SIEMENS

Data sheet 3TF6844-8CP7



Contactor, Size 14, 3-pole, AC-3, 335kW, 400/380 V (1000 V) Auxiliary switch 44 (4NO+4NC) AC operation 230...276 V AC 50/60 Hz

product designation	Vacuum contactor
product type designation	3TF6
General technical data	
size of contactor	14
product extension	
 function module for communication 	No
auxiliary switch	No
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 safe isolation in networks with grounded star point	
 between auxiliary and auxiliary circuit 	300 V
between main and auxiliary circuit	500 V
shock resistance at rectangular impulse	
• at AC	8.1g / 5 ms, 4.7g / 10 ms
shock resistance with sine pulse	
• at AC	12.8g / 5 ms, 7.4g / 10 ms
mechanical service life (switching cycles)	
of contactor typical	5 000 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.03.2017 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +55 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity during operation	10 95 %
relative humidity at 55 °C acc. to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
type of voltage for main current circuit	AC

■ at AC-3 rated value maximum ■ pos 800 V at ambient temperature 40 °C □ pub 1000 V at ambient temperature 55 °C □ pub 1000 V at ambient temperature 55 °C □ pub 1000 V at ambient temperature 55 °C □ pub 1000 V at ambient temperature 55 °C □ pub 1000 V at ambient temperature 55 °C □ pub 1000 V at ambient temperature 55 °C □ pub 1400 V rated value □ pub 1400 V rated value □ pub 1400 V rated value □ pub 1500 V rated value □ pub 1500 V for current peak value n=20 rated value □ pub 1500 V for current peak value n=20 rated value □ pub 1500 V for current peak value n=30 rated value □ pub 1500 V for current peak	operating voltage	
• at AC-1 — up to 680 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 55 °C rated value — up to 1000 V at ambient temperature 55 °C rated value • at AC-3 — at 4.00 V rated value — at 500 V rated value — at 690 V rated value — at 690 V rated value — at 1000 V rated value — at 1000 V rated value — at 1000 V rated value • at AC-4 at 400 V rated value — at 1000 V rated value • at AC-5 at 440 V rated value — at 1000 V for current peak value n=20 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 500 V for current peak value n=30 rated value — up to 500 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — at 400 V rated value — at 680 V rated value — at 680 V rated value — at 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=20 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated valu		1 000 V
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rated value — up to 1000 V at ambient temperature 55 °C rated value — at ACO-3 — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 1000 V rated value — at ACO-6a — up to 500 V for current peak value n=20 rated value — up to 1000 V for current peak value n=20 rated value — up to 1000 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 600 V for current peak value n=30 rated value — up to 600 V for current peak value n=30 rated value — up to 600 V for current peak value n=30 rated value — up to 600 V for current peak value n=30 rated value — up to 600 V for current peak value — up to 600 V for current peak value — at 400 °C minimum permissible operating power • at AC-3 — at 230 V rated value — at 600 V for current peak value n=20 rated value • up to 600 V for current peak value n=20 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V fo		700 A
rated value		630 A
		450 A
- at 500 V rated value	• at AC-3	
- at 690 V rated value - at 1000 V rated value - at AC-6a - au pu to 500 V for current peak value n=20 rated value - up to 1000 V for current peak value n=20 rated value - up to 1000 V for current peak value n=20 rated value - up to 1000 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 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 400 V for current peak value n=30 rated value - at 400 V rated value - at 400 V rated value - at 400 V rated value - at 690 V rated value - at 690 V rated value - at 690 V rated value - at 1000 V for current peak value n=20 rated value - up to 400 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 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=50 rated value - up to 690 V for current peak value n=50 rated value - up to 690 V for current peak value n=50 rated value - up to 690 V for current peak value n=50 rated value - up to 690 V for current peak value n=50 rated value - up to 690 V for current peak value n=50 rated value - u	— at 400 V rated value	630 A
- at 1000 V rated value • at AC-4 at 40 V rated value	— at 500 V rated value	630 A
• at AC-4 at 400 V rated value • at AC-6a — up to 500 V for current peak value n=20 rated value — up to 1000 V for current peak value n=20 rated value — up to 1000 V for current peak value n=20 rated value — up to 1000 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 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value — at 40 °C minimum permissible operational current for approx. 200000 operating cycles at AC-4 — at 40 °V rated value — at 400 V rated value — at 230 V rated value — at 400 V rot current peak value n=20 rated value — at 400 V rot current peak value n=20 rated value = up to 1000 V for current peak value n=20 rated value = up to 400 V for current peak value n=20 rated value = up to 1000 V for current peak value n=20 rated value = up to 1000 V for current peak value n=20 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak value n=30 rated value = up to 1000 V for current peak	— at 690 V rated value	630 A
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value	• at AC-6a	
value - up to 1000 V for current peak value n=20 rated value • at AC-6a - 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 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - up to 1000 V for current peak value n=30 rated value - at 40 °C minimum permissible - at 400 °C rated value - at 400 °C rated value - at 690 V rated value - at 690 V rated value - at 690 V rated value - at 400 °C rated value - at 400 °C rated value - at 690 °C rated value - at 690 °C rated value - at 690 °C rated value - at 1000 °C rated value - at 20 °C value operating apparent power at AC-6a - up to 600 °C rated value - up t	·	513 A
value ■ at AC-6a — 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 1000 V for current peak value n=30 rated value — up to 1000 V for current peak value n=30 rated value connectable conductor cross-section in main circuit at AC-1 ■ at 40 °C minimum permissible ■ at 400 V rated value ■ at 400 V rated value ■ at 690 V rated value ■ at 690 V rated value ■ at 690 V rated value — at 230 V rated value — at 400 V rated value — at 690 V rated value — at 1000 V for current peak value n=20 rated value ■ up to 400 V for current peak value n=20 rated value ■ up to 690 V for current peak value n=20 rated value ■ up to 1000 V for current peak value n=20 rated value ■ up to 400 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 1000 V for current peak value n=30 rated value ■ up to 1000 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 1000 V for current peak value n=30 rated value ■ up to 1000 V for current peak value n=30 rated value ■ up to 1000 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 590 V for current peak value n=30 rated value ■ up to 590 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 400 V for current peak value n=30 rated value ■ up to 400 V for current peak value n=30 ra		513 A
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value connectable conductor cross-section in main circuit at AC-1 • at 40 °C minimum permissible operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at AC-3 — at 230 V rated value — at 400 V rated value — at 690 V rated value — at 690 V rated value — at 1000 V rated value — at 1000 V rated value — at 900 kW operating apparent power at AC-6a • up to 400 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 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 690 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 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 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for	value	
at 40 °C minimum permissible operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 230 V rated value — at 230 V rated value — at 400 V rated value — at 690 V rated value — at 690 V rated value — at 1000 V rated value — at 1000 V rated value — at 1000 V rated value — 600 kW operating apparent power at AC-6a • up to 400 V for current peak value n=20 rated value • up to 900 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 400 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=30 rated value • up to 690 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=20 rated value • up to 1000 V for current pe	value	342 A
