



AF116 ... AF146 3-pole contactors

Technical data

Main pole - Utilization characteristics according to IEC

Contactor types	AC / DC operated	AF116	AF140	AF146
Standards		IEC 60947-4-1 and EN 60947-4-1		
Rated operational voltage U _e max.		690 V	690 V	1000 V
Rated frequency (without derating)		50 / 60 Hz		
AC-1 Utilization category				
For air temperature close to contactor				
I_e / Rated operational current AC-1	θ ≤ 40 °C	160 A	200 A	225 A
U _e max. ≤ 690 V, 50/60 Hz	θ ≤ 60 °C	145 A	175 A	200 A
	θ ≤ 70 °C	130 A	160 A	175 A
With conductor cross-sectional area		70 mm ²	70 mm ²	95 mm ²
AC-3 Utilization category				
For air temperature close to contactor θ ≤ 55 °C				
I_e / Max. rated operational current AC-3				
 3-phase motors	220-230-240 V	116 A	140 A	146 A
	380-400 V	116 A	140 A	146 A
	415 V	116 A	140 A	146 A
	440 V	116 A	140 A	146 A
	500 V	110 A	130 A	130 A
	690 V	65 A	80 A	93 A
	1000 V	–	–	60 A
Rated operational power AC-3				
 1500 r.p.m. 50 Hz 1800 r.p.m. 60 Hz 3-phase motors	220-230-240 V	30 kW	37 kW	45 kW
	380-400 V	55 kW	75 kW	75 kW
	415 V	55 kW	75 kW	75 kW
	440 V	75 kW	90 kW	90 kW
	500 V	75 kW	90 kW	90 kW
	690 V	55 kW	75 kW	90 kW
	1000 V	–	–	75 kW
Short-circuit protection device for contactors				
without thermal overload relay - Motor protection excluded				
U _e ≤ 500 V AC - gG type fuse		200 A	315 A	315 A
Max. electrical switching frequency	AC-1	300 cycles/h		
	AC-3	300 cycles/h		
Connection capacity (min. ... max.)				
Main conductors (poles)				
Stranded	1 or 2 x	10 ... 95 mm ²		
Flexible	1 or 2 x	10 ... 70 mm ²		

Main pole - Utilization characteristics according to UL / CSA

Contactor types	AC / DC operated	AF116	AF140	AF146
Standards		UL 60947-4-1A and CSA C22.2 N° 60947-4-1-07		
Max. operational voltage		600 V		
UL / CSA General use rating				
600 VAC		160 A	200 A	200 A
With conductor cross-sectional area		AWG 2/0	AWG 3/0	AWG 3/0
UL / CSA maximum 3-phase motor rating				
Full load current	220-208 V AC	88 A	114 A	114 A
	220-240 V AC	104 A	130 A	130 A
	440-480 V AC	96 A	124 A	124 A
	550-600 V AC	99 A	125 A	125 A
Horse power rating	220-208 V AC	30 hp	40 hp	40 hp
	220-240 V AC	40 hp	50 hp	50 hp
	440-480 V AC	75 hp	100 hp	100 hp
	550-600 V AC	100 hp	125 hp	125 hp
Short-circuit protection device for contactors				
without thermal overload relay - Motor protection excluded				
Fuse rating		250 A	250 A	250 A
Fuse type, 600 V		J/R		
Connexion capacity acc to UL/CSA	1 or 2 x	AWG 6 ...3/0		