BF50T4A400



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 90A, AC COIL 50/60HZ, 400VAC



Product designation			Power contactor
Product type designation			BF50
Contact characteristics			
Number of poles		nr.	4
Rated insulation voltage Ui		V	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		А	90
Operating current			
	Operational current AC1 (≤40°C)	А	90
	Operational current AC3 (≤440V ≤55°C)	А	50
	Operational current AC4 (400V)	А	28
Rated operational power AC1 (T≤40°C)			
	230V	kW	34
	400V	kW	59
	500V	kW	74
	690V	kW	102
Rated operational power AC3 (T≤55°C)			
	230V	kW	15
	400V	kW	22
	415V	kW	30
	440V	kW	30
	500V	kW	30
	690V	kW	37
	1000V	kW	22
Short-time allowable current for 10s (IEC/EN6	60947-1)	А	400
Protection fuse			
	gG (IEC)	А	100
	aM (IEC)	А	50
Making capacity (RMS value)		А	500
Breaking capacity at voltage			
	Breaking capacity 440V	А	400
	Breaking capacity 500V	А	352
	Breaking capacity 690V	А	312
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Power dissipation pole (average value) Ith	W	6.5
	AC3	W	2
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbft	2.95

lbft

max

3.69



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400VAC

Tightening torque for c	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
max number of wires s	simultaneously connectable		nr.	2
Conductor section				
	AWG			
		min		14
		max		2
	Flexible w/o lug conductor section			
	5	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	35
Power terminal protec	tion according to IEC/EN 60529	Παλ		IP20 front
Auxiliary contact chara	-			
Operational current A			А	90
Operating current DC1			Λ	50
operating current DC	10			Screw / DIN rail
		110V	А	35mm
Ambient conditions				5511111
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°
				Screw / DIN rail
Mounting				35mm
Weight			g	1.24
Operations			Ū	
Mechanical life			Cycles	15000000
Electrical life			Cycles	1400000
Safety related data			e y el ce	1100000
	0d according to EN/ISO 13489-1			
		rated load	Cicli	1400000
		mechanical load		
Mirror contate accerding		mechanicarioad	Cicli	1500000
	ng 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			

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			min	%Us	0.2
			max	%Us	0.55
	of 50/60Hz coil power				
		pick-up			
			min	%Us	0.85
			max	%Us	1.1
		drop-out	min	%Us	0.4
			min max	%Us %Us	0.4 0.55
	of 60Hz coil powered a		IIIdX	/005	0.00
		pick-up			
		ρισκ-αρ	min	%Us	0.8
			max	%Us	1.1
		drop-out	max	/003	1.1
			min	%Us	0.2
			max	%Us	0.55
AC operating voltage					
,	of 50/60Hz coil power	ed at 50Hz			
			in-rush	VA	210
			holding	VA	15
	of 50/60Hz coil power	ed at 60Hz	Ŭ		
			in-rush	VA	195
			holding	VA	13
	of 60Hz coil powered a	at 60Hz			
			in-rush	VA	210
			holding	VA	15
Dissipation at holding	<20°C 50Hz			14/	5.0
	=20 0 001 12			W	5.0
Max cycles frequency					
Max cycles frequency Mechanical operations				vv Cycles/ł	
Max cycles frequency Mechanical operations Operating times	;				
Max cycles frequency Mechanical operations	ontrol				
Max cycles frequency Mechanical operations Operating times	;				
Max cycles frequency Mechanical operations Operating times	ontrol	Closing NO	min	Cycles/ł	n 3600
Max cycles frequency Mechanical operations Operating times	ontrol	Closing NO	min	Cycles/h ms	12
Max cycles frequency Mechanical operations Operating times	ontrol	-	min max	Cycles/ł	n 3600
Max cycles frequency Mechanical operations Operating times	ontrol	Closing NO Opening NO	max	Cycles/h ms ms	12 28
Max cycles frequency Mechanical operations Operating times	ontrol	-	max	Cycles/h ms	12 28 8
Max cycles frequency Mechanical operations Operating times Average time for Us co	ontrol	-	max	Cycles/h ms ms ms	12 28
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data	ontrol	Opening NO	max	Cycles/h ms ms ms	12 28 8
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC	Opening NO	max	Cycles/h ms ms ms	12 28 8
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC	Opening NO	max min max	Cycles/h ms ms ms ms	12 28 8 22
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC) for three-phase AC mo	Opening NO	max min max at 480V	Cycles/h ms ms ms ms	12 28 8 22 52
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mo	Opening NO	max min max at 480V	Cycles/h ms ms ms ms	12 28 8 22 52
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mor	Opening NO	max min max at 480V	Cycles/h ms ms ms ms	12 28 8 22 52
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mor erformance for single-phase AC m	Opening NO tor	max min max at 480V at 600V	Cycles/r ms ms ms ms A A	12 28 8 22 52 41
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mor	Opening NO tor	max min max at 480V at 480V at 600V at 110/120V at 230V	Cycles/h ms ms ms ms A A A hp	12 28 8 22 52 41 5 10
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mor erformance for single-phase AC m	Opening NO tor	max min max at 480V at 480V at 600V at 110/120V at 230V at 200/208V	Cycles/h ms ms ms ms A A A hp hp	12 28 8 22 52 41 5 10 15
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mor erformance for single-phase AC m	Opening NO tor	max min max at 480V at 600V at 600V at 110/120V at 230V at 200/208V at 220/230V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 52 41 5 10 15 20
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mor erformance for single-phase AC m	Opening NO tor	max min max at 480V at 600V at 600V at 200V at 230V at 220/230V at 220/230V at 460/480V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 52 41 5 10 15 20 40
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical pe	ontrol in AC) for three-phase AC mor erformance for single-phase AC m	Opening NO tor	max min max at 480V at 600V at 600V at 110/120V at 230V at 200/208V at 220/230V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 52 41 5 10 15 20
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC) for three-phase AC mo erformance for single-phase AC m for three-phase AC m	Opening NO tor	max min max at 480V at 600V at 600V at 200V at 230V at 220/230V at 220/230V at 460/480V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 52 41 5 10 15 20 40
Max cycles frequency Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA) Yielded mechanical pe	ontrol in AC) for three-phase AC mor erformance for single-phase AC m	Opening NO tor	max min max at 480V at 600V at 600V at 200V at 230V at 220/230V at 220/230V at 460/480V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 52 41 5 10 15 20 40

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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



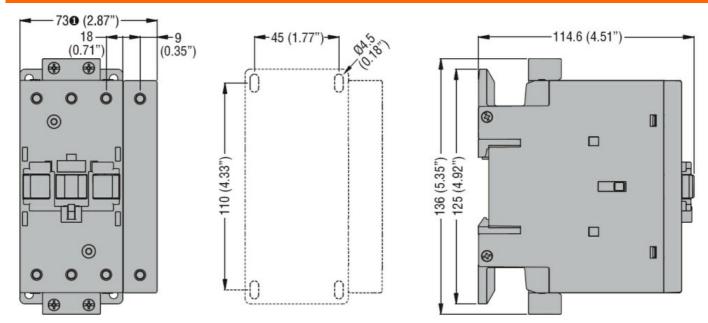
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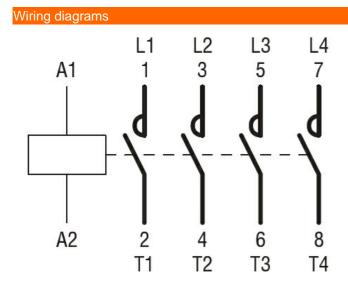
ENERGY AND AUTOMATION

Other features

Pollution degree Dimensions



• BF80T2 82mm/3.23"



Certifications and compliance

Certifications

CSA	C

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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