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operating power • at AC-3 — at 230 V rated value — at 400 V rated value — at 400 V rated value — at 400 V rated value — at 690 V rated value — at 1000 V rocurrent peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 1000 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 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 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 400 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 400 V for current peak value n=30 rated value • up		
cycles at AC-4 • at 400 V rated value • at 690 V rated value operating power • at AC-3 — at 230 V rated value — at 400 V rated value — at 400 V rated value — at 690 V rated value — at 690 V rated value — at 1000 V roc current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 400 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 1000 V for current pea	at 40 °C minimum permissible	480 mm²
• at 690 V rated value 300 A operating power • at AC-3 — at 230 V rated value 200 kW — at 690 V rated value 600 kW — at 1000 V rated value 600 kW operating apparent power at AC-6a • up to 400 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 1000 V for current peak value n=30 rated value • up to 400 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 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 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 400 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 400 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 400 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 400 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 400		
operating power		
 at AC-3 at 230 V rated value at 400 V rated value 335 kW at 690 V rated value 600 kW operating apparent power at AC-6a up to 400 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 1000 V for current peak value n=20 rated value talk 6kV-A up to 1000 V for current peak value n=20 rated value operating apparent power at AC-6a up to 400 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 1000 V for current peak value n=30 rated value soperating apparent power at AC-6a up to 1000 V for current peak value n=30 rated value soperating apparent power at AC-6a up to 690 V for current peak value n=30 rated value sope kV-A thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC 2 000 1/h operating frequency at AC-1 maximum at AC-2 at AC-3 maximum 	at 690 V rated value	300 A
- at 230 V rated value - at 400 V rated value - at 690 V rated value - at 1000 V rated value 600 kW operating apparent power at AC-6a • up to 400 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value value operating apparent power at AC-6a • up to 400 V for current peak value n=20 rated value value operating apparent power at AC-6a • up to 400 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value operating apparent power at AC-6a • up to 400 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value operating apparent power at AC-6a • up to 400 V for current peak value n=30 rated value oup to 1000 V for current peak value of to 592 kV-A value thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency • at AC-1 maximum operating frequency • at AC-3 maximum 700 1/h • at AC-2 at AC-3 maximum	operating power	
- at 400 V rated value - at 690 V rated value - at 1000 V rated value 600 kW operating apparent power at AC-6a • up to 400 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 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 1000 V for current peak value n=30 rated value • value thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency • at AC-1 maximum • at AC-2 at AC-3 maximum 700 1/h • at AC-2 at AC-3 maximum 200 1/h	• at AC-3	
- at 690 V rated value - at 1000 V rated value 600 kW operating apparent power at AC-6a • up to 400 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 1000 V for current peak value n=20 rated value operating apparent power at AC-6a • 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 690 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value value thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency • at AC-1 maximum • at AC-2 at AC-3 maximum 700 1/h • at AC-3 at AC-3 maximum 200 1/h	— at 230 V rated value	200 kW
— at 1000 V rated value operating apparent power at AC-6a oup to 400 V for current peak value n=20 rated value oup to 690 V for current peak value n=20 rated value oup to 1000 V for current peak value n=20 rated value operating apparent power at AC-6a oup to 400 V for current peak value n=30 rated value oup to 690 V for current peak value n=30 rated value oup to 690 V for current peak value n=30 rated value oup to 1000 V for current peak value n=30 rated value oup to 1000 V for current peak value n=30 rated value sulue thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency out at AC-1 maximum out at AC-2 at AC-3 maximum 700 1/h out at AC-3 at AC-3 maximum 700 1/h out at AC-3 at AC-3 maximum out at AC-6a oup to 400 V for current peak value n=30 rated value sup to 400 V for current peak value n=30 rated value out at AC-1 maximum out at AC-2 at AC-3 maximum out at AC-1 maximum out at AC-2 at AC-3 maximum	— at 400 V rated value	335 kW
operating apparent power at AC-6a	— at 690 V rated value	600 kW
 up to 400 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 1000 V for current peak value n=20 rated value up to 1000 V for current peak value n=20 rated value operating apparent power at AC-6a up to 400 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value spower loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC-1 maximum at AC-2 at AC-3 maximum 200 1/h 	— at 1000 V rated value	600 kW
 up to 690 V for current peak value n=20 rated value up to 1000 V for current peak value n=20 rated value operating apparent power at AC-6a up to 400 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value thermal short-time current limited to 10 s 5040 A 45 W operating frequency at AC-1 maximum at AC-2 at AC-3 maximum 200 1/h 	operating apparent power at AC-6a	
up to 1000 V for current peak value n=20 rated value operating apparent power at AC-6a up to 400 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC at AC-1 maximum at AC-2 at AC-3 maximum at AC-2 at AC-3 maximum at AC-2 at AC-3 maximum at AC-4 maximum at AC-4 maximum at AC-5 at AC-5 maximum at AC-6 at AC-7 maximum at AC-7 maximum at AC-7 maximum at AC-7 maximum at AC-8 maximum at AC-8 maximum at AC-8 maximum at AC-9 maximum at AC-9 maximum at AC-1 maximum at AC-1 maximum at AC-1 maximum at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum at AC-5 maximum at AC-6 maximum at AC-7 maximum at AC-7 maximum at AC-8 maximum at AC-8 maximum at AC-9 maximum at AC-1 maximum at AC-2 maximum	• up to 400 V for current peak value n=20 rated value	338 kV·A
operating apparent power at AC-6a • up to 400 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value • up to 1000 V for current peak value n=30 rated value value thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC operating frequency • at AC-1 maximum • at AC-2 at AC-3 maximum 200 1/h	• up to 690 V for current peak value n=20 rated value	586 kV·A
 up to 400 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC at AC-1 maximum at AC-2 at AC-3 maximum 200 1/h 		752 kV·A
 up to 690 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value thermal short-time current limited to 10 s 5 040 A power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC 2 000 1/h operating frequency at AC-1 maximum at AC-2 at AC-3 maximum 200 1/h 	operating apparent power at AC-6a	
 up to 1000 V for current peak value n=30 rated value thermal short-time current limited to 10 s 5 040 A power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC 2 000 1/h operating frequency at AC-1 maximum at AC-2 at AC-3 maximum 200 1/h 		226 kV·A
thermal short-time current limited to 10 s power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC operating frequency o at AC-1 maximum o at AC-2 at AC-3 maximum 200 1/h		390 kV·A
power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor no-load switching frequency at AC operating frequency • at AC-1 maximum • at AC-2 at AC-3 maximum 200 1/h	value	592 kV·A
operational current per conductor no-load switching frequency at AC operating frequency • at AC-1 maximum • at AC-2 at AC-3 maximum 200 1/h		
operating frequency	operational current per conductor	
 at AC-1 maximum at AC-2 at AC-3 maximum 200 1/h 	no-load switching frequency at AC	2 000 1/h
• at AC-2 at AC-3 maximum 200 1/h		
		700 1/h
ontrol circuit/ Control	• at AC-2 at AC-3 maximum	200 1/h
	Control circuit/ Control	

