SIEMENS

Product data sheet 3RT2518-2AP60



2NO+2NC CONTACTOR, AC3: 7.5KW DC 220V 50HZ, 240V 60HZ 4-POLE, 2NO+2NC, SZ: S00, SPRING-LOADED TERMINAL

General technical data:		
product brand name		SIRIUS
Size of the contactor		S00
Product extension		
auxiliary switch		Yes
function module for communication		No
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-55 +80
during operating	°C	-25 +60
Shock resistance		
at rectangular impulse		
• at AC		7,3g / 5 ms, 4,7g / 10 ms
at sine pulse		
• at AC		11,4g / 5 ms, 7,3g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690

Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1	V	400
Mechanical operating cycles as operating time		
of the contactor / typical		30,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
 of the contactor with added electronics-compatible auxiliary switch block / typical 		5,000,000

Main circuit:		
Number of NC contacts / for main contacts		2
Number of NO contacts / for main contacts		2
Operational current / at AC-1 / up to 690 V		
• at 40 °C ambient temperature / rated value	Α	22
• at 60 °C ambient temperature / rated value	А	20
Operating current / at AC-2 / at AC-3		
• at 400 V		
• per NO contact / rated value	Α	16
• per NC contact / rated value	Α	9
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	2.1
• at 220 V / rated value	Α	0.8
• at 440 V / rated value	Α	0.6
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	Α	20
• at 110 V / rated value	Α	12
• at 220 V / rated value	Α	1.6
• at 440 V / rated value	Α	0.8
Operating current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V		
• per NO contact / rated value	Α	20
• per NC contact / rated value	Α	20
• at 110 V		
• per NO contact / rated value	Α	0.15
• per NC contact / rated value	Α	0.075
• at 220 V		
• per NO contact / rated value	Α	0.75
• per NC contact / rated value	Α	0.375
• with 2 current paths in series / at DC-3 / at DC-5		

• at 24 V		
• per NO contact / rated value	Α	20
• per NC contact / rated value	Α	20
• at 110 V		
• per NO contact / rated value	Α	0.35
• per NC contact / rated value	Α	0.175
Operating performance		
• at AC-1		
• at 230 V / rated value	kW	7.5
• at 400 V / rated value	kW	13
• at AC-2 / at AC-3		
• at 230 V		
• per NO contact / rated value	kW	4
• per NC contact / rated value	kW	2.2
• at 400 V		
• per NO contact / rated value	kW	7.5
• per NC contact / rated value	kW	4
Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor	W	2.2
Off-load operating frequency		
• at AC	1/h	10,000
• at DC	1/h	10,000
Frequency of operation		
• with AC-1 / maximum	1/h	1,000
• at AC-2 / at AC-3 / maximum	1/h	1,000

Control circuit/ Control:		
Voltage type / of control feed voltage		AC
Control supply voltage		
• at 50 Hz / at AC / rated value	V	220
• at 60 Hz / at AC / rated value	V	240
operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.8 1.1
• at 60 Hz / for AC		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	43
Apparent holding power / of the solenoid / for AC	V-A	6.5
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.25
Closing delay		

• at AC	ms	8 33
Opening delay		
• at AC	ms	4 15
Arcing time	ms	10 15
Residual current / of electronics / for control with signal <0>		
• at 230 V / with AC / maximum permissible	А	0.0040

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
Operating current		
• at AC-12 / maximum	Α	10
• at AC-15 / at 230 V / rated value	Α	10
• at AC-15 / at 400 V / rated value	Α	3
Operating current / at DC-12		
• at 48 V / rated value	Α	6
• at 60 V / rated value	Α	6
• at 110 V / rated value	Α	3
• at 125 V / rated value	Α	2
• at 220 V / rated value	Α	1
• at 440 V / rated value	Α	0.3
• at 600 V / rated value	Α	0.15
Operating current / at DC-13		
• at 24 V / rated value	А	10
• at 48 V / rated value	Α	2
• at 60 V / rated value	Α	2
• at 110 V / rated value	Α	1
• at 220 V / rated value	Α	0.3
• at 600 V / rated value	Α	0.1

