SIEMENS

Data sheet

3RT2015-1HB42



power contactor, AC-3e/AC-3, 7 A, 3 kW / 400 V, 3-pole, 24 V DC, 0.7-1.25* Us, auxiliary contacts: 1 NC, screw terminal, size: S00, suitable for PLC outputs, not expandable with auxiliary switch

product brand name	SIRIUS			
product designation	Coupling contactor			
product type designation	3RT2			
General technical data	0012			
size of contactor	S00			
product extension				
function module for communication	No			
auxiliary switch	No			
power loss [W] for rated value of the current				
at AC in hot operating state	0.6 W			
at AC in hot operating state per pole	0.2 W			
without load current share typical	2.8 W			
type of calculation of power loss depending on pole	quadratic			
insulation voltage	4			
of main circuit with degree of pollution 3 rated value	690 V			
 of auxiliary circuit with degree of pollution 3 rated value 	690 V			
surge voltage resistance				
of main circuit rated value	6 kV			
 of auxiliary circuit rated value 	6 kV			
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V			
shock resistance at rectangular impulse				
• at DC	6,7g / 5 ms, 4,2g / 10 ms			
shock resistance with sine pulse				
• at DC	10,5g / 5 ms, 6,6g / 10 ms			
mechanical service life (operating cycles)				
 of contactor typical 	30 000 000			
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000			
reference code according to IEC 81346-2	Q			
Substance Prohibitance (Date)				
Weight	0.297 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 (EDD)	Vac
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total Global Warming Potential [CO2 eq] during manufacturing	153 kg 1.42 kg
Global Warming Potential [CO2 eq] during manufacturing Global Warming Potential [CO2 eq] during operation	1.42 kg
Global Warming Potential [CO2 eq] after end of life	-0.305 kg
Main circuit	-0.000 kg
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	5
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C rated value	18 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	18 A
— up to 690 V at ambient temperature 60 °C rated value	16 A
• at AC-3	
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
• at AC-3e	
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
• at AC-4 at 400 V rated value	6.5 A
at AC-5a up to 690 V rated value	15.8 A
• at AC-5b up to 400 V rated value	5.8 A
• at AC-6a	4.4
 — up to 230 V for current peak value n=20 rated value — up to 400 V for current peak value n=20 rated value 	4 A 4 A
— up to 500 V for current peak value n=20 rated value	3.8 A
— up to 690 V for current peak value n=20 rated value	3.6 A
• at AC-6a	0.071
— up to 230 V for current peak value n=30 rated value	2.7 A
— up to 400 V for current peak value n=30 rated value	2.7 A
— up to 500 V for current peak value n=30 rated value	2.5 A
	2.4 A
minimum cross-section in main circuit at maximum AC-1 rated value	2.5 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	2.6 A
• at 690 V rated value	1.8 A
operational current	
 at 1 current path at DC-1 	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	1.5 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.42 A
— at 600 V rated value	0.42 A
with 2 current paths in series at DC-1	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	8.4 A
— at 220 V rated value	1.2 A
- at 440 V rated value	0.6 A
— at 600 V rated value	0.5 A
 with 3 current paths in series at DC-1 	

— at 24 V rated value	15 A			
— at 60 V rated value	15 A			
— at 110 V rated value	15 A			
— at 220 V rated value	15 A			
— at 440 V rated value	0.9 A			
— at 600 V rated value	0.7 A			
 at 1 current path at DC-3 at DC-5 				
— at 24 V rated value	15 A			
— at 60 V rated value	0.35 A			
 with 2 current paths in series at DC-3 at DC-5 				
— at 24 V rated value	15 A			
— at 60 V rated value	3.5 A			
— at 110 V rated value	0.25 A			
 with 3 current paths in series at DC-3 at DC-5 				
— at 24 V rated value	15 A			
— at 60 V rated value	15 A			
— at 110 V rated value	15 A			
— at 220 V rated value	1.2 A			
— at 440 V rated value	0.14 A			
— at 600 V rated value	0.14 A			
operating power				
• at AC-3				
- at 230 V rated value	1.5 kW			
— at 200 V rated value	3 kW			
	3 kW			
— at 500 V rated value				
— at 690 V rated value • at AC-3e	4 kW			
— at 230 V rated value	1.5 kW			
— at 400 V rated value	3 kW			
— at 500 V rated value	3 kW			
— at 690 V rated value	4 kW			
operating power for approx. 200000 operating cycles at AC- 4				
at 400 V rated value	1.15 kW			
at 690 V rated value	1.15 kW			
operating apparent power at AC-6a				
operating apparent power at AC-6aup to 230 V for current peak value n=20 rated value	1.5 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value 	1.5 kVA 2.7 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value 	1.5 kVA 2.7 kVA 3.3 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value 	1.5 kVA 2.7 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA 1.8 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA 1.8 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 	1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for surrent peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value <li< td=""><td> 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value </td></li<>	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value timited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum at DC 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value timited to 1 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum no-load	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 			
operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum at DC operating frequency at AC-1 maximum 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 1 000 1/h 			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum at DC operating frequency at AC-1 maximum at AC-2 maximum 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 1 000 1/h 1 000 1/h 			
operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum at DC operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 1000 1/h 750 1/h 750 1/h 			
 operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value to 690 V for current peak value n=30 rated value to 690 V for current peak value n=30 rated value to 690 V for current peak value n=30 rated value	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 1000 1/h 750 1/h 750 1/h 750 1/h 			
operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum at DC operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum 	 1.5 kVA 2.7 kVA 3.3 kVA 4.3 kVA 4.3 kVA 1 kVA 1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 1000 1/h 750 1/h 750 1/h 			

