



CONTACTOR,AC3:18.5KW/400V, 1NO+1NC, 230V AC
50/60HZ, 3-POLE, SIZE S2, SPRING-TYPE TERMINAL
UPRIGHT MOUNTING POSITION

Figure similar

product brand name		SIRIUS
Product designation		3RT2 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	A	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 voltage		

• at AC-3 Rated value maximum	V	690
Operating current		
• at AC-1		
— at 400 V at ambient temperature 40 °C Rated value	A	60
— up to 690 V at ambient temperature 40 °C Rated value	A	60
— up to 690 V at ambient temperature 60 °C Rated value	A	55
• at AC-2 at 400 V Rated value	A	40
• at AC-3		
— at 400 V Rated value	A	40
— at 500 V Rated value	A	40
— at 690 V Rated value	A	24
• at AC-4 at 400 V Rated value	A	35
Operating current with 1 current path		
• at DC-1		
— at 24 V Rated value	A	55
— at 110 V Rated value	A	4.5
— at 220 V Rated value	A	2
— at 440 V Rated value	A	0.4
— at 600 V Rated value	A	0.25
• at DC-3 at DC-5		
— at 24 V Rated value	A	35
— at 110 V Rated value	A	2.5
— at 220 V Rated value	A	2
— at 440 V Rated value	A	0.1
— at 600 V Rated value	A	0.06
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	A	55
— at 110 V Rated value	A	45
— at 220 V Rated value	A	5
— at 440 V Rated value	A	1
— at 600 V Rated value	A	0.8
• at DC-3 at DC-5		
— at 110 V Rated value	A	25
— at 220 V Rated value	A	5
— at 24 V Rated value	A	55
— at 440 V Rated value	A	0.27
— at 600 V Rated value	A	0.16
Operating current with 3 current paths in series		

<ul style="list-style-type: none"> • at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value — at 220 V Rated value — at 440 V Rated value — at 600 V Rated value • at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 220 V Rated value — at 24 V Rated value — at 440 V Rated value — at 600 V Rated value 	A	55
	A	45
	A	45
	A	2.9
	A	1.4
	A	45
	A	25
	A	55
	A	0.6
	A	0.6
Operating power		
<ul style="list-style-type: none"> • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value 	kW	39
	kW	18.5
	kW	18.5
Operating power		
<ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 230 V at 60 °C Rated value — at 230 V Rated value — at 400 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V Rated value • at AC-3 <ul style="list-style-type: none"> — at 230 V Rated value — at 400 V Rated value — at 500 V Rated value — at 690 V Rated value 	kW	21
	kW	23
	kW	36
	kW	62
	kW	68
	kW	11
	kW	18.5
	kW	22
	kW	22
Operating power for ≥ 200000 operating cycles at AC-4		
<ul style="list-style-type: none"> • at 400 V Rated value • at 690 V Rated value 	kW	11.6
	kW	16.8
Operating frequency		
<ul style="list-style-type: none"> • at AC-3 maximum 	1/h	1 000
Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
<ul style="list-style-type: none"> • at 50 Hz Rated value • at 60 Hz Rated value 	V	230
	V	230
Operating range factor control supply voltage rated value of the magnet coil with AC		

- at 50 Hz
- at 60 Hz

0.8 ... 1.1

0.85 ... 1.1

Auxiliary circuit:

Number of NC contacts		
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact 		1
Number of NO contacts		
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact 		1
Product expansion Auxiliary switch		Yes
Operating current at AC-15		
<ul style="list-style-type: none"> • at 230 V Rated value 	A	10
<ul style="list-style-type: none"> • at 400 V Rated value 	A	3
<ul style="list-style-type: none"> • at 690 V Rated value 	A	1
Operating current		
<ul style="list-style-type: none"> • at DC-12 at 125 V Rated value 	A	2
<ul style="list-style-type: none"> • at DC-12 at 220 V Rated value 	A	1
<ul style="list-style-type: none"> • at DC-12 at 600 V Rated value 	A	0.15
<ul style="list-style-type: none"> • at DC-13 at 125 V Rated value 	A	0.9
<ul style="list-style-type: none"> • at DC-13 at 220 V Rated value 	A	0.3
<ul style="list-style-type: none"> • at DC-13 at 600 V Rated value 	A	0.1
Operating current		
<ul style="list-style-type: none"> • at DC-12 <ul style="list-style-type: none"> — at 60 V Rated value — at 110 V Rated value 	A	6
	A	3
<ul style="list-style-type: none"> • at DC-13 <ul style="list-style-type: none"> — at 24 V Rated value — at 60 V Rated value — at 110 V Rated value 	A	10
	A	2
	A	1
Contact reliability of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor		
<ul style="list-style-type: none"> • at 480 V Rated value 	A	40
<ul style="list-style-type: none"> • at 600 V Rated value 	A	41
yielded mechanical performance [hp]		
<ul style="list-style-type: none"> • for single-phase AC motor at 110/120 V Rated value 	metric hp	3
<ul style="list-style-type: none"> • for single-phase AC motor at 230 V Rated value 	metric hp	7.5
<ul style="list-style-type: none"> • for three-phase AC motor at 200/208 V Rated value 	metric hp	10

