



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 (=40°C)	A	32
	AC-1 (=55°C)	A	26
	AC-1 (=70°C)	A	23
	AC-3 (=440V =55°C)	A	18
	AC-4 (400V)	A	8.5
Rated operational power AC-1 (T=40°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	Vertical plan
allowable	±30°

Fixing

Screw / DIN rail
35mm

Weight

g 360

Conductor section

AWG/kcmil conductor section	max	10
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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	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 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

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ,
230VAC, 4NC

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 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

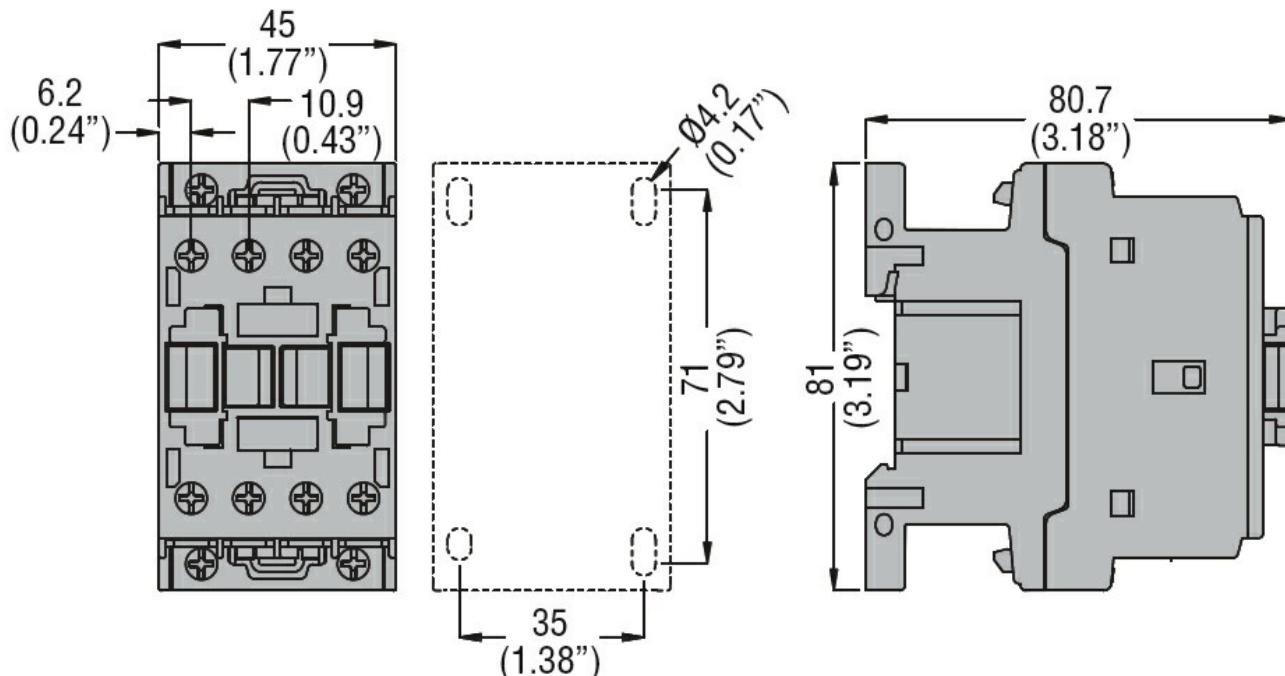
min	°C	-60
max	°C	80

Max altitude m 3000

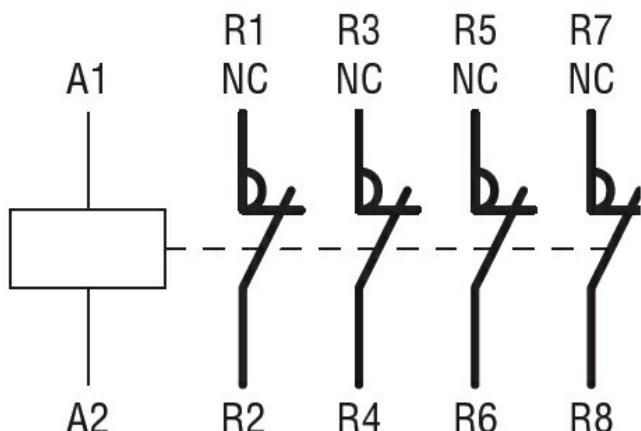
Resistance & Protection

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