

BF80T4A230 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 230VAC



Product designation			Power contacto
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		А	115
Operational current le			
	AC-1 (≤40°C)	А	115
	AC-1 (≤55°C)	A	95
	AC-1 (≤70°C)	A	80
	AC-3 (≤440V ≤55°C)	A	80
	AC-4 (400V)	A	38
Rated operational current AC-3 (T≤55°C)			
	230V	А	80
	400V	A	80
	415V	A	80
	440V	A	80
	500V	A	78
	690V	A	57
	1000V	A	28
Rated operational power AC-1 (T≤40°C)			
	230V	kW	43
	400V	kW	76
	500V	kW	95
	690V	kW	120
IEC max current le in DC1 with L/R $\leq$ 1ms with 1 poles in series	0001		120
	≤24V	А	70
	48V	A	60
	75V	A	60
	110V	A	8
	220V	A	-
EC max current le in DC1 with L/R $\leq$ 1ms with 2 poles in series	2201	~~~~	
	≤24V	А	100
	48V	A	100
	48V 75V		
	75V 110V	A	100
		A	80
IEC may ourrant to in DC1 with L/D < 1 may with 2 nation in action	220V	A	9
EC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	-0.0.1		100
	≤24V	A	100
	48V	A	100
	75V	А	100



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	110V	А	85
	220V	А	95
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	А	100
	48V	А	100
	75V	А	100
	110V	А	100
	220V	А	115
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	А	40
	48V	А	30
	75V	А	30
	110V	А	3
	220V	А	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	А	60
	48V	А	50
	75V	А	50
	110V	А	40
	220V	А	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	А	80
	48V	А	70
	75V	А	70
	110V	A	60
	220V	A	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			-
	≤24V	А	90
	48V	A	90
	75V	A	90
	110V	A	75
	220V	А	80
Short-time allowable current for 10s (IEC/EN60947-1)		А	640
Protection fuse			
	gG (IEC)	А	125
	aM (IEC)	A	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	А	640
	500V	A	625
	690V	A	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	Ith	W	7.9
	AC-3	Ŵ	3.8
Tightening torque for terminals		••	
	min	Nm	4
	max	Nm	5
	min	Ibin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal	Παλ	10111	0.00
	min	Nm	0.8
	max	Nm	1
	Παλ	1 11 11	•

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FOUR-POLE CONTACTOR, IEC OPER 230VAC

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RATING CURRENT ITH (AC1) = 115A, AC COIL	_ 50/60HZ,
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				Λ 0
		min	lbin	0.8
		max	lbin	0.74
Max number of wires	number of wires simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor sectio	n		
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor sectio	n		
		min	mm²	1.5
		max	mm²	35
Power terminal prote	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
				Screw / DIN rail
Fixing				35mm
Weight			g	1240
Conductor section			0	
	AWG/kcmil conductor section			
		max		2
Operations				_
Mechanical life			cycles	15000000
			0,0100	10000000
Electrical life			cycles	1300000
Electrical life			cycles	1300000
Safety related data	10d according to EN/ISO 13489-1		cycles	1300000
Safety related data	10d according to EN/ISO 13489-1	rated load		
Safety related data	10d according to EN/ISO 13489-1	rated load	cycles	1300000
Safety related data Performance level B <sup>2</sup>	-	rated load mechanical load		1300000 15000000
Safety related data Performance level B <sup>2</sup> Mirror contats accord	10d according to EN/ISO 13489-1 ling to IEC/EN 609474-4-1		cycles	1300000 15000000 yes
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility	-		cycles	1300000 15000000
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating	ling to IEC/EN 609474-4-1		cycles cycles	1300000 15000000 yes yes
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz		cycles	1300000 15000000 yes
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz	mechanical load	cycles cycles	1300000 15000000 yes yes
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	mechanical load	cycles cycles	1300000 15000000 yes yes
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz	mechanical load	cycles cycles V	1300000 15000000 yes yes 230
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	mechanical load	cycles cycles V	1300000 15000000 yes yes 230 80
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	cycles cycles V	1300000 15000000 yes yes 230
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	mechanical load	cycles cycles V V %Us %Us	1300000 15000000 yes yes 230 80 110
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	cycles cycles V V %Us %Us	1300000 15000000 yes yes 230 80 110 20
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load min max min max	cycles cycles V V %Us %Us	1300000 15000000 yes yes 230 80 110
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load min max min max	cycles cycles V V %Us %Us	1300000 15000000 yes yes 230 80 110 20
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load min max min max	cycles cycles V %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load	cycles cycles V V %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55 85
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	mechanical load	cycles cycles V %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55 85 110
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55 85 110 40
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at S AC operating voltage	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55 85 110
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 9 AC operating voltage	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55 85 110 40
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ling to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55 85 110 40
Safety related data Performance level B <sup>2</sup> Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 9 AC operating voltage	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load	cycles cycles V %Us %Us %Us %Us %Us %Us %Us	1300000 15000000 yes yes 230 80 110 20 55 85 110 40

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**BF80T4A230** FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ,

230VAC

	of 50/60Hz coil power	ed at 60Hz			
			in-rush	VA	195
			holding	VA	13
	of 60Hz coil powered	at 60Hz			
	0. 00. <u>–</u> 00. pono. 00.		in-rush	VA	210
			holding	VA	15
Dissipation at holding	1 <20°C 50H7		noiding	W	5
Max cycles frequency				VV	0
					2000
Mechanical operation				cycles/h	3600
Operating times	· •				
Average time for Us					
	in AC				
		Closing NO			
			min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO	max	mo	00
		oponing ito	min	ms	20
			max	ms	55
UL technical data			IIIdA	1115	55
	A) for three-phase AC mo	tor			
	A) for three-phase AC mo	lui	-+ 4001/	^	77
			at 480V	A	77
<u> </u>			at 600V	A	77
Yielded mechanical p					
	for three-phase AC m	otor			
			200/208V	HP	25
			220/230V	HP	30
			460/480V	HP	60
			575/600V	HP	75
General USE					
	Contactor				
			AC current	А	115
Short-circuit protection	on fuse 600V				-
	High fault				
	riigiriaun		Short circuit current	kA	100
				кА А	
			Fuse rating	А	200
	0		Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	А	200
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating temperature	e			
			min	°C	-50
			max	°C	70
	Storage temperature			-	
			min	°C	-60

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



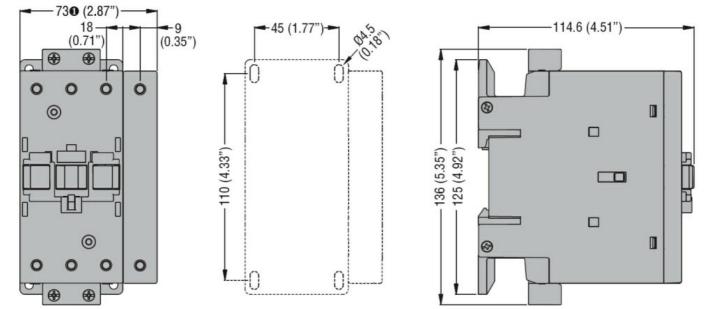
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ENERGY AND AUTOMATION

230VAC

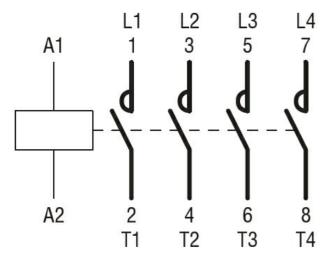
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BF80T2 82mm/3.23"

## Wiring diagrams



## Certifications and compliance

Complianc	9	
	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		
	202	
	cULus	
ETIM class	ification	
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FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 230VAC

ETIM 8.0

EC000066 -Power contactor, AC switching

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