<ul style="list-style-type: none"> • for three-phase AC motor at 220/230 V Rated value 	metric hp	15
<ul style="list-style-type: none"> • for three-phase AC motor at 460/480 V Rated value 	metric hp	30
<ul style="list-style-type: none"> • for three-phase AC motor at 575/600 V Rated value 	metric hp	40
Contact rating of the auxiliary contacts acc. to UL		A600 / P600

Short-circuit:

Design of the fuse link		
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of assignment 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 		gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 80 A fuse gL/gG: 10 A

Installation/ mounting/ dimensions:

mounting position		standing, on horizontal mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<ul style="list-style-type: none"> • Side-by-side mounting 		Yes
Height	mm	113.4
Width	mm	55
Depth	mm	130
Required spacing		
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	mm	0 0 0 0 0 0 0 50 6 50 0 0 50 50 6

Connections/ Terminals:

Type of electrical connection <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		screw-type terminals spring-loaded terminals
Type of connectable conductor cross-section <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for main contacts • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG conductors for auxiliary contacts 		2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²) 2x (18 ... 2), 1x (18 ... 1) 2x (0,5 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (20 ... 14)
Apparent pick-up power of the magnet coil with AC <ul style="list-style-type: none"> • at 50 Hz • at 60 Hz 	V·A V·A	210 188

Safety related data:

Proportion of dangerous failures <ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 	% %	40 73
Product function Mirror contact acc. to IEC 60947-4-1		Yes
Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529

Mechanical data:

Size of contactor		S2
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Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature <ul style="list-style-type: none"> • during operation • during storage 	°C °C	-25 ... +60 -55 ... +80

Certificates/ approvals:

General Product Approval

other



[Environmental Confirmations](#)

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

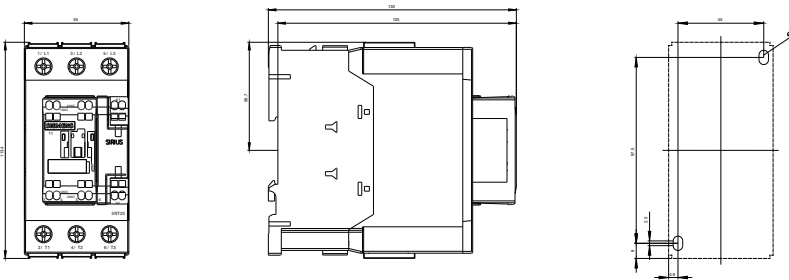
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RT20353AL201AA0>

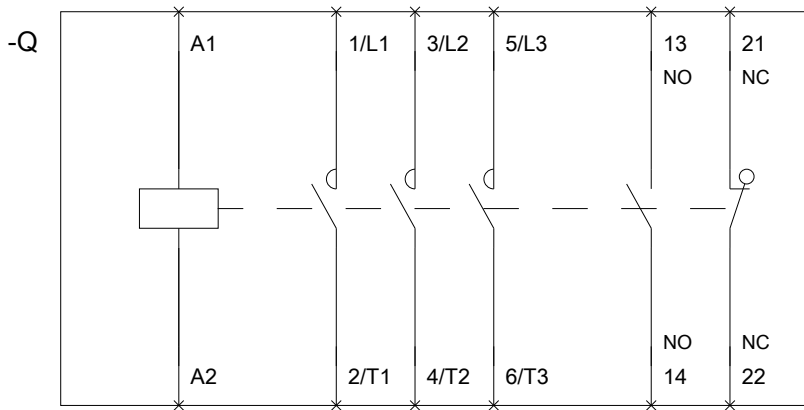
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT20353AL201AA0/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT20353AL201AA0&lang=en





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