value		
— up to 690 V at ambient temperature 60 °C	A	250
Rated value		
• 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		252
— at 24 V Rated value	A	250
— at 110 V Rated value	A	18
• at DC-3 at DC-5		050
— 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	•	050
— at 24 V Rated value	A	250
— at 110 V Rated value	A	250
• at DC-3 at DC-5		252
— 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	٨	250
— at 24 V Rated value	A	250
— at 110 V Rated value	A	250
• at DC-3 at DC-5	٨	250
— at 110 V Rated value	A	250
— at 24 V Rated value	A	250
Operating power	kW	165
at AC-1 at 400 V Rated value	kW	55
at AC-2 at 400 V Rated value		55
• at AC-1		
<ul> <li>at AC-1</li> <li>— at 230 V at 60 °C Rated value</li> </ul>	kW	95
- at 690 V at 60 °C Rated value	kW	285
— at 690 V at 60 °C Rated value	kW	285
<ul> <li>at AC-3</li> </ul>		
	kW	30
— at 230 V Rated value — 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	200 277
• at 60 Hz Rated value	V	200 277
Control supply voltage for DC		
Rated value	V	200 277
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		
<ul> <li>with closing power of the coil</li> </ul>		0.8
<ul> <li>with the holding power of the coil</li> </ul>		0.4
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
— instantaneous contact		2
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		
— instantaneous contact		2
Operating current at AC-15		
• at 230 V Rated value	A	6
• at 400 V Rated value	А	3
Operating current		
• at DC-12 at 220 V Rated value	А	1
• at DC-13 at 220 V Rated value	А	0.3
Operating current		
• at DC-12		
— at 60 V Rated value	А	6
— at 110 V Rated value	А	3

• at DC-13		
— at 24 V Rated value	А	10
— at 60 V Rated value	А	2
— at 110 V Rated value	А	1

UL/CSA ratings:		
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600
Short-circuit:		
Design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
— with type of assignment 1 required		fuse gL/gG: 355 A
— with type of assignment 2 required		fuse gL/gG: 350 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		fuse gL/gG: 10 A
Installation/ mounting/ dimensions:		
Mounting type		screw fixing
<ul> <li>Side-by-side mounting</li> </ul>		Yes
Height	mm	172
Width	mm	120
Depth	mm	170
Required spacing	_	
<ul> <li>for grounded parts</li> </ul>		
— at the side	mm	10
Connections/ Terminals:	-	
Type of electrical connection		
<ul> <li>for main current circuit</li> </ul>		screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Type of connectable conductor cross-section		
<ul> <li>for AWG conductors for main contacts</li> </ul>		4 250 kcmil
<ul> <li>for auxiliary contacts</li> </ul>		
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14), 1x 12
Mechanical data:	_	
Size of contactor		S6
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 +55

<ul> <li>during storage</li> </ul>	9		°C -55 +80	)	
Certificates/ approv	als:				
General Produc	t Approval			Functional Safety/Safety of Machinery	Declaration of Conformity
CCC	CSA CSA		EHC	Type Examination	EG-Konf.
-					
Test Certificates	Shipping App	roval			other
	Shipping App	roval JÅ DNV DNV	GLŵ	RMRS	other Environmental Confirmations
Certificates Special Test	Received and a second s	<u>Ĵå</u> divv		RMRS	Environmental

#### 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=3RT14566NP36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT14566NP36/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=3RT14566NP36&lang=en



