



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 max	Hz Hz 25 400
IEC Conventional free air thermal current I_{th}	A	32
Operational current I_e	AC-1 (=40°C) AC-1 (=55°C) AC-1 (=70°C) AC-3 (=440V =55°C) AC-4 (400V)	A A A A A 32 26 23 18 8.5
Rated operational power AC-1 (T=40°C)	230V 400V 500V 690V	kW kW kW kW 12 21 26 36
Short-time allowable current for 10s (IEC/EN60947-1)	A	200
Protection fuse	gG (IEC) aM (IEC)	A A 32 20
Making capacity (RMS value)	A	180
Breaking capacity at voltage	440V 500V 690V	A A A 144 120 94
Resistance per pole (average value)	m?	2.5
Power dissipation per pole (average value)	I_{th} AC3	W W 2.6 0.8
Tightening torque for terminals	min max min max	Nm Nm lbin lbin 1.5 1.8 1.1 1.5
Tightening torque for coil terminal	min max min max	Nm Nm lbin lbin 0.8 1 0.8 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	360
Conductor section				
AWG/kcmil conductor section				
		max	10	
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
Mirror contacts according to IEC/EN 60947-4-1				YES
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz			V	230
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	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
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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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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

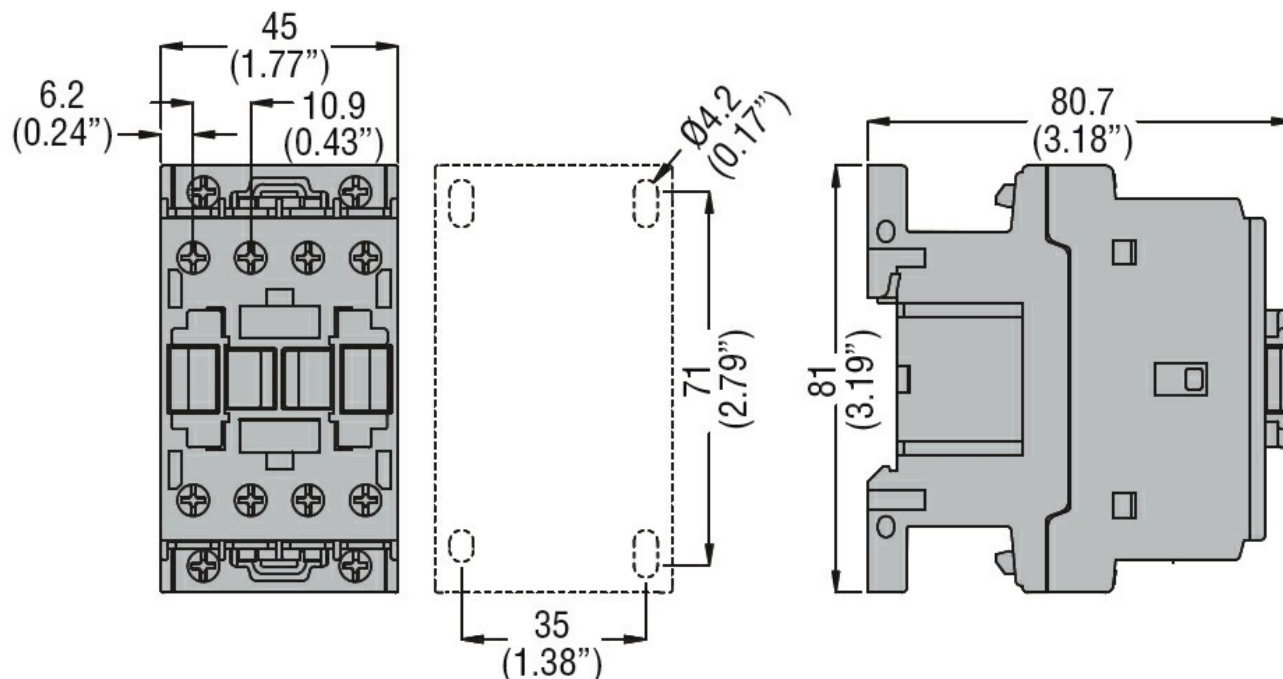
m	3000
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Resistance & Protection

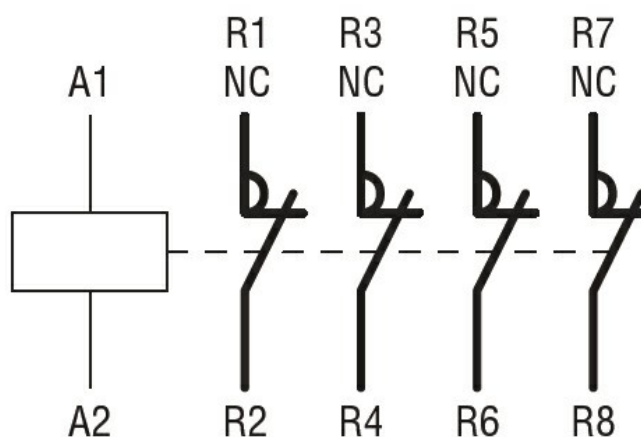
Pollution degree

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