



Product designation				Power contactor
Product type designation				BF38
Contact characteristics				
Number of poles	nr.	3		
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	56	
Operating current	Operational current AC1 ($\leq 40^\circ\text{C}$)	A	56	
	Operational current AC3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A	38	
	Operational current AC4 (400V)	A	15.5	
Rated operational power AC1 ($T \leq 40^\circ\text{C}$)	230V	kW	21	
	400V	kW	36	
	500V	kW	45	
	690V	kW	62	
Rated operational power AC3 ($T \leq 55^\circ\text{C}$)	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)	m Ω	2		
Power dissipation per pole (average value)	Power dissipation pole (average value) I_{th}	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
<hr/>				
max number of wires simultaneously connectable			nr.	2
<hr/>				
Conductor section				
AWG				
		min		14
		max		6
<hr/>				
Flexible w/o lug conductor section				
		min	mm ²	2.5
		max	mm ²	16
<hr/>				
Flexible c/w lug conductor section				
		min	mm ²	1
		max	mm ²	10
<hr/>				
Flexible with insulated spade lug conductor section				
		min	mm ²	1
		max	mm ²	10
<hr/>				
Power terminal protection according to IEC/EN 60529				IP20 when wired
Auxiliary contact characteristics				
Operational current AC1 (≤40°C)				A 56
<hr/>				
Operating current DC13				110V A Screw / DIN rail 35mm
Ambient conditions				
Temperature				
Operating temperature				
		min	°C	-50
		max	°C	70
<hr/>				
Storage temperature				
		min	°C	-60
		max	°C	80
<hr/>				
Max altitude				m 3000
<hr/>				
Operating position				normal allowable Vertical plan ±30°
<hr/>				
Mounting				Screw / DIN rail 35mm
<hr/>				
Weight				g 0.554
Operations				
Mechanical life				Cycles 20000000
Electrical life				Cycles 1400000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		rated load	Cicli	1400000
		mechanical load	Cicli	20000000
<hr/>				
Mirror contacts according to IEC/EN 60947-4-1				yes
EMC compatibility				yes
DC coil operating				
DC rated control voltage				min V 6
<hr/>				
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 consumption ≤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 NO	min	ms	8
	max	ms	24
Opening NO	min	ms	5
	max	ms	15
in DC			
Closing NO	min	ms	54
	max	ms	66
Opening NO	min	ms	14
	max	ms	17

UL technical data

Full-load current (FLA) for three-phase AC motor			
	at 480V	A	40
	at 600V	A	32

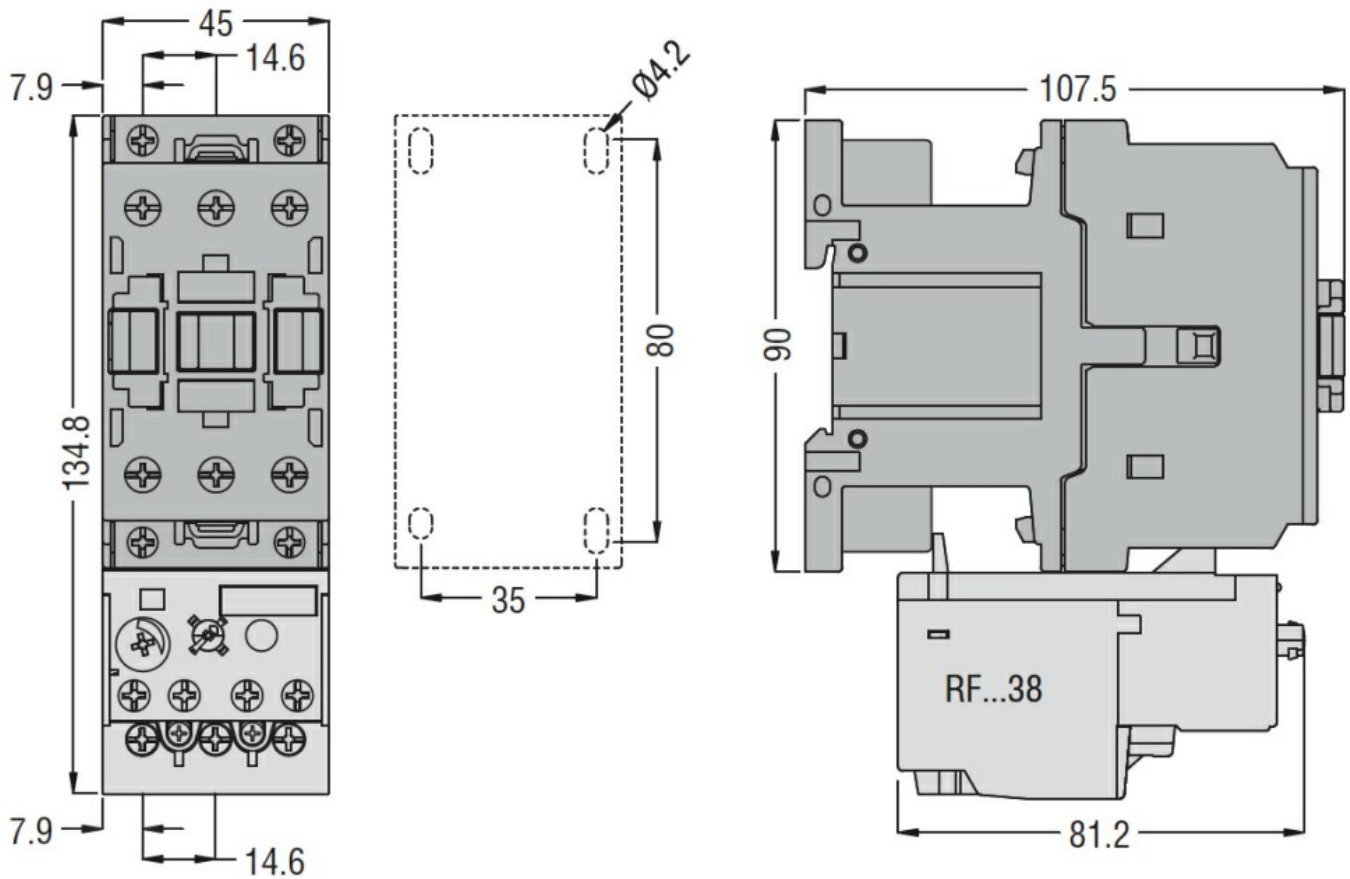
Yielded mechanical performance			
for single-phase AC motor			
	at 110/120V	hp	3
	at 230V	hp	7.5
for three-phase AC motor			
	at 200/208V	hp	10
	at 220/230V	hp	15
	at 460/480V	hp	30
	at 575/600V	hp	30

General USE			
Contactor			
	AC current	A	32

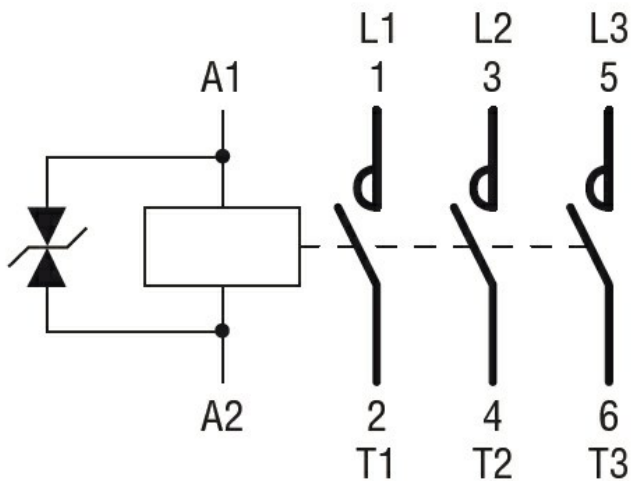
Other features

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

cULus

EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching