BF3800A048

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 38A, AC COIL 50/60HZ, 48VAC

Product designation			Power contactor
Product type designation			BF38
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui		V	690
Rated impulse withstand voltage Uimp		kV	6
Operating frequency			
	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith		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 AC3A (T≤55°C)			
	Rated operational power AC3 (T≤55°C) 230V	kW	11
	Rated operational power AC3 (T≤55°C) 400V	kW	18.5
	Rated operational power AC3 (T≤55°C) 415V	kW	18.5
	Rated operational power AC3 (T≤55°C) 440V	kW	18.5
	Rated operational power AC3 (T≤55°C) 500V	kW	20
	Rated operational power AC3 (T≤55°C) 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) Ith	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	mm²	2.5
		max	mm²	16
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	10
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	10
Power terminal protection according to IEC/EN 60529				IP20 when wired
Auxiliary contact characteristics				
Operational current AC1 (≤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
Operating position				
		normal		Vertical plan
		allowable		±30°
Mounting				Screw / DIN rail 35mm
Weight			g	0.43
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 contats according to IEC/EN 609474-4-1				yes
EMC compatibility				yes
AC coil operating				
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		pick-up		
		min	%Us	0.8

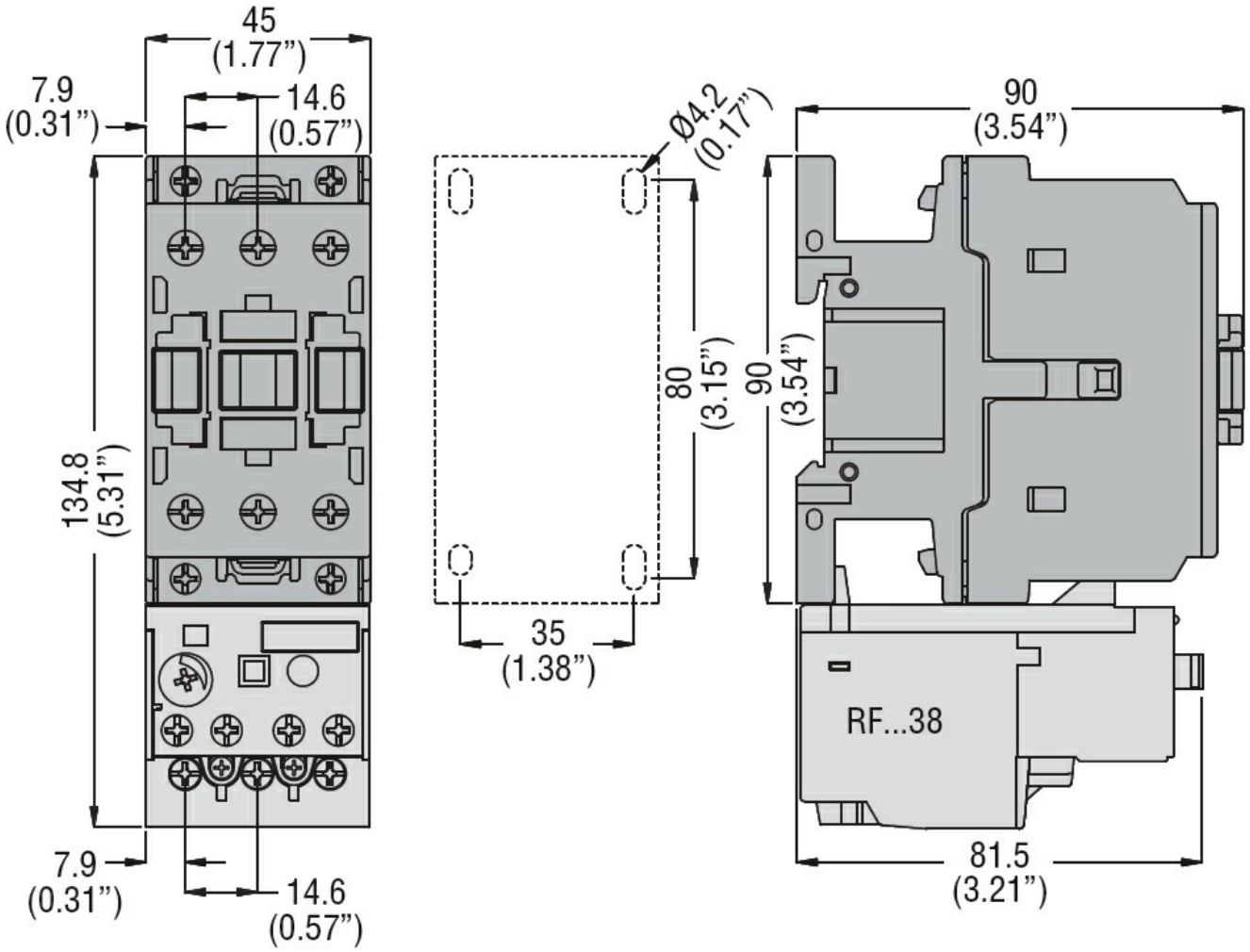
			max	%Us	1.1
		drop-out			
			min	%Us	0.2
			max	%Us	0.55
	of 50/60Hz coil powered at 60Hz				
		pick-up			
			min	%Us	0.85
			max	%Us	1.1
		drop-out			
			min	%Us	0.2
			max	%Us	0.55
	of 60Hz coil powered at 60Hz				
		pick-up			
			min	%Us	0.8
			max	%Us	1.1
		drop-out			
			min	%Us	0.2
			max	%Us	0.55
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 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

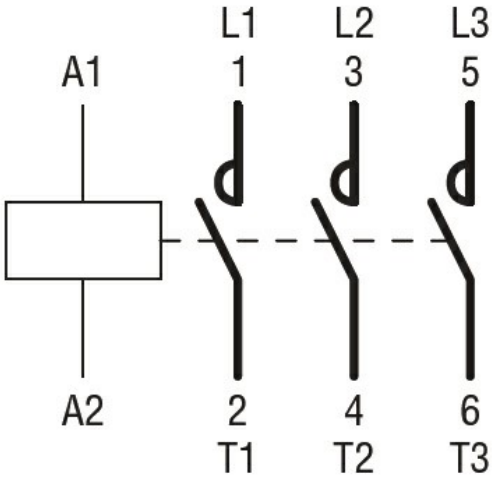
Other features

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