



Product designation	Power contactor		
Product type designation	BF38		
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage $Uimp$	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	56	
Operational current Ie			
AC-1 ($\leq 40^\circ C$)	A	56	
AC-1 ($\leq 40^\circ C$) with 16mm ² wire and fork end lugA	A	60	
AC-1 ($\leq 55^\circ C$)	A	45	
AC-1 ($\leq 55^\circ C$) with 16mm ² wire and fork end lugA	A	48	
AC-1 ($\leq 70^\circ C$)	A	40	
AC-1 ($\leq 70^\circ C$) with 16mm ² wire and fork end lugA	A	42	
AC-3 ($\leq 440V \leq 55^\circ C$)	A	38	
AC-4 (400V)	A	15.5	
Rated operational power AC-1 ($T \leq 40^\circ C$)	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
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			
440V	A	304	
500V	A	240	
690V	A	192	
Resistance per pole (average value)	m?		
Power dissipation per pole (average value)	Ith	W	6
	AC3	W	2.9
Tightening torque for terminals	min	Nm	2.5
	max	Nm	3
	min	lbin	1.8
	max	lbin	2.2
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1

	min	Ibin	0.8		
	max	Ibin	0.74		
Max number of wires simultaneously connectable	Nr. 2				
Conductor section	AWG/Kcmil				
	max		6		
Flexible w/o lug conductor section	min	mm ²	2.5		
	max	mm ²	16		
Flexible c/w lug conductor section	min	mm ²	1		
	max	mm ²	10		
Flexible with insulated spade lug conductor section	min	mm ²	1		
	max	mm ²	10		
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	514			
Conductor section	AWG/kcmil conductor section				
	max	6			
Operations					
Mechanical life	cycles	20000000			
Electrical life	cycles	1400000			
Safety related data					
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	1400000		
	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	48			
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			
Operating times					

Average time for Us control
 in AC

Closing NO	min	ms	8
	max	ms	24
Opening NO	min	ms	5
	max	ms	15
Closing NC	min	ms	11
	max	ms	29
Opening NC	min	ms	6
	max	ms	14

UL technical data

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	110/120V	HP	3
	230V	HP	7.5
for three-phase AC motor			
	200/208V	HP	10
	220/230V	HP	15
	460/480V	HP	30
	575/600V	HP	30

General USE

Contactor	AC current	A	55
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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

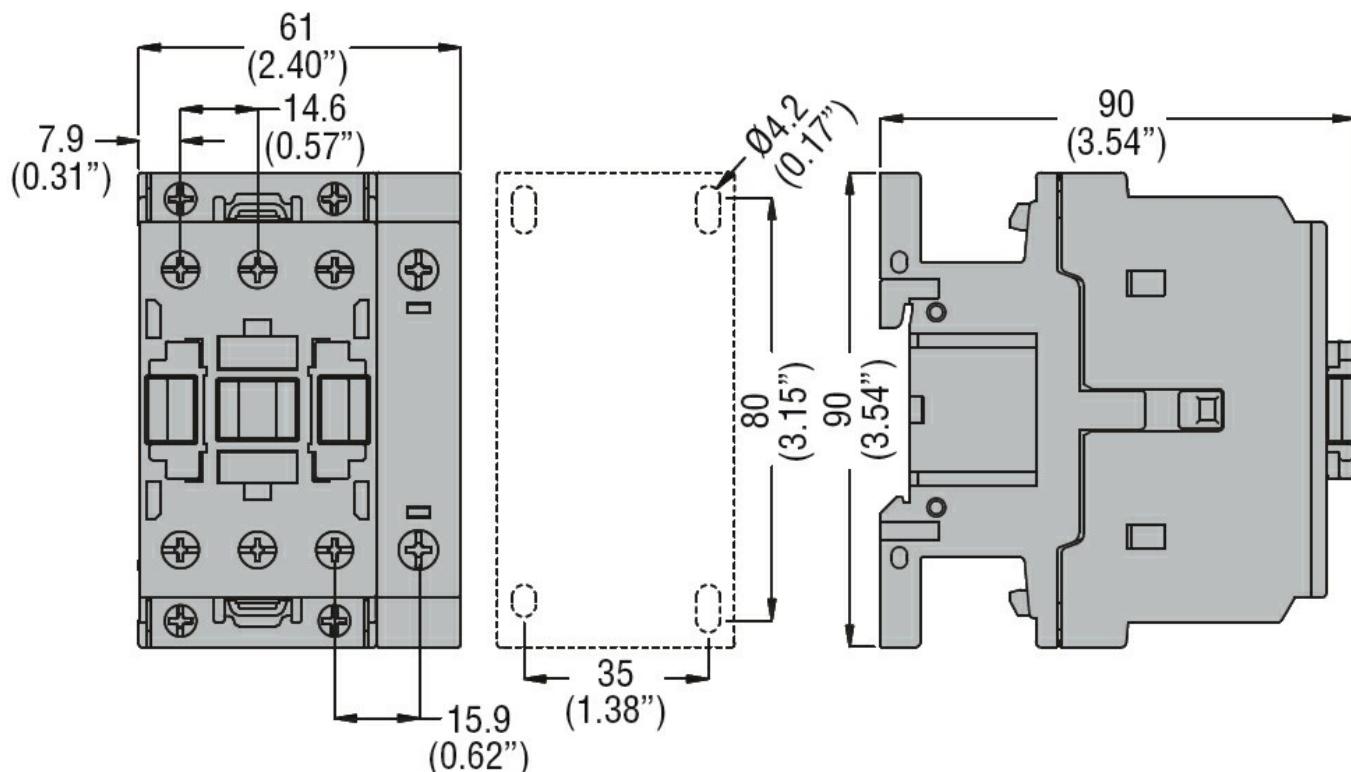
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Resistance & Protection

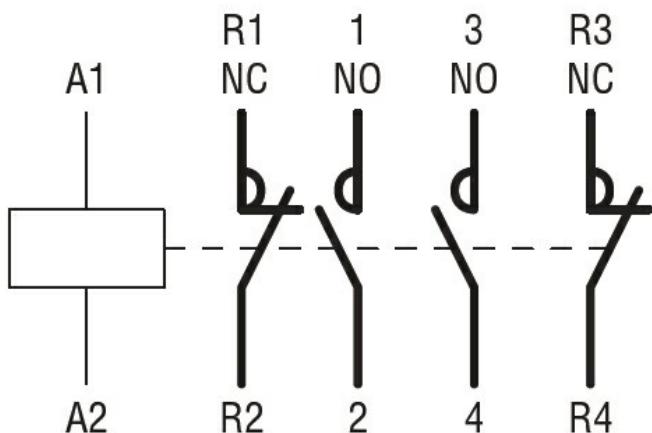
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Pollution degree

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