



Product designation

Power contactor

Product type designation

BF18

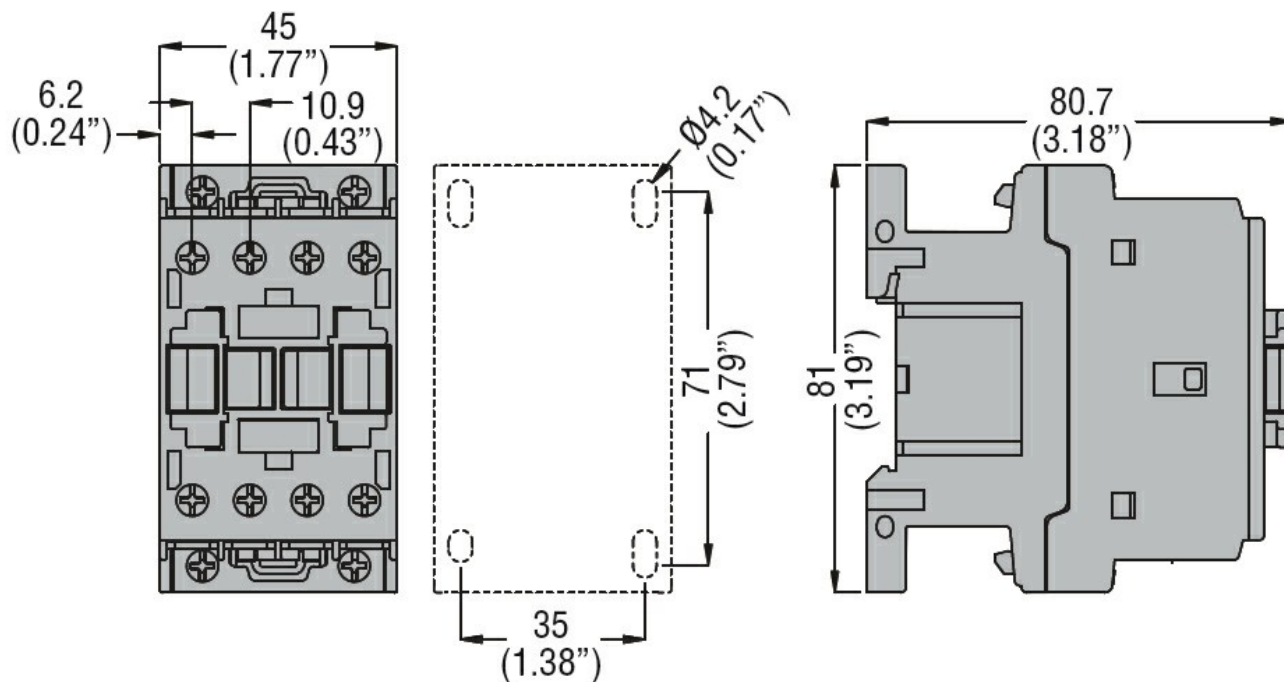
Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I_{th}	A	32
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 32
	AC-1 ($\leq 55^\circ\text{C}$)	A 26
	AC-1 ($\leq 70^\circ\text{C}$)	A 23
	AC-3 ($\leq 440\text{V } \leq 55^\circ\text{C}$)	A 18
	AC-4 (400V)	A 8.5
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 12
	400V	kW 21
	500V	kW 26
	690V	kW 36
Short-time allowable current for 10s (IEC/EN60947-1)	A	200
Protection fuse	gG (IEC)	A 32
	aM (IEC)	A 20
Making capacity (RMS value)	A	180
Breaking capacity at voltage	440V	A 144
	500V	A 120
	690V	A 94
Resistance per pole (average value)	m Ω	2.5
Power dissipation per pole (average value)	I_{th}	W 2.6
	AC3	W 0.8
Tightening torque for terminals	min	Nm 1.5
	max	Nm 1.8
	min	lbin 1.1
	max	lbin 1.5
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	lbin 0.8
	max	lbin 0.74
Max number of wires simultaneously connectable	Nr.	2

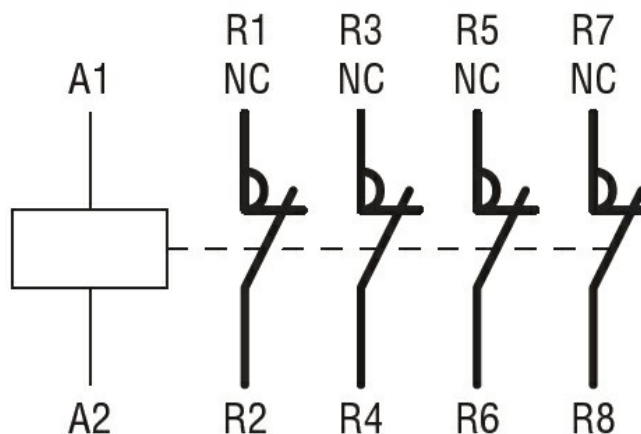
Conductor section	AWG/Kcmil		
	max	10	
Flexible w/o lug conductor section	min	mm ²	1
	max	mm ²	6
Flexible c/w lug conductor section	min	mm ²	1
	max	mm ²	4
Flexible with insulated spade lug conductor section	min	mm ²	1
	max	mm ²	4
Power terminal protection according to IEC/EN 60529	IP20 when wired		
Mechanical features			
Operating position	normal allowable	Vertical plan ±30°	
Fixing			Screw / DIN rail 35mm
Weight			g 362
Conductor section	AWG/kcmil conductor section		
	max	10	
Auxiliary contact characteristics			
Thermal current Ith	A		32
IEC/EN 60947-5-1 designation	A600 - P600		
Operations			
Mechanical life	cycles		20000000
Electrical life	cycles		1600000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1600000
		cycles	20000000
Mirror contats according to IEC/EN 609474-4-1			YES
EMC compatibility	yes		
AC coil operating			
AC operating voltage	of 50/60Hz coil powered at 50Hz		
	pick-up		
	min	%Us	80
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55
	of 50/60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	85
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55
AC average coil consumption at 20°C	of 50/60Hz coil powered at 50Hz		

		in-rush holding	VA VA	75 9
of 50/60Hz coil powered at 60Hz				
		in-rush holding	VA VA	70 6.5
of 60Hz coil powered at 60Hz				
		in-rush holding	VA VA	75 9
Dissipation at holding ≤20°C 50Hz			W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us control in AC				
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			
		min	ms	10
		max	ms	20
	Closing NC			
		min	ms	14
		max	ms	28
	Opening NC			
		min	ms	7
		max	ms	18
UL technical data				
Full-load current (FLA) for three-phase AC motor				
		at 480V	A	14
		at 600V	A	17
Yielded mechanical performance				
	for single-phase AC motor			
		110/120V	HP	1
		230V	HP	3
	for three-phase AC motor			
		200/208V	HP	5
		220/230V	HP	5
		460/480V	HP	10
		575/600V	HP	15
General USE				
	Contactor			
		AC current	A	32
	Auxiliary contacts			
		AC voltage	V	600
		AC current	A	10
		DC voltage	V	250
		DC current	A	1
Contact rating of auxiliary contacts according to UL				SI - A600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			

	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimensions			



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching