



Product designation

Power contactor

Product type designation

BF18

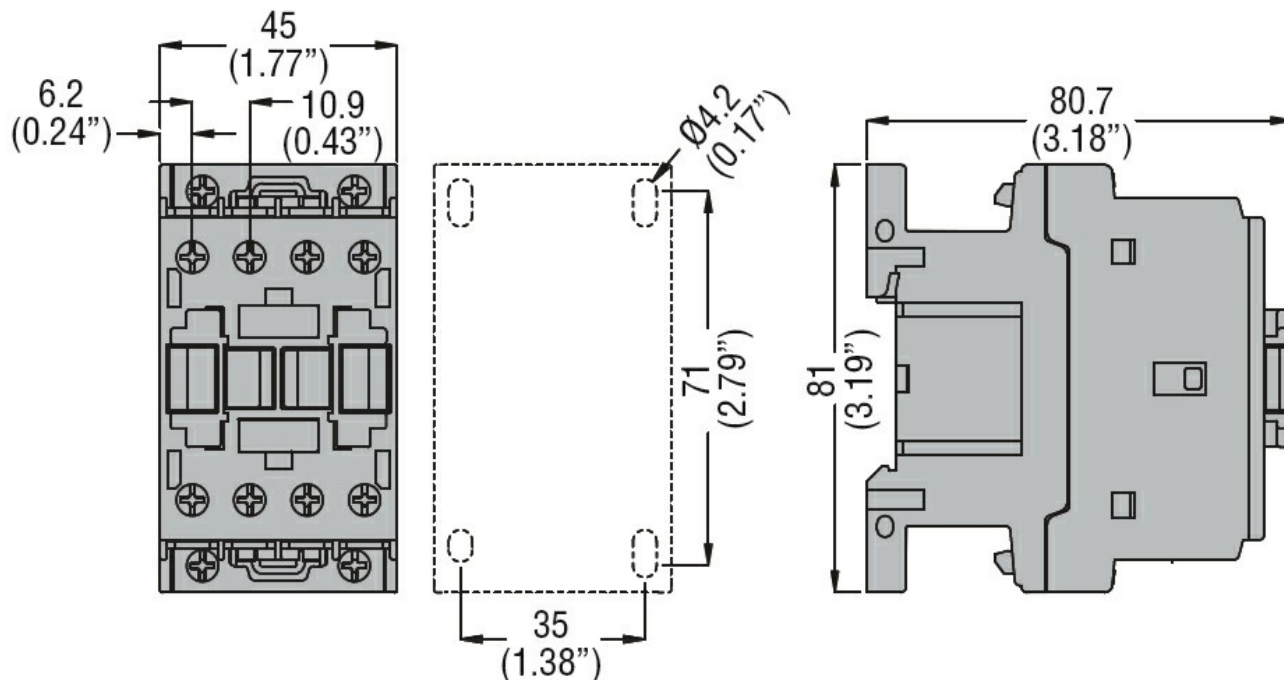
Contact characteristics

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
	AC-3 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

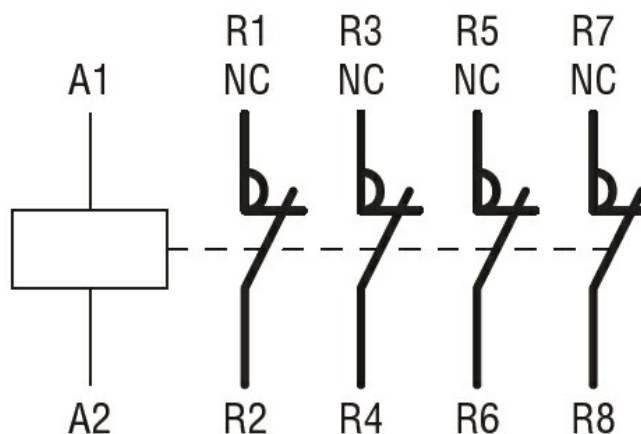
Conductor section			
AWG/Kcmil	max		10
Flexible w/o lug conductor section			
	min	mm ²	1
	max	mm ²	6
Flexible c/w lug conductor section			
	min	mm ²	1
	max	mm ²	4
Flexible with insulated spade lug conductor section			
	min	mm ²	1
	max	mm ²	4
Power terminal protection according to IEC/EN 60529			IP20 when properly wired
Mechanical features			
Operating position		normal allowable	Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	372
Auxiliary contact characteristics			
Thermal current I _{th}		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
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 50/60Hz		V	400
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 75
			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 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				
Rated operational voltage AC (UL)		V		600
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/BS 60947-1
IEC/EN/BS 60947-4-1
UL 60947-1
UL 60947-4-1

Certificates

CCC
cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching