SIEMENS

Data sheet 3RT2047-1AP60



power contactor, AC-3e/AC-3, 110 A, 55 kW / 400 V, 3-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S3 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S3
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	23.7 W
 at AC in hot operating state per pole 	7.9 W
 without load current share typical 	8.8 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	1 000 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
 of main circuit rated value 	8 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	10.3g / 5 ms, 6,.g / 10 ms
shock resistance with sine pulse	
• at AC	16.3g / 5 ms, 10.g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	
Weight	1.72 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	405 kg
Global Warming Potential [CO2 eq] during manufacturing	7.66 kg
Global Warming Potential [CO2 eq] during operation	399 kg
Global Warming Potential [CO2 eq] after end of life	-1.19 kg
Main circuit	1.10 Ng
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	1 000 V
at AC-3 rated value maximum at AC-3e rated value maximum	1 000 V
operational current	1 000 V
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	130 A
 at AC-1 — up to 690 V at ambient temperature 40 °C rated value 	130 A
— up to 690 V at ambient temperature 60 °C rated value	110 A
• at AC-3	
— at 400 V rated value	110 A
— at 500 V rated value	110 A
— at 690 V rated value	98 A
— at 1000 V rated value	30 A
• at AC-3e	
— at 400 V rated value	110 A
— at 500 V rated value	110 A
— at 690 V rated value	98 A
— at 1000 V rated value	30 A
 at AC-4 at 400 V rated value 	97 A
 at AC-5a up to 690 V rated value 	120 A
 at AC-5b up to 400 V rated value 	110 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	98 A
 up to 400 V for current peak value n=20 rated value 	98 A
 up to 500 V for current peak value n=20 rated value 	98 A
up to 690 V for current peak value n=20 rated valueat AC-6a	98 A
— up to 230 V for current peak value n=30 rated value	65.3 A
— up to 400 V for current peak value n=30 rated value	65.3 A
— up to 500 V for current peak value n=30 rated value	65.3 A
— up to 690 V for current peak value n=30 rated value	65.3 A
minimum cross-section in main circuit at maximum AC-1 rated value	50 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	46 A
at 690 V rated value	36 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	100 A
— at 60 V rated value	60 A
— at 110 V rated value	9 A
— at 220 V rated value	2 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.4 A
with 2 current paths in series at DC-1	
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	10 A

— at 440 V rated value	1.8 A
— at 600 V rated value	1.0 A
with 3 current paths in series at DC-1	
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 100 V rated value	100 A
— at 220 V rated value	80 A
— at 440 V rated value	4.5 A
— at 600 V rated value	2.6 A
• at 1 current path at DC-3 at DC-5	2.0 A
— at 24 V rated value	40 A
— at 60 V rated value	6 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1A
— at 440 V rated value	0.15 A
— at 600 V rated value	0.06 A
with 2 current paths in series at DC-3 at DC-5	0.00 A
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	7 A
— at 440 V rated value	0.42 A
— at 600 V rated value	0.16 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	35 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	55 kW
• at AC-3	
— at 230 V rated value	30 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	90 kW
— at 1000 V rated value	37 kW
• at AC-3e	
— at 230 V rated value	30 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	90 kW
— at 1000 V rated value	37 kW
operating power for approx. 200000 operating cycles at AC-	
4	OLO UM
at 400 V rated value	24.3 kW
• at 690 V rated value	32.9 kW
operating apparent power at AC-6a	00 14/4
up to 230 V for current peak value n=20 rated value	39 kVA
up to 400 V for current peak value n=20 rated value	67 kVA
up to 500 V for current peak value n=20 rated value	84 kVA
up to 690 V for current peak value n=20 rated value	117 kVA
operating apparent power at AC-6a	26 N/A
up to 230 V for current peak value n=30 rated value	26 kVA
• up to 400 V for current peak value n=30 rated value	45.2 kVA
up to 500 V for current peak value n=30 rated value up to 600 V for current peak value n=20 rated value.	56.5 kVA
up to 690 V for current peak value n=30 rated value short time withstand current in cold operating state up to	78 kVA
short-time withstand current in cold operating state up to 40 °C	
• limited to 1 s switching at zero current maximum	1 960 A; Use minimum cross-section acc. to AC-1 rated value
<u> </u>	

Initial of to 15 a wollching at zero current maximum Initial of to 15 a wollching at zero current maximum Initial of to 15 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 16 a wollching at zero current maximum Initial of to 27 a wollching at zero current maximum Initial of to 27 a wollching at zero current maximum Initial of to 28 a wollching at zero current maximum Initial of to 28 a wollching at zero current maximum Initial of to 28 a wollching at zero current maximum Initial of the zero current wollching at zero current wollching at zero current wollching at zero current supply voltage Initial of the zero current wollching at zero c		
mimided to Dis switching at zero current maximum 507 A. User minimum cross-section acc. to AC-1 rated value no-load switching frequency 1 AC-1 maximum 502 A. User minimum cross-section acc. to AC-1 rated value 5000 15h 1 AC-1 maximum 500 15h 1 AC-1 maximum 500 15h 1 AC-1 maximum 500 15h 1 AC-3 maximum 500 15h 1 AC	 limited to 5 s switching at zero current maximum 	1 502 A; Use minimum cross-section acc. to AC-1 rated value
• Immined to 80 a swidthing at zero current maximum 562 A, Use minimum cross-section acc. to AC-1 railed value no-load switching frequency 4 AC 5 000 1/h 3 AC 1 maximum 900 1/h 3 AC 1 maximum 850 1/h 3 AC 1 maximum 850 1/h 3 AC 1 AC 3	 limited to 10 s switching at zero current maximum 	1 095 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	 limited to 30 s switching at zero current maximum 	707 A; Use minimum cross-section acc. to AC-1 rated value
	 limited to 60 s switching at zero current maximum 	562 A; Use minimum cross-section acc. to AC-1 rated value
operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at Control supply voltage at AC • at 60 Hz rated value • at 60 Hz •	no-load switching frequency	
	• at AC	5 000 1/h
e. at AC-2 maximum 850 fth e. at AC-3 maximum 850 fth e. at AC-3 maximum 850 fth e. at AC-3 maximum 850 fth e. at AC-4 maximum 200 fth control supply voltage AC control supply voltage AC e. at 50 ft/2 raided value 220 V e. at 50 ft/2 raided value 240 V operating range factor control supply voltage rated value of magnet coll et AC e. at 50 ft/2 raided value 08 1.1 aparent plack-up power of magnet coll at AC e. at 50 ft/2 raided value 08 1.1 aparent plack-up power of magnet coll at AC e. at 50 ft/2 raided value 0.52 value 0.55 value 0.52 value 0.55 value	operating frequency	
at AC-3 maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum 200 tith Control circuit Control Type of Voilage of the control supply voltage AC control supply voltage at AC at 50 Hz rated value at 80 Hz rated value at 80 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz a	• at AC-1 maximum	900 1/h
	• at AC-2 maximum	350 1/h
# at AC-4 maximum Type of voltage of the control supply voltage AC control supply voltage at AC at 60 Hz rated value at 60 Hz at 70 Hz apparent pick-up power of magnet coil at AC at 60 Hz at 60 Hz apparent pick-up power of magnet coil at AC at 60 Hz at 60 Hz apparent pick-up power of magnet coil at AC at 60 Hz at 60 Hz apparent holding power of the coil at 60 Hz	at AC-3 maximum	850 1/h
# at AC-4 maximum Type of voltage of the control supply voltage AC control supply voltage at AC at 60 Hz rated value at 60 Hz at 70 Hz apparent pick-up power of magnet coil at AC at 60 Hz at 60 Hz apparent pick-up power of magnet coil at AC at 60 Hz at 60 Hz apparent pick-up power of magnet coil at AC at 60 Hz at 60 Hz apparent holding power of the coil at 60 Hz	at AC-3e maximum	850 1/h
Control circuit/ Control		200 1/h
type of voltage of the control supply voltage control supply voltage at AC et als 01 Hz rated value 220 V et at 60 Hz rated value 220 V et at 60 Hz rated value 0		
control supply voltage at AC		^
# at 50 Hz rated value		AC
• at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz • at 60 Hz apparent pick-up power of magnet coil at AC • at 50 Hz val 60 Hz at 60 Hz apparent holding power of the coil • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz closing delay • at AC arcing time control version of the switch operating mechanism arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact outher of NC contacts for auxiliary contacts instantaneous contact outher of NC contacts for auxiliary contacts instantaneous at 400 V rated value • at 400 V rated value • at 400 V rated value • at 450 V rated value • at 45 V rated value • at 450 V rated valu		000.1/
Operating range factor control supply voltage rated value of magnet coil at AC		
### ### ### ### ### ### ### ### ### ##		240 V
* at 60 Hz		
apparent pick-up power of magnet coil at AC	● at 50 Hz	
■ at 50 Hz ■ at 60 Hz ■ at 60 Hz ■ at 50 Hz ■ at 50 Hz ■ at 50 Hz ■ at 60 Hz ■ at 50 Hz ■ at 60 Hz ■ at 50 Hz ■ at 60 Hz ■ at 60 Hz ■ at 50 Hz ■ at 60 Hz ■ at 50 Hz ■ at 60 Hz ■ at 50 Hz ■ at 60 Hz	• at 60 Hz	0.8 1.1
	apparent pick-up power of magnet coil at AC	
Inductive power factor with closing power of the coil * at 50 Hz	● at 50 Hz	326 VA
• at 50 Hz • at 60 Hz • at 60 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at AC	● at 60 Hz	326 VA
	inductive power factor with closing power of the coil	
apparent holding power of magnet coil at AC	● at 50 Hz	0.62
■ at 50 Hz ■ at 60 Hz Inductive power factor with the holding power of the coil ■ at 50 Hz ■ at 60 Hz ■ at 60 Hz ■ at AC	● at 60 Hz	0.55
■ at 50 Hz ■ at 60 Hz Inductive power factor with the holding power of the coil ■ at 50 Hz ■ at 60 Hz ■ at 60 Hz ■ at AC	apparent holding power of magnet coil at AC	
inductive power factor with the holding power of the coil		22 VA
inductive power factor with the holding power of the coil	• at 60 Hz	22 VA
■ at 50 Hz ■ at 60 Hz ■ at 60 Hz ■ at AC ■ arcing time ■ control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum □ AC-15 ■ at 230 V rated value ■ at 4500 V rated value ■ at 500 V rated value ■ at 480 V rated value ■ at 48 V rated value ■ at 110 V rated value ■ at 125 V rated value ■ at 220 V rated value ■ at 125 V rated value ■ at 125 V rated value ■ at 220 V rated value ■ at 320 V rated value ■ at 48 V rated value ■ at 220 V rated value ■ at 600 V rated value ■ at 600 V rated value □ at 600 V rated value □ at 24 V rated value	inductive power factor with the holding power of the coil	
● at 60 Hz		0.36
closing delay		
e at AC 13 50 ms opening delay e at AC 10 21 ms arcing time 10 20 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-15 e at 230 V rated value 6 A e at 400 V rated value 3 A e at 500 V rated value 1 A e at 690 V rated value 1 A operational current at DC-12 e at 24 V rated value 6 A e at 48 V rated value 6 A e at 60 V rated value 7 A e at 60 V rated value 8 A e at 10 V rated value 9 A e at 60 V rated value 9 A e at 125 V rated value 9 A e at 125 V rated value 9 A e at 220 V rated value 9 A e		7.
opening delay • at AC arcing time tontrol version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 60 V rated value • at 60 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value		13 50 ms
■ at AC arcing time		
arcing time control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 42 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 100 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value		10 21 me
Control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at 8 V rated value • at 8 V rated value • at 8 V rated value • at 80 V rated value • at 80 V rated value • at 80 V rated value • at 125 V rated value • at 125 V rated value • at 125 V rated value • at 20 V rated value • at 3 A • at 22 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value		
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 20 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 29 V rated value • at 24 V rated value		
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 125 V rated value • at 220 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 20 V rated value • at 20 V rated value • at 24 V rated value		Standard A1 - A2
number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value		4
contact operational current at AC-12 maximum 10 A operational current at AC-15 6 A • at 230 V rated value 3 A • at 500 V rated value 2 A • at 690 V rated value 1 A operational current at DC-12 10 A • at 24 V rated value 6 A • at 48 V rated value 6 A • at 60 V rated value 3 A • at 110 V rated value 3 A • at 220 V rated value 2 A • at 220 V rated value 1 A • at 600 V rated value 0.15 A operational current at DC-13 0.15 A • at 24 V rated value 10 A	contact	
operational current at AC-15 • at 230 V rated value 6 A • at 400 V rated value 3 A • at 500 V rated value 2 A • at 690 V rated value 1 A operational current at DC-12 10 A • at 24 V rated value 6 A • at 48 V rated value 6 A • at 60 V rated value 3 A • at 110 V rated value 2 A • at 220 V rated value 1 A • at 600 V rated value 0.15 A operational current at DC-13 0.15 A • at 24 V rated value 10 A	The state of the s	1
 at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value 1 A Operational current at DC-12 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 220 V rated value at 24 V rated value at 24 V rated value On 15 A Operational current at DC-13 at 24 V rated value 10 A 	operational current at AC-12 maximum	10 A
 at 400 V rated value at 500 V rated value at 690 V rated value 1 A operational current at DC-12 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 220 V rated value at 220 V rated value at 24 V rated value 	operational current at AC-15	
 at 500 V rated value at 690 V rated value 1 A operational current at DC-12 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 220 V rated value at 600 V rated value at 220 V rated value at 220 V rated value at 24 V rated value at 24 V rated value at 24 V rated value 	at 230 V rated value	6 A
● at 690 V rated value operational current at DC-12 ● at 24 V rated value ● at 48 V rated value ● at 60 V rated value ● at 110 V rated value ● at 110 V rated value ● at 125 V rated value ● at 220 V rated value ● at 600 V rated value 1 A operational current at DC-13 ● at 24 V rated value 10 A	• at 400 V rated value	3 A
operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value 10 A operational current at DC-13 • at 24 V rated value 10 A	 at 500 V rated value 	2 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 24 V rated value 10 A 	at 690 V rated value	1 A
 at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 24 V rated value 10 A 	operational current at DC-12	
 at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value 10 A 	at 24 V rated value	10 A
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value 10 A 	at 48 V rated value	6 A
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value 10 A 		
 at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value 10 A 		
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at 600 V rated value operational current at DC-13 at 24 V rated value 10 A		
operational current at DC-13 ● at 24 V rated value 10 A		
• at 24 V rated value 10 A		0.10 A
	•	10.0
■ at 40 v rateu value		
	• at 48 v rated value	Z A