UL/CSA ratings:		
yielded mechanical performance [hp]		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	1
• at 230 V / rated value	hp	2
Contact rating designation / for auxiliary contacts / according to UL		A600 / Q600

Short-circuit:

Design of the fuse link	
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
• for short-circuit protection of the main circuit	
with type of assignment 1 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
• at type of coordination 2 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A

Installation/ mounting/ dimensions:		
mounting position		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Mounting type / series installation		Yes
Width	mm	45
Height	mm	70
Depth	mm	73

Connections/ terminals:		
Design of the electrical connection		
• for main current circuit	spring-loaded terminals	
 for auxiliary and control current circuit 	spring-loaded terminals	
Type of the connectable conductor cross-section		
• for main contacts		
• solid	2x (0.5 4 mm²)	
• finely stranded		
 with conductor end processing 	2x (0.5 2.5 mm²)	
 without conductor final cutting 	2x (0.5 2.5 mm²)	
• for AWG conductors / for main contacts	2x (20 12)	
for auxiliary contacts		
• solid	2x (0.5 4 mm²)	
• finely stranded		
 with conductor end processing 	2x (0.5 2.5 mm²)	
 without conductor final cutting 	2x (0.5 2.5 mm²)	
• for AWG conductors / for auxiliary contacts	2x (20 12)	

Safety related data:		
B10 value / with high demand rate		
according to SN 31920		1,000,000
T1 value / for proof test interval or service life		
according to IEC 61508	а	20
Proportion of dangerous failures		

• with low demand rate / according to SN 31920	%	40
with high demand rate / according to SN 31920	%	73
Failure rate [FIT] / with low demand rate		
according to SN 31920	FIT	100
Product function		
• mirror contact to IEC 60947-4-1		Yes
• comment		with 3RH29
• positively driven operation to IEC 60947-5-1		No

Certificates/ approvals:

General Product Approval

Functional Safety / Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Special Test Certificate

Shipping Approval









GL





Shipping Approval

other





Confirmation



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

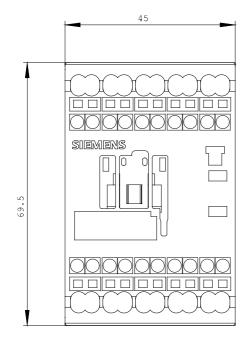
http://www.siemens.com/cax

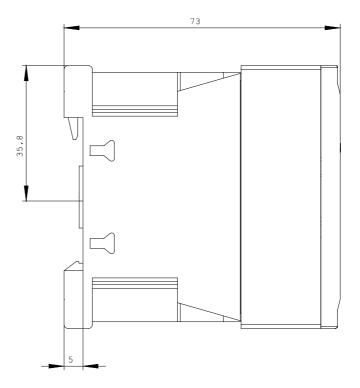
 ${\bf Service \& Support\ (Manuals,\ Certificates,\ Characteristics,\ FAQs,...)}$

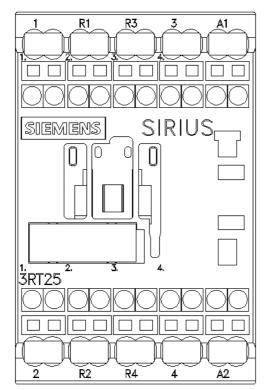
 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RT2518-2AP60/all}}$

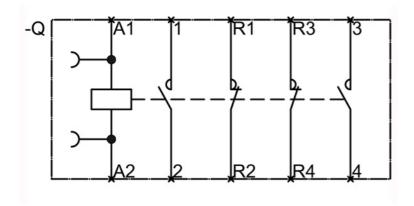
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2518-2AP60}$









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