



Power contactor  
BF18

Product designation

Product type designation

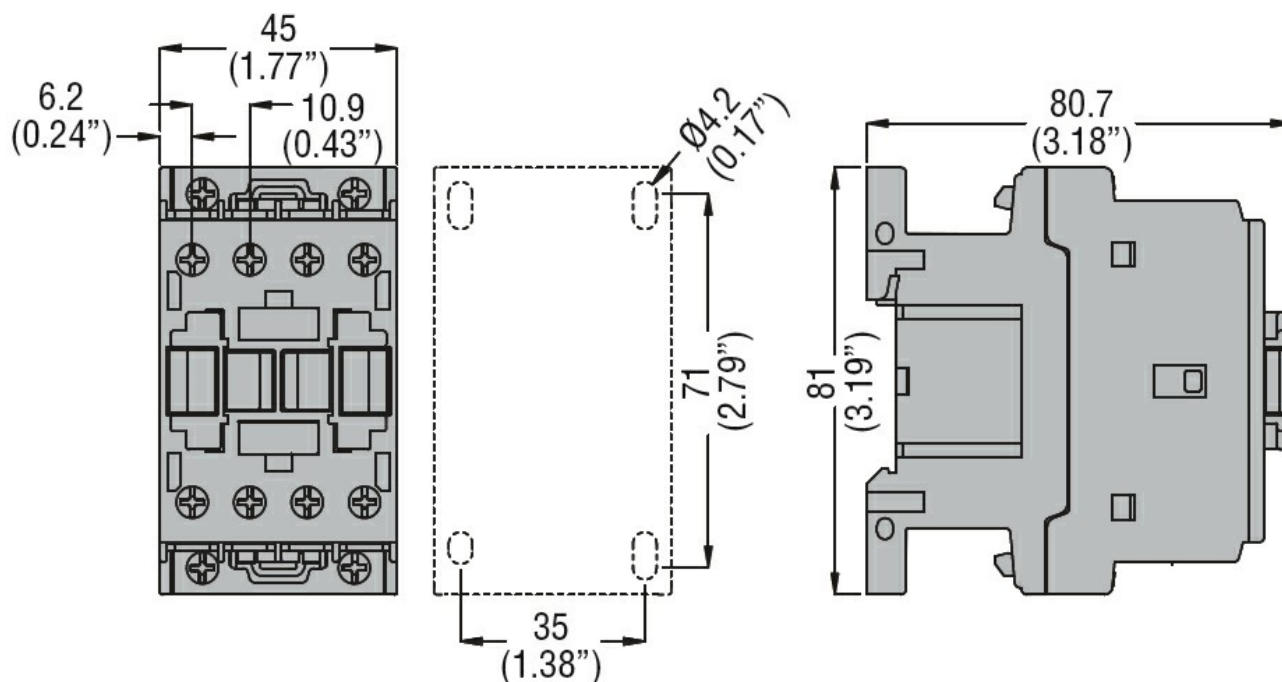
**Contact characteristics**

Number of poles	nr.	4
Rated insulation voltage $U_i$	V	690
Rated impulse withstand voltage $U_{imp}$	kV	6
Operating frequency		
	Operational frequency min	Hz 25
	Operational frequency max	Hz 400
Conventional free air thermal current $I_{th}$	A	32
Operating current		
	Operational current AC1 ( $\leq 40^\circ\text{C}$ )	A 32
	Operational current AC3 ( $\leq 440\text{V } \leq 55^\circ\text{C}$ )	A 18
	Operational current AC4 (400V)	A 8.5
Rated operational power AC1 ( $T \leq 40^\circ\text{C}$ )		
	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		
	Breaking capacity 440V	A 144
	Breaking capacity 500V	A 120
	Breaking capacity 690V	A 94
Resistance per pole (average value)	m $\Omega$	2.5
Power dissipation per pole (average value)		
	Power dissipation 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	lbft 1.1
	max	lbft 1.5
Tightening torque for coil terminal		
	min	Nm 0.8
	max	Nm 1
	min	lbft 0.8
	max	lbft 0.74
max number of wires simultaneously connectable	nr.	2
Conductor section		

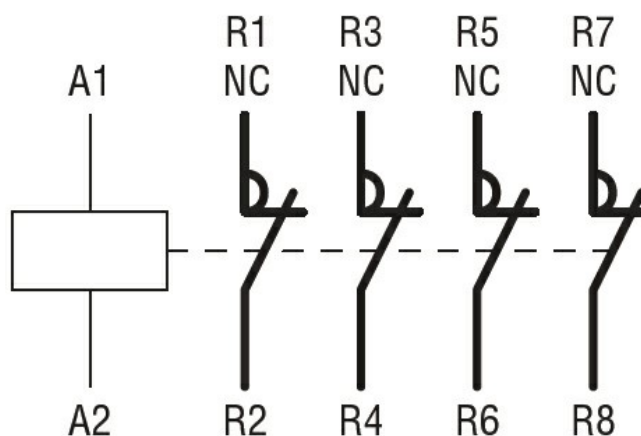
AWG

	min	16	
	max	10	
Flexible w/o lug conductor section			
	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	6
Flexible c/w lug conductor section			
	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	4
Flexible with insulated spade lug conductor section			
	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	4
Power terminal protection according to IEC/EN 60529			IP20 when wired
<b>Auxiliary contact characteristics</b>			
Operational current AC1 (≤40°C)	A	32	
Operating current DC13			
	110V	A	Screw / DIN rail 35mm
<b>Ambient conditions</b>			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude	m	3000	
Operating position			
	normal allowable		Vertical plan ±30°
Mounting			Screw / DIN rail 35mm
Weight	g	0.36	
<b>Operations</b>			
Mechanical life	Cycles	20000000	
Electrical life	Cycles	1600000	
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1			
	rated load	Cicli	1600000
	mechanical load	Cicli	20000000
EMC compatibility			yes
<b>AC coil operating</b>			
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up	min	%Us	0.8
	max	%Us	1.1
drop-out	min	%Us	0.2
	max	%Us	0.55
of 50/60Hz coil powered at 60Hz			
pick-up	min	%Us	0.85
	max	%Us	1.1
drop-out			

		min	%Us	0.2
		max	%Us	0.55
	of 60Hz coil powered at 60Hz			
	pick-up	min	%Us	0.8
		max	%Us	1.1
	drop-out	min	%Us	0.2
		max	%Us	0.55
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding ≤20°C 50Hz			W	2.5
Max cycles frequency				
Mechanical operations			Cycles/h	3600
Operating times				
Average time for Us control				
	in AC			
	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
General USE				
	Contactor			
		AC current	A	32
Other features				
Pollution degree				3
Dimensions				



#### Wiring diagrams



#### Certifications and compliance

##### Certifications

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

##### Compliance

CCC

cULus

EAC

#### ETIM 6 classification

EC000066 - Power contactor, AC switching