at 60 V rated value	2 A
at 110 V rated value	1 A
at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	96 A
at 600 V rated value	99 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	10 hp
— at 230 V rated value	20 hp
• for 3-phase AC motor	
— at 200/208 V rated value	30 hp
 — at 220/230 V rated value 	40 hp
— at 460/480 V rated value	75 hp
— at 575/600 V rated value	100 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)
 — with type of assignment 2 required 	gG: 200A (690V,100kA), aM: 100A (690V,100kA), BS88: 160A (415V,80kA)
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
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
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	140 mm
width	70 mm
depth	152 mm
required spacing	
 with side-by-side mounting 	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	20 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control circuit 	screw-type terminals
 at contactor for auxiliary contacts 	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
• for main contacts	
 finely stranded with core end processing 	2x (2.5 35 mm²), 1x (2.5 50 mm²)
for AWG cables for main contacts	2x (10 1/0), 1x (10 2)
connectable conductor cross-section for main contacts	

• solid	2.5 16 mm²
• stranded	6 70 mm²
 finely stranded with core end processing 	2.5 50 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 2.5 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
 for main contacts 	10 2
 for auxiliary contacts 	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

Approvals Certificates

General Product Approval







Confirmation



<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping









Confirmation

other

Special Test Certificate

Railway

Dangerous goods

Environment



Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2047-1AP60

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2047-1AP60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AP60

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

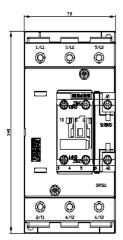
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2047-1AP60&lang=en

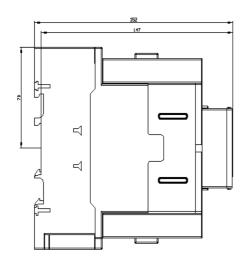
Characteristic: Tripping characteristics, I²t, Let-through current

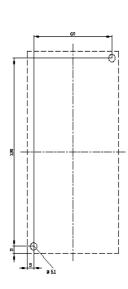
https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AP60/char

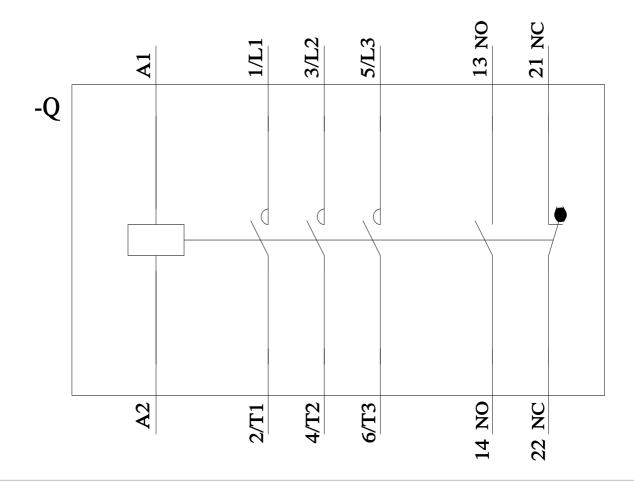
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2047-1AP60&objecttype=14&gridview=view1









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last modified: