



Product designation
Product type designation

Power contactor
BF38

Contact characteristics

Number of poles	nr.	3
Rated insulation voltage U_i IEC/EN	V	690
Rated impulse withstand voltage U_{imp}	kV	6
Operational frequency	min	Hz 25
	max	Hz 400
Conventional free air thermal current I_{th} IEC/EN	A	56
Operational current I_e	AC-1 ($\leq 40^\circ\text{C}$)	A 56
	AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$)	A 38
	AC-4 (400V)	A 15.5
Rated operational power AC-1 ($T \leq 40^\circ\text{C}$)	230V	kW 21
	400V	kW 36
	500V	kW 45
	690V	kW 62
Rated operational power AC-3 ($T \leq 55^\circ\text{C}$)	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	440V	A 304
	500V	A 240
	690V	A 192
Resistance per pole (average value)	m Ω	2
Power dissipation per pole (average value)	I_{th}	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	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 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
Auxiliary contact characteristics				
Operational current I _e 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	0.429
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
AC coil operating				
AC operating voltage				
	of 50/60Hz coil powered at 50Hz pick-up			
		min	%U _s	0.8

	drop-out	max	%Us	1.1
		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	
AC operating voltage				
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 ≤20°C 50Hz			W	2.5
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	
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

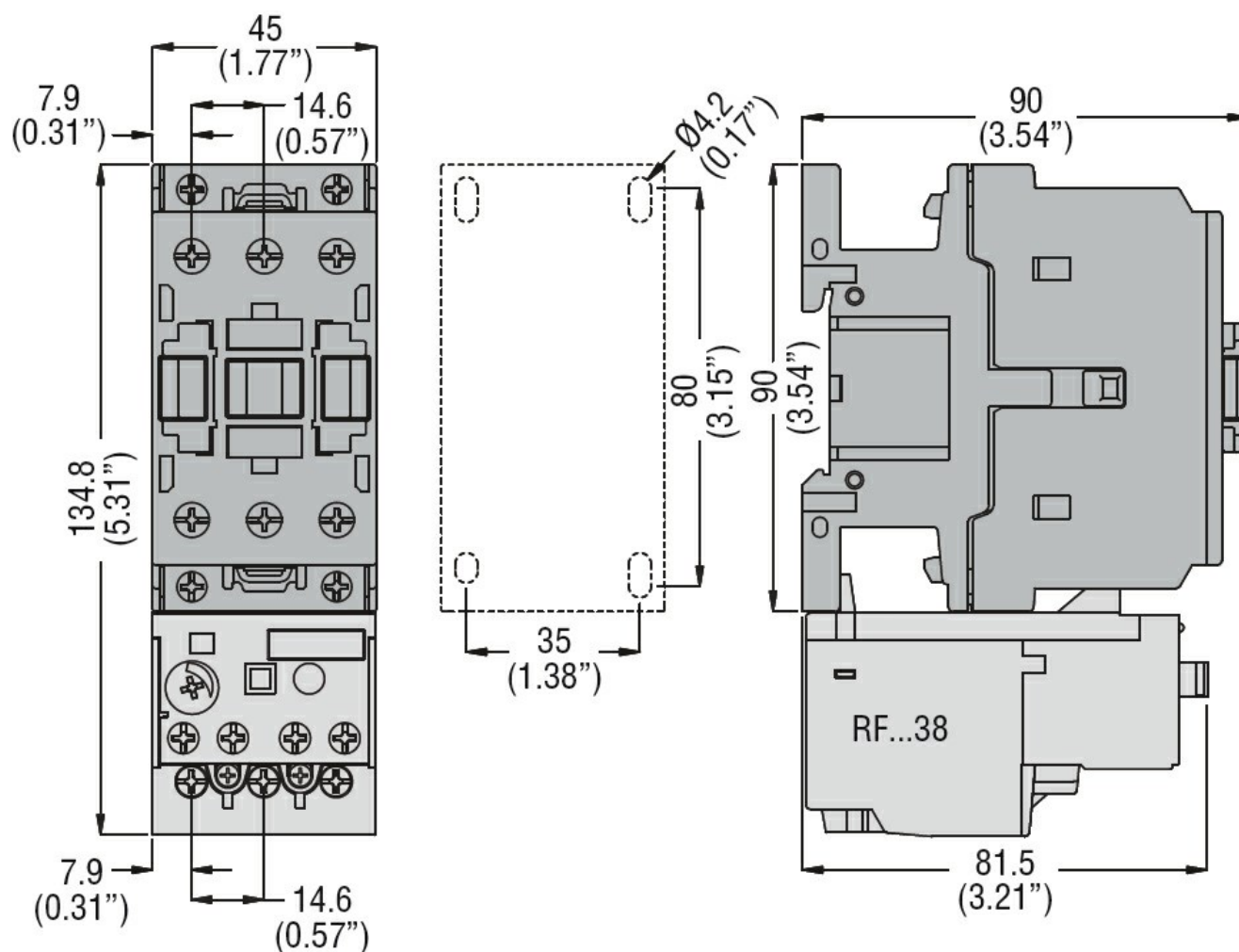
AC current A 32

Other features

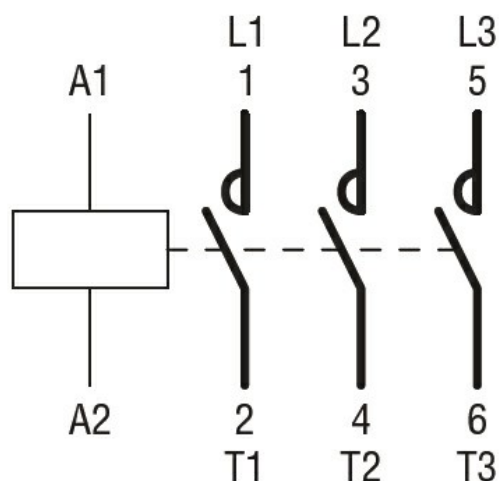
Pollution degree

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

cULus

EAC

ETIM 6 classification

EC000066 - Power contactor, AC switching