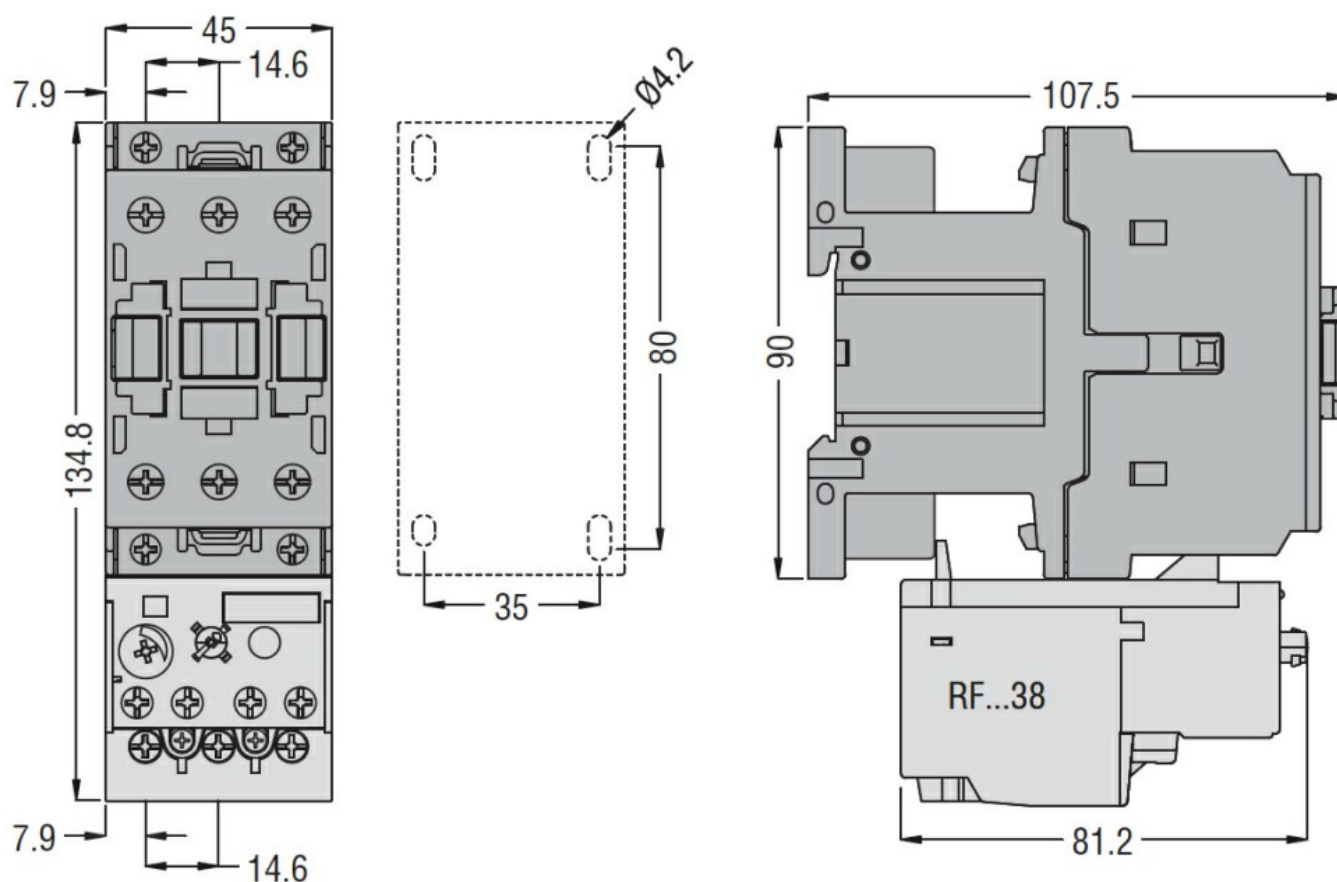




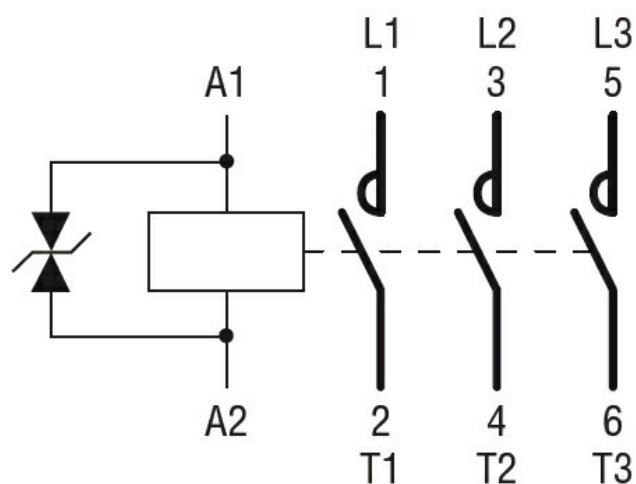
Product designation			Power contactor
Product type designation			BF38
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency	min	Hz	25
	max	Hz	400
Conventional free air thermal current Ith IEC/EN		A	56
Operational current Ie	AC-1 (≤40°C)	A	56
	AC-3 (≤440V ≤55°C)	A	38
	AC-4 (400V)	A	15.5
Rated operational power AC-1 (T≤40°C)	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
Rated operational power AC-3 (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	440V	A	304
	500V	A	240
	690V	A	192
Resistance per pole (average value)		mΩ	2
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	Ibin	1.8
	max	Ibin	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			
		/kcmil min		14
		/kcmil 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
Auxiliary contact characteristics				
Operational current I <sub>e</sub> AC-1 (≤40°C)			A	56
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
Operational position				
		Operating position normal		vertical plan
		Operating position allowable		±30°
Fixing				Screw / DIN rail 35mm
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
Mirror contacts according to IEC/EN 60947-4-1				yes
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 consumption $\leq 20^{\circ}\text{C}$				
Average coil consumption $\leq 20^{\circ}\text{C}$ in-rush			W	5.4
Average coil consumption $\leq 20^{\circ}\text{C}$ 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				
for single-phase AC motor				
Yielded mechanical performance 110/120V			hp	3
Yielded mechanical performance 230V			hp	7.5
for three-phase AC motor				
Yielded mechanical performance 200/208V			hp	10
Yielded mechanical performance 220/230V			hp	15
Yielded mechanical performance 460/480V			hp	30
Yielded mechanical performance 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

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cULus

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EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching