## BF50T4A024



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 90A, AC COIL 50/60HZ, 24VAC



		P
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 mi		25
Operational frequency ma	x Hz	400
Conventional free air thermal current Ith	А	90
Operating current		
Operational current AC1 (≤40°C	C) A	90
Operational current AC3 (≤440V ≤55°C	C) A	50
Operational current AC4 (400)	/) A	28
Rated operational power AC1 (T≤40°C)		
230	V kW	34
400	V kW	59
500		74
690		102
Rated operational power AC3 (T≤55°C)		
230	V kW	15
400		22
415		30
440		30
500		30
690		37
1000		22
Short-time allowable current for 10s (IEC/EN60947-1)	A KW	400
Protection fuse	~	400
gG (IEC	C) A	100
aM (IEC		50
	C) A A	
Making capacity (RMS value)	A	500
Breaking capacity at voltage		400
Breaking capacity 440		400
Breaking capacity 500		352
Breaking capacity 690		312
Resistance per pole (average value)	mΩ	0.8
Power dissipation per pole (average value)		
Power dissipation pole (average value) It		6.5
AC	3 W	2
Tightening torque for terminals		
mi	n Nm	4
ma		5
	x Nm	



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Tightening torque for	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
	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
-	ction according to IEC/EN 60529			IP20 front
Auxiliary contact chara				
Operational current A			А	90
Operating current DC	13			
		110V	А	Screw / DIN rai 35mm
Ambient conditions				
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°
Mounting				Screw / DIN rai
Mounting				35mm
Weight			g	1.24
Operations				
Mechanical life			Cycles	15000000
Electrical life			Cycles	1400000
Safety related data			-	
	0d according to EN/ISO 13489-1			
	~	rated load	Cicli	1400000
		mechanical load	Cicli	15000000
Mirror contats accordi	ing to IEC/EN 609474-4-1			yes
EMC compatibility				yes
AC coil operating				,
AC operating voltage				
no operating voltage	of E0/60Hz and noward at E0Hz			
	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	
			IIIdA	/005	0.55	
	of 50/60Hz coil powere					
		pick-up				
			min	%Us	0.85	
			max	%Us	1.1	
		drop-out				
			min	%Us	0.4	
			max	%Us	0.55	
	of 60Hz coil powered a	t 60Hz				
		pick-up				
			min	%Us	0.8	
			max	%Us	1.1	
			IIIdA	/005	1.1	
		drop-out				
			min	%Us	0.2	
			max	%Us	0.55	
AC operating voltage						
i e eperanig renage	of 50/60Hz coil powere	d at 50Hz				
			tan an et	1/4	040	
			in-rush	VA	210	
			holding	VA	15	
	of 50/60Hz coil powere	d at 60Hz				
			in-rush	VA	195	
			holding	VA	13	
		+ 0011-	Tiolaing	٧A	10	
	of 60Hz coil powered a	t 60HZ				
			in-rush	VA	210	
			holding	VA	15	
Dissipation at holding :	≤20°C 50Hz			W	5.0	
Max cycles frequency						
Max cycles frequency				Cycles/	2 3600	
Mechanical operations				Cycles/I	n 3600	
Mechanical operations Operating times				Cycles/I	n 3600	
Mechanical operations	ontrol			Cycles/I	n 3600	
Mechanical operations Operating times				Cycles/I	n 3600	
Mechanical operations Operating times	ontrol	Closina NO		Cycles/I	n 3600	
Mechanical operations Operating times	ontrol	Closing NO	min			
Mechanical operations Operating times	ontrol	Closing NO	min	ms	12	
Mechanical operations Operating times	ontrol	-	min max			
Mechanical operations Operating times	ontrol	Closing NO Opening NO	max	ms	12 28	
Mechanical operations Operating times	ontrol	-		ms	12 28 8	
Mechanical operations Operating times	ontrol	-	max	ms ms	12 28	
Mechanical operations Operating times Average time for Us co	ontrol	-	max	ms ms ms	12 28 8	
Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC	Opening NO	max	ms ms ms	12 28 8	
Mechanical operations Operating times Average time for Us co UL technical data	ontrol	Opening 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	Opening NO	max min max at 480V	ms ms ms ms	12 28 8 22 52	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto	Opening 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 for three-phase AC moto	Opening NO	max min max at 480V	ms ms ms ms	12 28 8 22 52	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto	Opening NO	max min max at 480V	ms ms ms ms	12 28 8 22 52	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto	Opening NO	max min max at 480V at 600V	ms ms ms ms A A	12 28 8 22 52 41	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto	Opening NO	max min max at 480V at 600V at 110/120V	ms ms ms Ms A A	12 28 8 22 52 41	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto erformance for single-phase AC mo	Opening NO	max min max at 480V at 600V	ms ms ms ms A A	12 28 8 22 52 41	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto	Opening NO	max min max at 480V at 480V at 600V at 110/120V at 230V	ms ms ms ms A A A	12 28 8 22 52 41 5 10	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto erformance for single-phase AC mo	Opening NO	max min max at 480V at 480V at 600V at 600V at 230V at 230V	ms ms ms ms A A A hp hp	12 28 8 22 52 41 5 10 15	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto erformance for single-phase AC mo	Opening NO	max min max at 480V at 480V at 600V at 110/120V at 230V	ms ms ms ms A A A	12 28 8 22 52 41 5 10	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto erformance for single-phase AC mo	Opening NO	max min max at 480V at 480V at 600V at 600V at 230V at 230V	ms ms ms ms A A A hp hp	12 28 8 22 52 41 5 10 15	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto erformance for single-phase AC mo	Opening NO	max min max at 480V at 480V at 600V at 600V at 230V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms Ms A A hp hp hp	12 28 8 22 52 41 5 10 15 20 40	
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 moto erformance for single-phase AC mo	Opening NO	max min max at 480V at 600V at 600V at 200/208V at 220/208V at 220/230V	ms ms ms Ms A A hp hp hp	12 28 8 22 52 41 5 10 15 20	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC for three-phase AC moto erformance for single-phase AC mo for three-phase AC mo	Opening NO	max min max at 480V at 480V at 600V at 600V at 230V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms Ms A A hp hp hp	12 28 8 22 52 41 5 10 15 20 40	
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 moto erformance for single-phase AC mo	Opening NO	max min max at 480V at 480V at 600V at 600V at 200/208V at 220/230V at 220/230V at 460/480V at 575/600V	ms ms ms ms A A hp hp hp hp hp	12 28 8 22 52 41 5 10 15 20 40 40	
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 moto erformance for single-phase AC mo for three-phase AC mo	Opening NO	max min max at 480V at 480V at 600V at 600V at 230V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms Ms 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

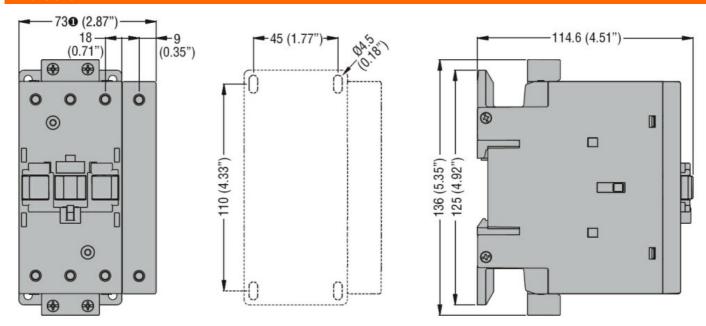


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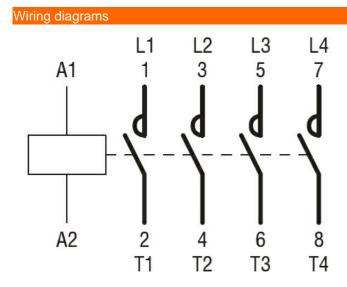
ENERGY AND AUTOMATION

## Other features

## Pollution degree Dimensions



BF80T2 82mm/3.23"



## Certifications and compliance

Certifications	
	CSA 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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