



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?	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°
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Fixing

Screw / DIN rail
35mm

Weight

g 352

Conductor section

AWG/kcmil conductor section	max	10
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Operations

Mechanical life	cycles	20000000
Electrical life	cycles	1600000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	1600000
mechanical load	cycles	20000000

Mirror contacts according to IEC/EN 609474-4-1

YES

EMC compatibility

yes

AC coil operating

Rated AC voltage at 60Hz	V	230
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AC operating voltage

of 60Hz coil powered at 60Hz			
pick-up	min	%Us	80
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55

AC average coil consumption at 20°C

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
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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
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Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	70

Storage temperature

min	°C	-60
max	°C	80

Max altitude

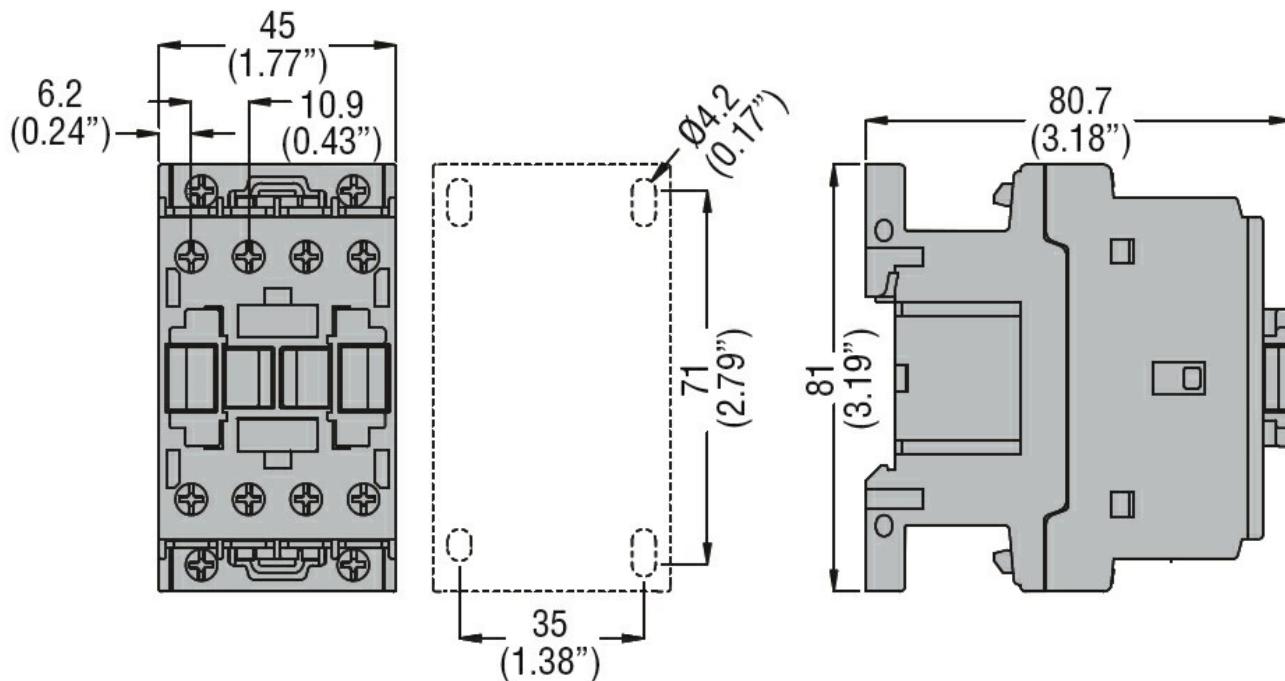
m	3000
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Resistance & Protection

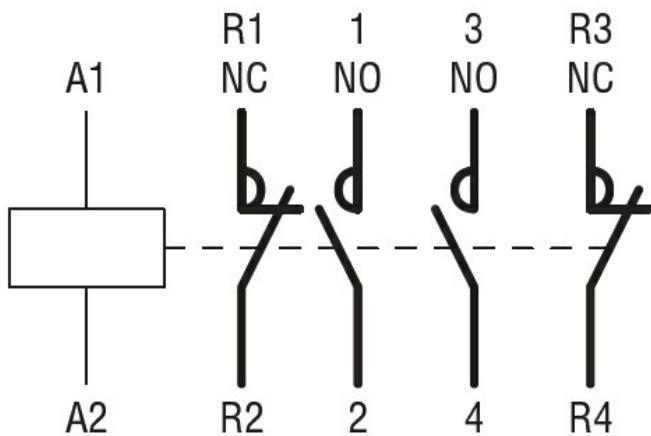
Pollution degree

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