type of voltage of the control supply voltage	DC			
control supply voltage at DC rated value	24 V			
operating range factor control supply voltage rated value of magnet coil at DC				
 initial value 	0.7			
• full-scale value	1.25			
closing power of magnet coil at DC	2.8 W			
holding power of magnet coil at DC	2.8 W			
closing delay				
• at DC	25 130 ms			
opening delay				
• at DC	7 20 ms			
arcing time	10 15 ms			
control version of the switch operating mechanism	Standard A1 - A2			
Auxiliary circuit				
number of NC contacts for auxiliary contacts instantaneous contact	1			
operational current at AC-12 maximum	10 A			
operational current at AC-15				
● at 230 V rated value	10 A			
• at 400 V rated value	3 A			
• at 500 V rated value	2 A			
• at 690 V rated value	1A			
operational current at DC-12				
at 24 V rated value	10 A			
at 48 V rated value	6 A			
at 60 V rated value	6 A			
at 110 V rated value	3 A			
at 125 V rated value	2 A			
at 220 V rated value	1A			
at 600 V rated value	0.15 A			
operational current at DC-13				
at 24 V rated value	10 A			
at 48 V rated value	2 A			
at 60 V rated value	2 A			
at 110 V rated value	1A			
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	484			
 at 480 V rated value at 600 V rated value 	4.8 A 6.1 A			
yielded mechanical performance [hp]				
for single-phase AC motor				
tor single-phase AC motor at 110/120 V rated value	0.25 hp			
— at 110/120 V fated value — at 230 V rated value				
	0.75 hp			
for 3-phase AC motor at 200/208 V rated value	1.5 hp			
- at 200/208 V rated value	1.5 hp			
- at 220/230 V rated value	2 hp			
- at 460/480 V rated value	3 hp			
- at 575/600 V rated value	5 hp			
contact rating of auxiliary contacts according to UL	A600 / Q600			
Short-circuit protection				
design of the fuse link				
for short-circuit protection of the main circuit				
— with type of coordination 1 required	gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)			
— with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)			
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)			
Installation/ mounting/ dimensions				

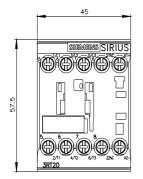
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface			
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715			
height	58 mm			
width	45 mm			
depth	73 mm			
required spacing				
with side-by-side mounting				
— forwards	10 mm			
— upwards	10 mm			
— downwards	10 mm			
— at the side	0 mm			
 for grounded parts 				
— forwards	10 mm			
— upwards	10 mm			
— at the side	6 mm			
— downwards	10 mm			
• for live parts				
— forwards	10 mm			
— upwards	10 mm			
— downwards	10 mm			
— at the side	6 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				
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²			
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²			
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)			
 for AWG cables for main contacts 	2x (20 16), 2x (18 14), 2x 12			
connectable conductor cross-section for main contacts				
• solid	0.5 4 mm²			
• stranded	0.5 4 mm²			
 finely stranded with core end processing 	0.5 2.5 mm²			
connectable conductor cross-section for auxiliary contacts				
solid or stranded	0.5 4 mm ²			
 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), 2x 4 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), 2x 12			
AWG number as coded connectable conductor cross section				
for main contacts	20 12			
 for main contacts for auxiliary contacts 	20 12 20 12			
Safety related data	LV 12			
product function				
mirror contact according to IEC 60947-4-1	Yes			
 minor contact according to IEC 60947-4-1 positively driven operation according to IEC 60947-5-1 	No			
suitable for safety function	Yes			
suitability for use safety-related switching OFF	Yes			
suitability for use safety-related switching OFF 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 %			
- with high demand rate according to SN 31920	10.70			

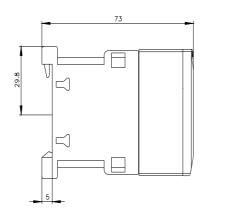
B10 value with high demand rate according to SN 31920 1 000 000 failure rate [FIT] with low demand rate according to SN 31920 100 FIT ISO 13849 3 device type according to ISO 13849-1 3 overdimensioning according to ISO 13849-2 necessary Yes IEC 61508 safety device type according to IEC 61508-2 Type A Electrical Safety protection on the front according to IEC 60529 IP20 touch protection on the front according to IEC 60529 IP20 touch approvals Certificates General Product Approval Confirmation General Product Approval EMV Functional Safety Marine / Shippin Figure EC Special Test Certificates Marine / Shippin Marine / Shippin Ifficate Special Test Certificates Type Iest Certificates Marine / Shippin Ifficate Special Test Certificates Type Iest Certificates Special Test Certificates Ifficate Report Miscelianeous Marine / Shippin Ifficate Ifficate Special Test Certificates Ifficate Report Ifficate Ifficate Ifficate Ifficate Ifficate Ifficate Ifficate Ifficate Iffi							
31920 IV	B10 value with high d	emand rate according to	SN 31920	1 000	000		
device type according to ISO 13849-1 3 overdimensioning according to ISO 13849-2 necessary Yes IEC 61508 Yes satety device type according to IEC 61508-2 Type A Electrical Safety IP20 protection class IP on the front according to IEC 60529 IP20 touch protection on the front according to IEC 60529 IP20 General Product Approval General Product Approval Efficience Functional Safety Ifficiate Ifficiate Ifficiate	failure rate [FIT] with low demand rate according to SN		100 F	ΊΤ			
overdimensioning according to IBO 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 IP20 touch protection on the front according to IEC 60529 IP20 ceneral Product Approval Confirmation General Product Approval EMV Functional Safety Efficience Functional Safety proval EMV Functional Safety Marine / Shipping EMV Functional Safey Marine / Shipping EMI Special Test Certificates Marine / Shipping Other Image: Safe / Shipping Image: Special Test Certificates Marine / Shipping Image: Special Test Certificates	ISO 13849						
IEC 61508 safety device type according to IEC 61508-2 Electrical Safety protection class IP on the front according to IEC 60529 IP20 touch protection on the front according to IEC 60529 General Product Approval Effective Effective General Product Approval Effective Effective IFF Effective	device type according	g to ISO 13849-1		3			
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 IP20 fouch protection on the front according to IEC 60529 IP20 fouch protection on the front according to IEC 60529 General Product Approval General Product Ap- proval EMV Functional Safety Type Examination Cer- tificate Type Test Certific- ate Type T	overdimensioning acc	cording to ISO 13849-2 n	ecessary	Yes			
Electrical Safety protection class IP on the front according to IEC 60529 IP20 finger-safe, for vertical contact from the front Approvals Certificates General Product Approval Confirmation KC General Product Ap- proval EMV Functional Safety Test Certificates Marine / Shippin Image: Subscription of the front according to IEC 60529 Type Examination Cer- tificate Special Test Certific- ate Type Test Certific- ates/Test Report Marine / Shippin Image: Subscription of the front score of the formation of the format	IEC 61508						
protection class IP on the front according to IEC 60529 IP20 touch protection on the front according to IEC 60529 Inger-safe, for vertical contact from the front Approvals Certificates General Product Approval Confirmation General Product Approval EMV Functional Saftey Test Certificates Marine / Shipping Image: Safe for vertical contact from the front according to IEC 60529 Marine / Shipping Marine / Shipping EMV Functional Saftey Test Certificates Type Test Certificates Marine / Shipping Image: Safe for vertical contact from the front according to IEC 60529 Image: Safe for vertical contact from the front Marine / Shipping Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact from the front Image: Safe for vertical contact	safety device type acc	cording to IEC 61508-2		Туре	A		
touch protection on the front according to IEC 60529 Inger-safe, for vertical contact from the front Approvals Certificates General Product Approval Image - safe, for vertical contact from the front General Product Approval Image - safe, for vertical contact from the front KC General Product Approval Image - safe, for vertical contact from the front KC General Product Approval Image - safe, for vertical contact from the front KC General Product Approval EMV Functional Saftey Test Certificates Marine / Shipping Image - safe, for vertical contact from the front Image - safe, for vertical contact from the front Image - safe, for vertical contact from the front General Product Approval EMV Functional Saftey Test Certificates Marine / Shipping Image - Second -	Electrical Safety						
Approvals Certificates Confirmation KC General Product Approval KC KC General Product Approval EMV Functional Saftey Test Certificates Marine / Shipping General Product Approval EMV Functional Saftey Test Certificates Marine / Shipping Marine / Shipping Ivpe Examination Certificate Special Test Certificate Type Test Certificate Ivpe Test Certificate Marine / Shipping Ivpe Examination Certificate Special Test Certificate Type Test Certificate Ivpe Test Certificate Marine / Shipping Ivpe Examination Certificate Special Test Certificate Type Test Certificate Ivpe Test Certificate Ivpe Test Certificate Marine / Shipping Ivpe Test Certificate Ivpe Test Certificate </td <td>protection class IP or</td> <td>the front according to I</td> <td>EC 60529</td> <td>IP20</td> <td></td> <td></td> <td></td>	protection class IP or	the front according to I	EC 60529	IP20			
General Product Approval Confirmation KC General Product Appoon EMV Functional Saffey Test Certificates Marine / Shipping General Product Apport EMV Functional Saffey Test Certificates Marine / Shipping Image: Figure Shipping Image: Figure Shipping Image: Figure Shipping Image: Figure Shipping Other Image: Figure Shipping	touch protection on th	he front according to IEC	C 60529	finger	-safe, for vertical contact	from the front	
Confirmation Confirmation General Product Ap- proval EMV Functional Saftey Test Certificates Marine / Shipping EFFE Image: Special Test Certificates Type Test Certificates Image: Special Test Certificates Image: Special Test Certificates Marine / Shipping Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Marine / Shipping Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Marine / Shipping Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Marine / Shipping Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates Image: Special Test Certificates <	pprovals Certificates						
General Product Approval EMV Functional Saftey Test Certificates Marine / Shipping EFFE EMV Functional Saftey Test Certificates Type Test Certificates Marine / Shipping Marine / Shipping EMV Functional Saftey Special Test Certificates Type Test Certificates Image: Ce	General Product App	roval					
proval Functional safety rest certificate Type Test Certificate <thtype certificate<="" test="" th=""> Type</thtype>	CE EG-Konf.	UK CA			<u>Confirmation</u>	(U) u	KC
Image: Second secon		EMV	Functional Saftey		Test Certificates		Marine / Shipping
Miscellaneous PRS PRS RINA RMRS	EHC	RCM					ABS
BUREAU VERITAS	Marine / Shipping						other
other Railway Dangerous goods Environment	BUREAU VERITAS		PRS		RINA	RMRS	<u>Miscellaneous</u>
	other	Railway	Dangerous goods		Environment		
Confirmation Special Test Certific- ate	<u>Confirmation</u>		Transport Information		EPD		
Further information Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,)	Information on the pa https://support.industry Information- and Dow	.siemens.com/cs/ww/en/vi nloadcenter (Catalogs, E					
https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2015-1HB42	Industry Mall (Online	ordering system)	alog/product?mlfb=	= <u>3R</u> T20	15-1HB42		
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2015-1HB42	Cax online generator http://support.automatic	on.siemens.com/WW/CAX	Corder/default.aspx	<u>(?lang=e</u>		2	
Service&Support (Manuals, Certificates, Characteristics, FAQs,) <u>https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1HB42</u> Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,)							

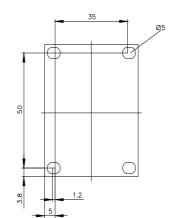
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2015-1HB42&lang=en

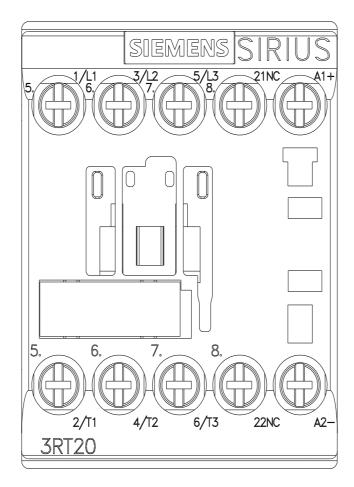
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1HB42/char

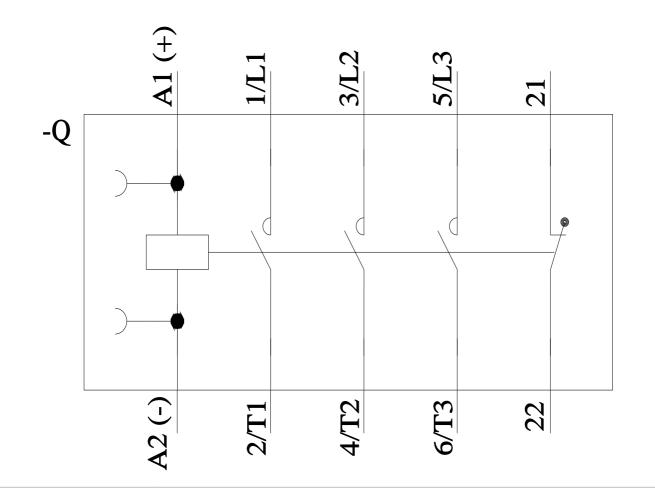
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2015-1HB42&objecttype=14&gridview=view1











last modified:

C