control supply voltage at AC	
at 50 Hz rated value	230 276 V
at 60 Hz rated value	230 276 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	1 200 V·A
● at 60 Hz	1 200 V·A
inductive power factor with closing power of the coil	
● at 50 Hz	1
● at 60 Hz	1
apparent holding power of magnet coil at AC	
● at 50 Hz	13.5 V·A
● at 60 Hz	13.5 V·A
inductive power factor with the holding power of the coil	
● at 50 Hz	0.15
• at 60 Hz	0.15
closing delay	
• at AC	70 120 ms
opening delay	
• at AC	70 100 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	
attachable	4
instantaneous contact	4
number of NO contacts for auxiliary contacts	
attachable	4
instantaneous contact	4
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	5.6 A
 at 400 V rated value 	3.6 A
 at 500 V rated value 	2.5 A
at 690 V rated value	2.3 A
operational current at DC-12 at 440 V rated value	0.33 A
operational current at DC-12	
at 24 V rated value	10 A
• at 48 V rated value	10 A
at 110 V rated value	3.2 A
• at 125 V rated value	2.5 A
• at 220 V rated value	0.9 A
at 600 V rated value	0.22 A
operational current at DC-13	40.4
• at 24 V rated value	10 A
• at 48 V rated value	5 A
• at 110 V rated value	1.14 A
• at 125 V rated value	0.98 A
• at 220 V rated value	0.48 A
at 600 V rated value	0.07 A
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA) $$
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	630 A
at 600 V rated value	630 A
yielded mechanical performance [hp]	

• for 3-phase AC motor	
— at 200/208 V rated value	231 hp
— at 220/230 V rated value	266 hp
— at 460/480 V rated value	530 hp
— at 575/600 V rated value	664 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: 1000 A (690 V, 100 kA)
— with type of assignment 2 required	gG: 500 A (690 V, 100 kA), aM: 630 A (690 V, 50 kA), BS88: 500 A (415 V, 50 kA)
 for short-circuit protection of the auxiliary switch required 	fuse gG: 10 A
Installation/ mounting/ dimensions	
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
fastening method	screw fixing
side-by-side mounting	Yes
height	276 mm
width	230 mm
depth	237 mm
required spacing	
with side-by-side mounting	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 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	
width of connection bar	30 mm
thickness of connection bar	6 mm
diameter of holes	11 mm
number of holes	1
type of electrical connection	
for main current circuit	Connection bar
 for auxiliary and control circuit 	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
type of connectable conductor cross-sections	
• for main contacts	
— stranded	70 240 mm²
 finely stranded with core end processing 	50 240 mm²
at AWG cables for main contacts	2/0 500 kcmil
connectable conductor cross-section for main contacts	
finely stranded with core end processing	240 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	2x (0.5 1.0 mm²), 2x (1.0 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.0 mm²), 2x (0.75 2.5 mm²)
 at AWG cables for auxiliary contacts 	2x (18 12)
AWG number as coded connectable conductor cross section	
 for main contacts 	500
 for auxiliary contacts 	18 12
Safety related data	
product function mirror contact acc. to IEC 60947-4-1	Yes; One NC contact each must be connected in series for the right and left auxiliary switch block respectively
product function positively driven operation acc. to IEC 60947-5-1	No
protection class IP on the front acc. to IEC 60529	IP00; IP20 with cover
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front with cover

Certificates/ approvals

General Product Approval

Functional Safety/Safety of Machinery

Declaration of Conformity









Type Examination Certificate UK Declaration of Conformity

Declaration of	
Conformity	

Test Certificates

Marine / Shipping



Special Test Certific-

Miscellaneous

Type Test Certificates/Test Report





Marine / Shipping

other

Railway



Confirmation

Confirmation

Special Test Certificate

Further information

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=3TF6844-8CP7

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3TF6844-8CP7

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

https://support.industry.siemens.com/cs/ww/en/ps/3TF6844-8CP7

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

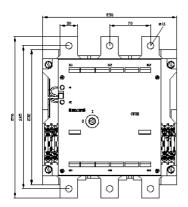
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3TF6844-8CP7&lang=en

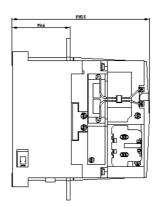
Characteristic: Tripping characteristics, I2t, Let-through current

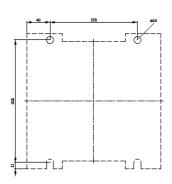
https://support.industry.siemens.com/cs/ww/en/ps/3TF6844-8CP7/char

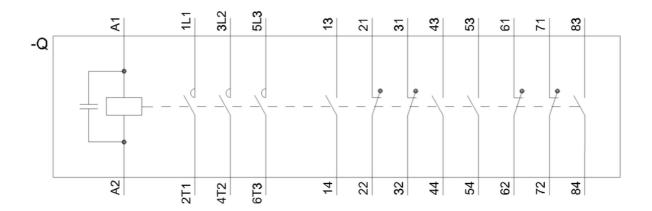
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3TF6844-8CP7&objecttype=14&gridview=view1









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