



Product designation				Power contactor
Product type designation				BF38
<b>Contact characteristics</b>				
Number of poles	nr.			4
Rated insulation voltage U <sub>i</sub>	V			690
Rated impulse withstand voltage U <sub>imp</sub>	kV			6
Operating frequency	Operational frequency min	Hz	25	
	Operational frequency max	Hz	400	
	Conventional free air thermal current I <sub>th</sub>	A	56	
Operating current	Operational current AC1 (≤40°C)	A	56	
	Operational current AC3 (≤440V ≤55°C)	A	38	
	Operational current AC4 (400V)	A	15.5	
Rated operational power AC1 (T≤40°C)	230V	kW	21	
	400V	kW	36	
	500V	kW	45	
	690V	kW	62	
Rated operational power AC3 (T≤55°C)	230V	kW	11	
	400V	kW	18.5	
	415V	kW	18.5	
	440V	kW	18.5	
	500V	kW	20	
	690V	kW	22	
Short-time allowable current for 10s (IEC/EN60947-1)	A	320		
Protection fuse	gG (IEC)	A	63	
	aM (IEC)	A	40	
Making capacity (RMS value)	A	380		
Breaking capacity at voltage	Breaking capacity 440V	A	304	
	Breaking capacity 500V	A	240	
	Breaking capacity 690V	A	192	
Resistance per pole (average value)	mΩ	2		
Power dissipation per pole (average value)	Power dissipation pole (average value) I <sub>th</sub>	W	6	
	AC3	W	2.9	
Tightening torque for terminals	min	Nm	2.5	
	max	Nm	3	
	min	lbft	1.8	
	max	lbft	2.2	
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		14
	max		6
Flexible w/o lug conductor section	min	mm <sup>2</sup>	2.5
	max	mm <sup>2</sup>	16
Flexible c/w lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Flexible with insulated spade lug conductor section	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	10
Power terminal protection according to IEC/EN 60529			IP20 when wired
<b>Auxiliary contact characteristics</b>			
Operational current AC1 (≤40°C)		A	56
Operating current DC13	110V	A	Screw / DIN rail 35mm
<b>Ambient conditions</b>			
Temperature	Operating temperature		
	min	°C	-50
	max	°C	70
	Storage temperature		
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Operating position	normal allowable		Vertical plan ±30°
Mounting			Screw / DIN rail 35mm
Weight		g	0.513
<b>Operations</b>			
Mechanical life		Cycles	20000000
Electrical life		Cycles	1400000
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	Cicli Cicli	1400000 20000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			yes
<b>AC coil operating</b>			
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up		
	min	%Us	0.8

		max	%Us	1.1	
	drop-out				
		min	%Us	0.2	
		max	%Us	0.55	
of 50/60Hz coil powered at 60Hz					
	pick-up				
		min	%Us	0.85	
		max	%Us	1.1	
	drop-out				
		min	%Us	0.2	
		max	%Us	0.55	
of 60Hz coil powered at 60Hz					
	pick-up				
		min	%Us	0.8	
		max	%Us	1.1	
	drop-out				
		min	%Us	0.2	
		max	%Us	0.55	
<b>AC operating voltage</b>					
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 $\leq 20^{\circ}\text{C}$ 50Hz					
			W	2.5	
<b>Max cycles frequency</b>					
Mechanical operations				Cycles/h	3600
<b>Operating times</b>					
Average time for Us control					
in AC					
Closing NO					
		min	ms	8	
		max	ms	24	
Opening NO					
		min	ms	5	
		max	ms	15	
<b>UL technical data</b>					
Full-load current (FLA) for three-phase AC motor					
		at 480V	A	40	
		at 600V	A	32	
Yielded mechanical performance					
for single-phase AC motor					
		at 110/120V	hp	3	
		at 230V	hp	7.5	
for three-phase AC motor					
		at 200/208V	hp	10	
		at 220/230V	hp	15	
		at 460/480V	hp	30	
		at 575/600V	hp	30	
<b>General USE</b>					

