



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
IEC Conventional free air thermal current Ith		Α	56
Operational current le			
	AC-1 (≤40°C)	Α	56
	AC-1 (≤40°C) with 16mm² wire and fork end	lugA	60
	AC-1 (≤55°C)	Α	45
	AC-1 (≤55°C) with 16mm² wire and fork end	lugA	48
	AC-1 (≤70°C)	Α	40
	AC-1 (≤70°C) with 16mm² wire and fork end	lugA	42
	AC-3 (≤440V ≤55°C)	Α	38
	AC-4 (400V)	Α	15.5
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
Rated operational power AC-1 (T≤40°C)			
	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current le in DC1 with L/R ≤ 1ms with	n 1 poles in series		_
	≤24V	Α	35
	48V	Α	30
	75V	Α	23
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with	n 2 poles in series		
	≤24V	Α	36
	48V	Α	34
	75V	Α	29
	110V	Α	32
	220V	Α	4
IEC max current le in DC1 with L/R ≤ 1ms with	n 3 poles in series		
	≤24V	Α	36



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	48V	Α	34
	75V	Α	33
	110V	Α	34
	220V	Α	30
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	36
	48V	Α	34
	75V	Α	33
	110V	Α	34
	220V	Α	38
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	
	≤24V	Α	24
	48V	A	20
	75V	A	17
	110V	A	2,5
IFO the in DO2 DO5 with 1/D < 45 with 0 in ani	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	<04)/	۸	20
	≤24V 48V	A	28
	48 V 75 V	A A	25 22
	110V	A	18
	220V	A	3
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V		<u> </u>
TEO MAX CUITER REPOSE OF WILL ETT 2 TOMS WILL 5 POICS IT SCHOS	≤24V	Α	32
	48V	A	28
	75V	A	28
	110V	A	23
	220V	Α	25
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
·	≤24V	Α	32
	48V	Α	28
	75V	Α	28
	110V	Α	23
	220V	Α	15
Short-time allowable current for 10s (IEC/EN60947-1)		Α	320
Protection fuse			
	gG (IEC)	Α	63
	aM (IEC)	Α	40
Making capacity (RMS value)		Α	380
Breaking capacity at voltage			
	440V	Α	304
	500V	Α	240
	690V	Α	192
Resistance per pole (average value)		mΩ	2
Power dissipation per pole (average value)			
	Ith	W	6
	AC-3	W	2.9
Tightening torque for terminals			
	min	Nm	2.5
	max ·	Nm	3
	min	lbin	1.8
Tightening terms for call terms and	max	Ibin	2.2
Tightening torque for coil terminal			



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		min	Nm	0.8
		max min	Nm Ibin	1 0.8
		max	Ibin	0.74
Max number of wires s	imultaneously connectable	max	Nr.	2
Conductor section	minana isousiy comisousis			
	AWG/Kcmil			
		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		_	
		min	mm²	1
		max	mm²	10
Power terminal protect	ion according to IEC/EN 60529			IP20 when properly wired
Mechanical features				property wiled
Operating position				
- p - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	554
Conductor section				
	AWG/kcmil conductor section			
		max		6
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1400000
Safety related data				
Performance level B10	d according to EN/ISO 13489-1			4.400000
		rated load	cycles	1400000
Mirror contate according	og to IEC/EN 600474 4 4	mechanical load	cycles	20000000
	ng to IEC/EN 609474-4-1			yes
EMC compatibility DC coil operating				yes
DC rated control voltage			V	24
DC rated control voltage DC operating voltage	JO		v	<u>-</u> T
20 operating voltage	pick-up			
	r - ~F	min	%Us	70
		max	%Us	125
	drop-out			
	•	min	%Us	10
		max	%Us	40
Average coil consumpt	tion ≤20°C			
		in-rush	W	5.4
		holding	W	5.4
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				



Average time for Us control

In AC	Average time for Us co					
Min		in AC				
Name			Closing NO			
Closing NC						
Max				max	ms	24
Closing NC			Opening NO			
Closing NC						
Min				max	ms	15
Name		•	Closing NC			
Opening NC				min	ms	
Min				max	ms	20
Max			Opening NC			
In DC				min	ms	9
Closing NO				max	ms	17
Min max		in DC				_
Min max			Closing NO			
Max			J	min	ms	54
Opening NO						
Min max 14 max ms 14 max ms 17 ms 14 max ms 17 ms			Openina NO			
The control of the			,g	min	ms	14
Ul technical data Full-load current (FLA) for three-phase AC motor						
Full-load current (FLA) for three-phase AC motor at 480V	III technical data			тах	1110	
At 480V A 40 at 600V A 32		for three-phase AC motor				
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 General USE Contactor AC current A 55 Short-circuit protection fuse, 600V High fault Short circuit current KA 100 Fuse rating A 100 Fuse class J Standard fault Short circuit current KA 5 Fuse rating A 150 Ambient conditions Temperature Min °C -50 max °C -50 max <td>Tull load carrett (LA)</td> <td>ioi tinee phase Ao motor</td> <td></td> <td>at 490\/</td> <td>۸</td> <td>40</td>	Tull load carrett (LA)	ioi tinee phase Ao motor		at 490\/	۸	40
Yielded mechanical performance for single-phase AC motor 110/120V HP 3						
For single-phase AC motor	Violded machanical na	eformon on		at 000 v	^	32
110/120V	rielded mechanical per					
Part		for single-phase AC mot	or	4.40/4001/		
For three-phase AC motor 200/208V						
200/208V		 		230V	HP	7.5
220/230V		for three-phase AC moto	or			
A60/480V						
Storage temperature S75/600V						
Contactor				460/480V		30
Contactor AC current A 55				575/600V	HP	30
AC current	General USE					_
Short-circuit protection fuse, 600V High fault Short circuit current kA 100 Fuse rating A 100 Fuse class J Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current kA 5 Fuse rating A 150 Standard fault Short circuit current Shor		Contactor				
High fault				AC current	Α	55
High fault	Short-circuit protection	fuse, 600V				
Short circuit current KA 100 Fuse rating Fuse class J	,					
Fuse rating Fuse class		3		Short circuit current	kA	100
Standard fault Short circuit current kA 5 Fuse rating A 150						
Standard fault Short circuit current kA 5 Fuse rating A 150					, ,	
Short circuit current Fuse rating A 150 Ambient conditions Temperature Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80		Standard fault		1 400 01400		
Fuse rating A 150		Gianuaru rauli		Short circuit current	kΔ	5
Ambient conditions						
Operating temperature	Ambient conditions			ruse raung	^	130
Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 max °C 80						
min °C -50 max °C 70 Storage temperature min °C -60 max °C 80	remperature	On another trace				
max °C 70 Storage temperature min °C -60 max °C 80		Operating temperature		•	0.0	50
Storage temperature min °C -60 max °C 80						
min °C -60 max °C 80				max	°C	/0
max °C 80		Storage temperature				
				min		
Max altitude m 3000	-			max	°C	
	Max altitude				m	3000

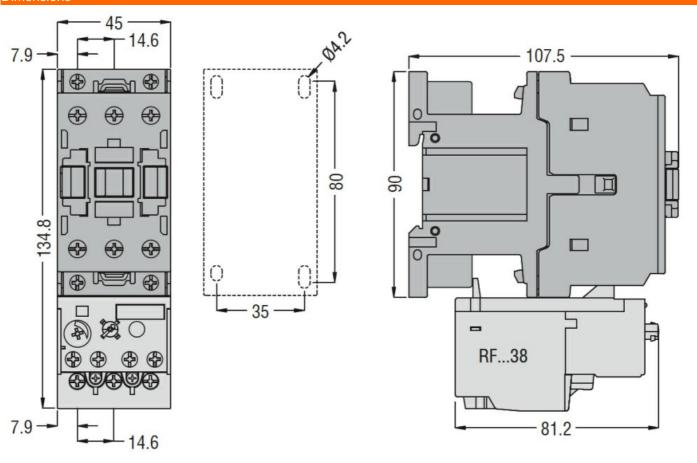


ENERGY AND AUTOMATION

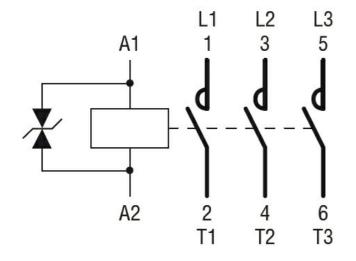
Resistance & Protection

Pollution degree 3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1



BF3800D024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 38A, DC COIL, 24VDC

	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
	EAC	
TTING 1 100 CT		

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching