



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 (≤40°C)	A 32
	Operational current AC3 (≤440V ≤55°C)	A 18
	Operational current AC4 (400V)	A 8.5
Rated operational power AC1 (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		
	Breaking capacity 440V	A 144
	Breaking capacity 500V	A 120
	Breaking capacity 690V	A 94
Resistance per pole (average value)	mΩ	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 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
Auxiliary contact characteristics			
Operational current AC1 (≤40°C)		A	32
Operating current DC13			
	110V	A	Screw / DIN rail 35mm
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Operating position			
	normal		Vertical plan ±30°
	allowable		
Mounting			Screw / DIN rail 35mm
Weight		g	0.49
Operations			
Mechanical life		Cycles	20000000
Electrical life		Cycles	1600000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	Cicli	1600000
	mechanical load	Cicli	20000000
EMC compatibility			yes
DC coil operating			
DC rated control voltage			
	min	V	6
DC operating voltage			
pick-up			
	min	%Us	0.7
	max	%Us	1.25
drop-out			
	min	%Us	0.1
	max	%Us	0.40
Average coil consuption ≤20°C			
	in-rush	W	5.4
	holding	W	5.4

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

in DC

Closing NC

min	ms	24
max	ms	30

Opening NC

min	ms	47
max	ms	57

UL technical data

Full-load current (FLA) for three-phase AC motor

at 480V	A	14
at 600V	A	17

General USE

Contactor

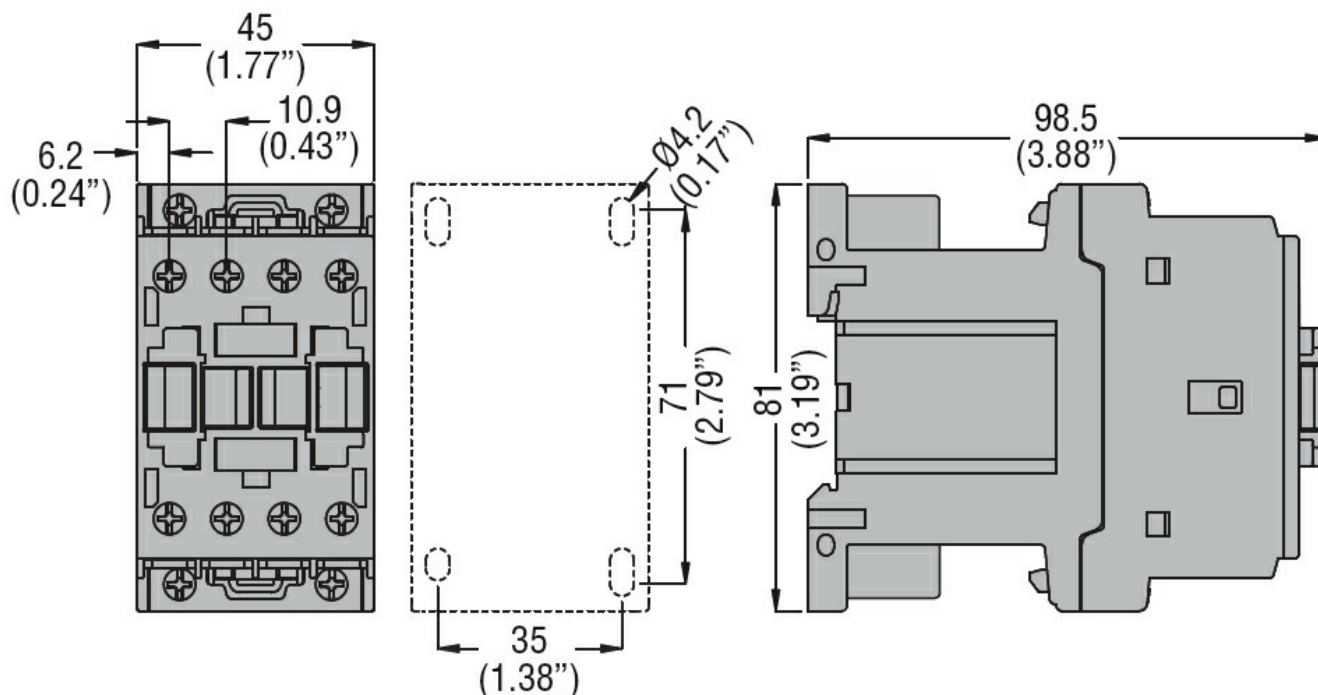
AC current	A	32
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Other features

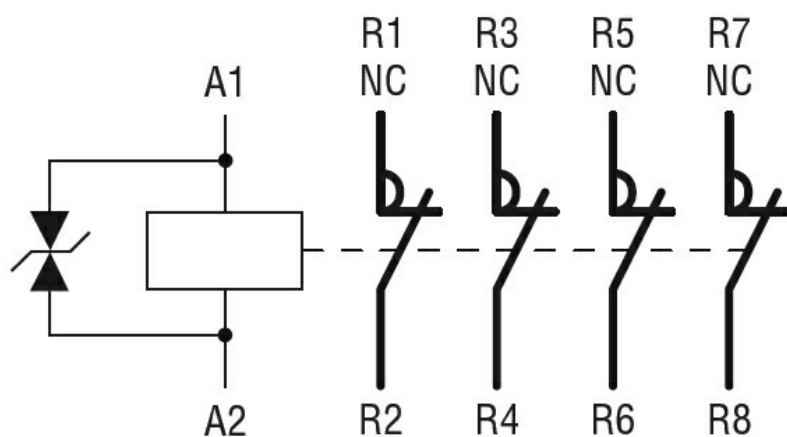
Pollution degree

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