Contactor

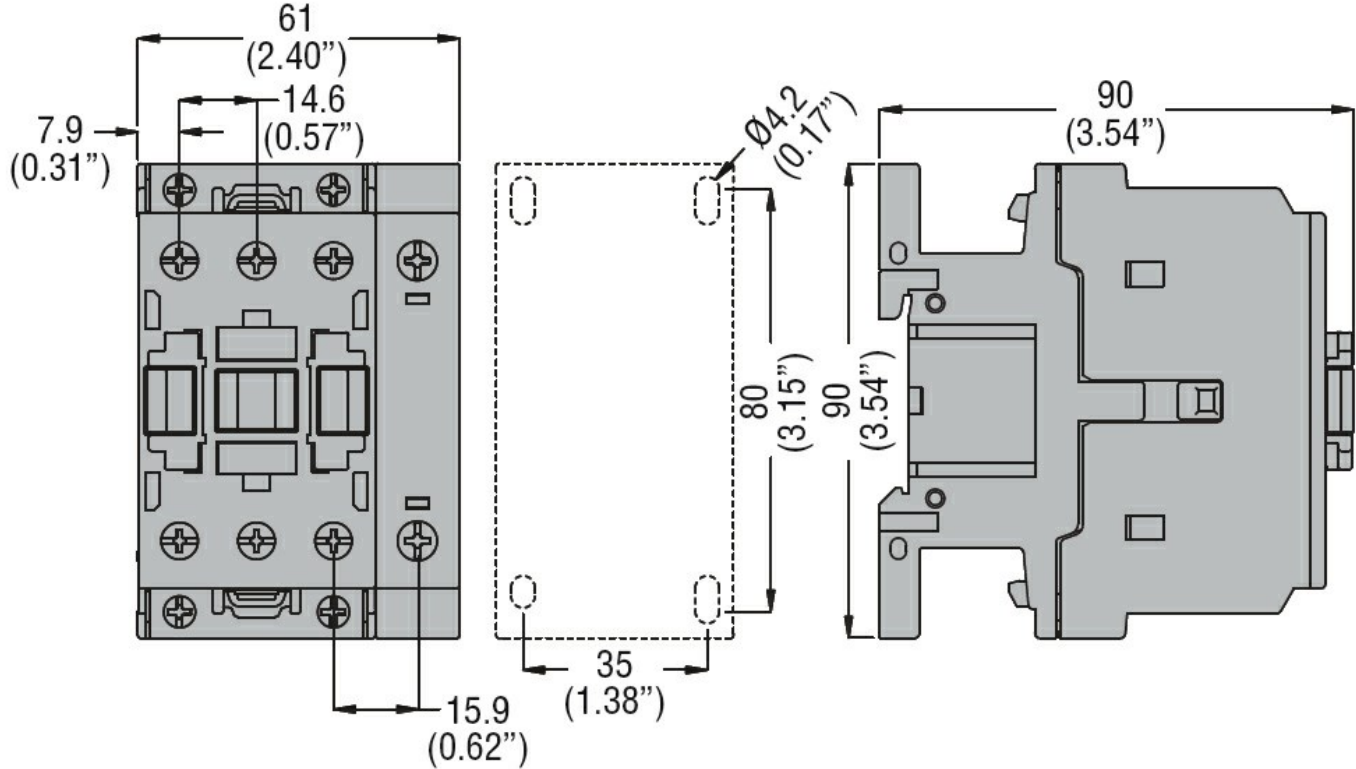
AC current A 32

Other features

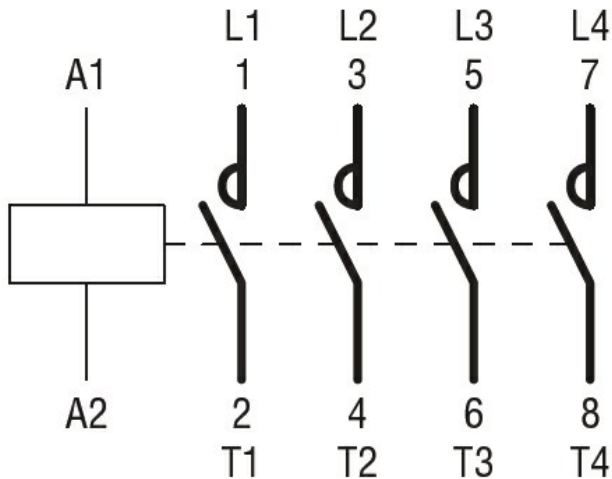
Pollution degree

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

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EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching