

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 110VAC, 2NO AND 2NC



Product designation Power contactor Product type designation BF80

Product type designation			BF80
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	115
Operational current le			
	AC-1 (≤40°C)	Α	115
	AC-1 (≤55°C)	Α	95
	AC-1 (≤70°C)	Α	80
	AC-3 (≤440V ≤55°C)	Α	80
	AC-4 (400V)	Α	38
Rated operational current AC-3 (T≤55°C)	,		
, ,	230V	Α	80
	400V	Α	80
	415V	Α	80
	440V	Α	80
	500V	Α	78
	690V	Α	57
	1000V	Α	28
Rated operational power AC-1 (T≤40°C)			
	230V	kW	43
	400V	kW	76
	500V	kW	95
	690V	kW	120
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
	aM (IEC)	Α	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
3 1 7 3	440V	Α	640
	500V	Α	625
	690V	Α	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			-
(2. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	Ith	W	7.9
	AC-3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	max	. 4111	Ü



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Minitary March March Minitary March March Minitary March March March Minitary March Mar					
Tightening torque for coil terminal min			min		
Max number of wires simultaneously connectable Max number of wires simultaneously connectable Nr. 2			max	Ibin	3.69
Max number of wires simultaneously connectable No. No.	Tightening torque for	coil terminal			
Max number of wires simultaneously connectable Nix 2			min		
Max number of wires simultaneously connectable Nr. 2					
Max number of wires simultaneously connectable Nr. 2 Conductor section max 2 Flexible w/o lug conductor section min mm² 1.5 Flexible c/w lug conductor section min mm² 35 Flexible c/w lug conductor section min mm² 35 Power terminal protection according to IEC/EN 60529 IP20 front IP20 front Machanical features normal allowable 430° Vertical plan ±30° Fixing normal allowable 5 Crew / DIN rail 35°mm 35mm Vertical plan ±30° Fixing Screw / DIN rail 35°mm 35mm Vertical plan ±30° 2000000 200000 200000 2000000 <t< td=""><td></td><td></td><td>min</td><td></td><td></td></t<>			min		
AWG/Kcmil			max		
AWG/Kcmil max 2 1.5		simultaneously connectable		Nr.	2
Flexible w/o lug conductor section min min mm² 1.5 max mm² 35	Conductor section				
Flexible w/o lug conductor section		AWG/Kcmil			_
Per Per		-	max		2
Persible c/w lug conductor section		Flexible w/o lug conductor section		•	
Flexible c/w lug conductor section					
Province Province		Fig. 9.1. of 1	max	mm²	35
Prower terminal protection according to IEC/EN 60529 IP20 front Machanical features IP20 from Machanical featu		Flexible c/w lug conductor section			4.5
Provide terminal protection according to IEC/EN 60529 IP20 front					
Nechanical features Society Paragraphic Paragraphi	D		max	mm⁴	
Operating position normal allowable	· · · · · · · · · · · · · · · · · · ·	ction according to IEC/EN 60529			1P20 front
Normal allowable Normal allo					
Sirce Sirce Sirce DIN rail DIN rail	Operating position		narmal		Vertical plan
Screw / DIN rail 35mm 35mm					
Weight	Fixina				
AWG/kcmil conductor section max 2					
AWG/kcmil conductor section max 2 Poperations				g	1360
Mechanical life Cycles 15000000 Electrical life Cycles 15000000 Electrical life Cycles 1300000 Safety related data Performance level B10d according to EN/ISO 13489-1 Preformance level B10d accordin	Conductor section	ANAIG/Levelle			
Mechanical life		AWG/kcmil conductor section			0
Mechanical life cycles 15000000 Electrical life cycles 1300000 Safety related data rated load mechanical load mechanical load mechanical load cycles 1300000 Mirror contats according to IEC/EN 609474-4-1 rated load mechanical load cycles 15000000 Mirror contats according to IEC/EN 609474-4-1 yes EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz V 110 AC operating voltage of 50/60Hz coil powered at 50Hz min %Us 80 max %Us 110 drop-out min %Us 55 of 50/60Hz coil powered at 60Hz min %Us 55 of 50/60Hz coil powered at 60Hz min %Us 85 min %Us 110 drop-out min %Us 85 min %Us 110 drop-out min </td <td>Operations ———</td> <td></td> <td>max</td> <td></td> <td></td>	Operations ———		max		
Electrical life cycles 1300000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1300000 mechanical load cycles 15000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110	•			cycles	15000000
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 1300000 mechanical load cycles 15000000				-	
Performance level B10d according to EN/ISO 13489-1 rated load cycles 1300000 mechanical load cycles 15000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110				Cycles	100000
rated load cycles 1300000 mechanical load cycles 15000000		10d according to FN/ISO 13489-1			
Mirror contats according to IEC/EN 609474-4-1 YES	. 5.10	33 333 ang ta Environ 10700 1	rated load	cycles	1300000
Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz Of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110					
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110	Mirror contats accord	ing to IEC/EN 609474-4-1	mosnamoa roda	0,000	
Rated AC voltage at 50/60Hz		<u> </u>			
Name					,
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110		50/60Hz		V	110
of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out					
pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40	, 5				
min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40					
Max %Us 110		1 1	min	%Us	80
drop-out min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 40					
min %Us 20 max %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 40		drop-out			
of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 40		·	min	%Us	20
of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 40					
pick-up min %Us 85 max %Us 110 drop-out min %Us 40		of 50/60Hz coil powered at 60Hz			
min %Us 85 max %Us 110 drop-out min %Us 40					
drop-out min %Us 40		•	min	%Us	85
min %Us 40			max	%Us	110
min %Us 40		drop-out			
max %Us 55		arop car			
		anop out	min	%Us	40



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A C avarage asil as	and the state of t			
AC average coll co	nsumption at 20°C			
	of 50/60Hz coil powered at 50Hz	in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz	Holding	ν <u>Λ</u>	10
	or 30/00112 con powered at 00112	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz	Holding	٧٨	10
	or our iz con powered at our iz	in-rush	VA	210
		holding	VA	15
Dissipation at holdi	ng <20°C 50Hz	ricialing	W	5
Max cycles frequer			VV	3
Mechanical operation			cycles/h	3600
Operating times	ווכ		Cycles/11	3000
Average time for U	e control			
Average time for O	in AC			
	Closing NC	1		
	Closing NC	, min	ms	12
		max	ms	28
	Opening N		1113	20
	Opening N	o min	ms	8
		max	ms	22
	Closing NC		1113	22
	Closhing IVC	, min	ms	11
		max	ms	29
	Opening N		1110	20
	Opening 14	min	ms	6
		max	ms	14
	in DC	· · · · · · · · · · · · · · · · · · ·		· ·
	Closing NC)		
		min	ms	40
		max	ms	85
	Opening N			
	-1-3	min	ms	20
		max	ms	55
UL technical data				
	LA) for three-phase AC motor			
,	•	at 480V	Α	77
		at 600V	Α	77
Yielded mechanica	l performance	-		
	for three-phase AC motor			
	•	200/208V	HP	25
		220/230V	HP	30
		460/480V	HP	60
		575/600V	HP	75
General USE				
	Contactor			
		AC current	Α	115
Ambient conditions				
Temperature				
•	Operating temperature			
		min	°C	-50
		max	°C	70

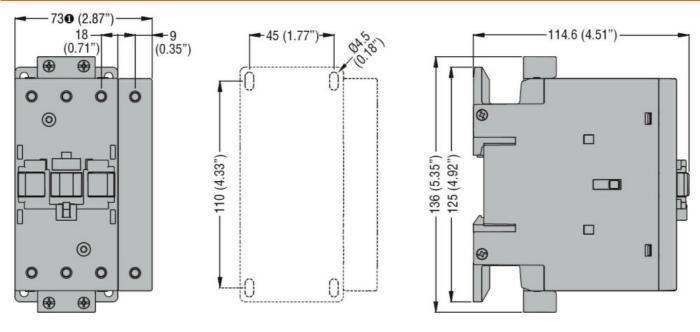


ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 110VAC, 2NO AND 2NC

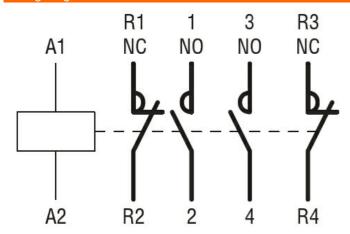
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3

Dimensions



BF80T2 82mm/3.23"

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

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification



BF80T2A110

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ETIM 8.0

EC000066 -Power contactor, AC switching