## BF80T4A024



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 24VAC



Product designation			Power contactor
Product type designation			BF80
Contact characteristics			B1 00
Number of poles		nr.	4
		V	
Rated insulation voltage Ui		-	1000
Rated impulse withstand voltage Uimp		kV	8
Operating frequency			
	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith		Α	115
Operating current			
	Operational current AC1 (≤40°C)	А	115
	Operational current AC3 (≤440V ≤55°C)	A	80
	Operational current AC4 (400V)	A	38
Bated appretional power AC1 (T<10°C)	Operational current AC4 (400V)	~	50
Rated operational power AC1 (T≤40°C)	0001	1.3.47	40
	230V	kW	43
	400V	kW	76
	500V	kW	95
	690V	kW	120
Rated operational power AC3 (T≤55°C)			
	230V	kW	22
	400V	kW	45
	415V	kW	45
	440V	kW	45
	500V	kW	55
	690V	kW	55
	1000V	kW	37
Short-time allowable current for 10s (IEC/EN6	0947-1)	A	640
Protection fuse			
	gG (IEC)	А	125
	aM (IEC)	Α	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	Breaking capacity 440V	А	640
	Breaking capacity 500V	A	625
	Breaking capacity 690V	A	456
Resistance per pole (average value)	Broaking sapasity see v	mΩ	0.6
		11152	0.0
Power dissipation per pole (average value)			
	Power dissipation pole (average value) Ith	W	7.9
	AC3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbft	2.95
	max	lbft	3.69



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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		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	35
Power terminal proto	ction according to IEC/EN 60529	Παλ	111111	IP20 front
Auxiliary contact char				
Operational current A			A	115
Operating current DC				
Sportaining ourient DO				Screw / DIN rail
		110V	А	35mm
Ambient conditions				John
Temperature				
remperature	Operating temperature			
	Operating temperature	min	°C	-50
		min	°C	-50 70
		max	U	70
	Storage temperature	min	°C	60
		min	°C °°	-60
Maria International		max	°C	80
Max altitude			m	3000
Operating position				
		normal		Vertical plan
		allowable		±30°
Mounting				Screw / DIN rail
				35mm
Weight			g	1.24
Operations				
Mechanical life			Cycles	15000000
Electrical life			Cycles	1300000
Safety related data				
Performance level B1	0d according to EN/ISO 13489-1			
		rated load	Cicli	1300000
		mechanical load	Cicli	15000000
Mirror contats accord	ing to IEC/EN 609474-4-1			yes
EMC compatibility	~			yes
AC coil operating				•
AC operating voltage				
operating voltage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ρισκ-αρ	min	0/110	0.9
		min	%Us	0.8
		max	%Us	1.1
	drop-out			

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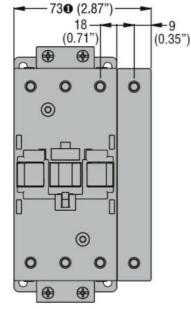
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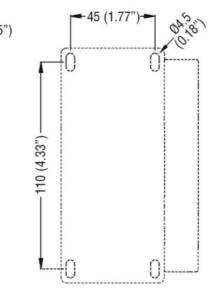
		min	%Us	0.2
		max	%Us	0.55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	0.85
		max	%Us	1.1
	drop-out			
		min	%Us	0.4
		max	%Us	0.55
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	0.8
		max	%Us	1.1
	drop-out			
		min	%Us	0.2
		max	%Us	0.55
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz			
		in-rush	VA	210
		holding	VA	15
Dissipation at holding	≤20°C 50Hz		W	5.0
N.A				
Max cycles frequency				
Mechanical operations			Cycles/ł	n 3600
Mechanical operations Operating times			Cycles/ł	ו 3600
Mechanical operations			Cycles/ł	n 3600
Mechanical operations Operating times	ontrol in AC		Cycles/ł	ו 3600
Mechanical operations Operating times	ontrol		Cycles/ł	
Mechanical operations Operating times	ontrol in AC	min	Cycles/ł	12
Mechanical operations Operating times	ontrol in AC Closing NO	max		
Mechanical operations Operating times	ontrol in AC	max )	ms ms	12 28
Mechanical operations Operating times	ontrol in AC Closing NO	max ) min	ms ms ms	12 28 8
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NO	max )	ms ms	12 28
Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC Closing NO Opening NC	max ) min	ms ms ms	12 28 8
Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC Closing NO	max ) min max	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC Closing NO Opening NC	max ) min max at 480V	ms ms ms ms	12 28 8 22 77
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NC	max ) min max	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC Closing NO Opening NC for three-phase AC motor	max ) min max at 480V	ms ms ms ms	12 28 8 22 77
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NC	max min max at 480V at 600V	ms ms ms ms A A	12 28 8 22 77 77
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NC for three-phase AC motor	max min max at 480V at 600V at 200/208V	ms ms ms A A	12 28 8 22 77 77 77 25
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NC for three-phase AC motor	max ) min max at 480V at 600V at 600V at 220/208V at 220/230V	ms ms ms Ms A A hp	12 28 8 22 77 77 77 25 30
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NC for three-phase AC motor	) max min max at 480V at 600V at 600V at 220/208V at 220/230V at 460/480V	ms ms ms A A hp hp	12 28 8 22 77 77 77 25 30 60
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical pe	ontrol in AC Closing NO Opening NC for three-phase AC motor	max ) min max at 480V at 600V at 600V at 220/208V at 220/230V	ms ms ms Ms A A hp	12 28 8 22 77 77 77 25 30
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NC for three-phase AC motor erformance for three-phase AC motor	) max min max at 480V at 600V at 600V at 220/208V at 220/230V at 460/480V	ms ms ms A A hp hp	12 28 8 22 77 77 77 25 30 60
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical pe	ontrol in AC Closing NO Opening NC for three-phase AC motor	) max min max at 480V at 600V at 600V at 220/230V at 220/230V at 460/480V at 575/600V	ms ms ms A A hp hp hp hp	12 28 8 22 77 77 77 25 30 60 75
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical per General USE	ontrol in AC Closing NO Opening NC for three-phase AC motor erformance for three-phase AC motor	) max min max at 480V at 600V at 600V at 220/208V at 220/230V at 460/480V	ms ms ms A A hp hp	12 28 8 22 77 77 77 25 30 60
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical per General USE Other features	ontrol in AC Closing NO Opening NC for three-phase AC motor erformance for three-phase AC motor	) max min max at 480V at 600V at 600V at 220/230V at 220/230V at 460/480V at 575/600V	ms ms ms A A hp hp hp hp	12 28 8 22 77 77 77 77 25 30 60 75 32
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical per General USE Other features Pollution degree	ontrol in AC Closing NO Opening NC for three-phase AC motor erformance for three-phase AC motor	) max min max at 480V at 600V at 600V at 220/230V at 220/230V at 460/480V at 575/600V	ms ms ms A A hp hp hp hp	12 28 8 22 77 77 77 25 30 60 75
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical per General USE Other features	ontrol in AC Closing NO Opening NC for three-phase AC motor erformance for three-phase AC motor	) max min max at 480V at 600V at 600V at 220/230V at 220/230V at 460/480V at 575/600V	ms ms ms A A hp hp hp hp	12 28 8 22 77 77 77 77 25 30 60 75 32

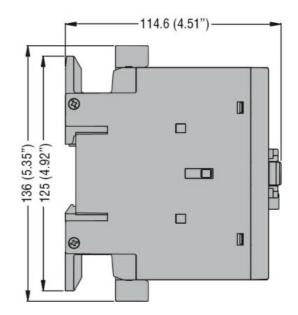
The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



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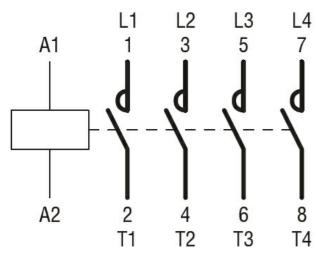






BF80T2 82mm/3.23"

## 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	
	cULus

## ETIM 6 classification

EC000066 - Power contactor, AC switching

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