SIEMENS

Data sheet 3RT1036-3AL20



CONTACTOR, AC-3 22 KW/400 V, AC 230 V 50/60 HZ, 3-POLE, SIZE S2, CAGE CLAMP

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:		
Insulation voltage		
Rated value	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
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	Α	400
Protection class IP		
• on the front		IP20
• 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	Α	60
Rated value		
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$	Α	60
Rated value		
— up to 690 V at ambient temperature 60 °C	Α	55
Rated value		
• at AC-3	^	50
— at 400 V Rated value	A A	50 24
— at 690 V Rated value		41
at AC-4 at 400 V Rated value	A	41
Operating current with 1 current path • at DC-1		
	Α	55
— at 24 V Rated value	A	4.5
— at 110 V Rated value	A	4.0
• at DC-3 at DC-5	^	35
— at 24 V Rated value	A	
— at 110 V Rated value	A	2.5
Operating current with 2 current paths in series • at DC-1		
	Α	55
— at 24 V Rated value	A	25
— at 110 V Rated value	^	20
• at DC-3 at DC-5	Α	25
— at 110 V Rated value— at 24 V Rated value	A	55
Operating current with 3 current paths in series	A	33
• at DC-1		
— at 24 V Rated value	Α	55
— at 110 V Rated value	A	55
• at DC-3 at DC-5	, ,	
— at 110 V Rated value	Α	55
— at 110 v Rated value — at 24 V Rated value	A	55
Operating power	71	30
at AC-1 at 400 V Rated value	kW	38
• at AC-2 at 400 V Rated value	kW	22
at AC-2 at 400 V Rated value at AC-4 at 400 V Rated value	W	22 000
Operating power		
• at AC-1		
— at 230 V at 60 °C Rated value	kW	22
— at 690 V at 60 °C Rated value	kW	66
— at 690 V Rated value	kW	66
• at AC-3		

— at 230 V Rated value	kW	15
— at 400 V Rated value	kW	22
— at 500 V Rated value	kW	30
— at 690 V Rated value	kW	22
Operating power for ≥ 200000 operating cycles at AC-4		
• at 400 V Rated value	kW	12.6
• at 690 V Rated value	kW	11.4
Operating frequency		
• at AC-3 maximum	1/h	800
Control circuit/ Control:		
Control circuit/ Control: Type of voltage of the control supply voltage		AC
		AC
Type of voltage of the control supply voltage	V	AC 230
Type of voltage of the control supply voltage Control supply voltage with AC	V V	
Type of voltage of the control supply voltage Control supply voltage with AC • at 50 Hz Rated value		230
Type of voltage of the control supply voltage Control supply voltage with AC • at 50 Hz Rated value • at 60 Hz Rated value	V	230 230
Type of voltage of the control supply voltage Control supply voltage with AC at 50 Hz Rated value at 60 Hz Rated value Rated value	V Hz	230 230 50
Type of voltage of the control supply voltage Control supply voltage with AC • at 50 Hz Rated value • at 60 Hz Rated value • Rated value Control supply voltage frequency 2 Rated value	V Hz	230 230 50
Type of voltage of the control supply voltage Control supply voltage with AC at 50 Hz Rated value at 60 Hz Rated value Rated value Control supply voltage frequency 2 Rated value Operating range factor control supply voltage rated	V Hz	230 230 50
Type of voltage of the control supply voltage Control supply voltage with AC • at 50 Hz Rated value • at 60 Hz Rated value • Rated value Control supply voltage frequency 2 Rated value Operating range factor control supply voltage rated value of the magnet coil with AC	V Hz	230 230 50 60

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-15		
• at 230 V Rated value	Α	6
• at 400 V Rated value	Α	3
Operating current		
• at DC-12 at 220 V Rated value	Α	1
• at DC-13 at 220 V Rated value	Α	0.3
Operating current		
• at DC-12		

V·A

15

0.760.35

Apparent holding power of the magnet coil with AC

• with closing power of the coil

• with the holding power of the coil

Inductive power factor

— at 60 V Rated value	Α	6
— at 110 V Rated value	Α	3
• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	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: 160 A
 — with type of assignment 2 required 	fuse gL/gG: 80 A
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A

A600 / Q600

Installation/ mounting/ dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
 Side-by-side mounting 		Yes
Height	mm	112
Width	mm	55
Depth	mm	115
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 	Cage Clamp terminals	
Type of connectable conductor cross-section		
• 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 processing 	2x (0.75 16 mm²)	
 for AWG conductors for main contacts 	2x (18 2)	
 for auxiliary contacts 		
— solid	2x (0.25 2.5 mm²)	

UL/CSA ratings:

required

Contact rating of the auxiliary contacts acc. to UL

- finely stranded with core end processing

— finely stranded without core end processing

• for AWG conductors for auxiliary contacts

2x (0.25 ... 1.5 mm²)

2x (0.25 ... 2.5 mm²)

2x (24 ... 14)

Mechanical data:

Size of contactor S2

Ambient conditions:

Installation altitude at height above sea level m 2 000 maximum

Ambient temperature

during operation

during storage

°C -25 ... +60

-55 ... +80

Certificates/ approvals:

General Product Approval

Functional
Safety/Safety
Of Machinery

Declaration of
Certificates

°C







Type Examination



Type Test
Certificates/Test
Report

Test Certificates **Shipping Approval**

Special Test Certificate







GL



LRS



Shipping other
Approval



Confirmation

Environmental Confirmations

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=3RT10363AL20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10363AL20&lang=en



