# BF4000A024



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 50/60HZ, 24VAC



Product designation			Power contactor
Product type designation			BF40
Contact characteristics			21.10
Number of poles		nr.	3
Rated insulation voltage Ui		V	1000
		kV	8
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	70
Operating current			
	Operational current AC1 (≤40°C)	А	70
	Operational current AC3 (≤440V ≤55°C)	А	40
	Operational current AC4 (400V)	А	24
Rated operational power AC1 (T≤40°C)			
	230V	kW	26
	400V	kW	46
	400V 500V	kW	58
	690V	kW	79
Rated operational power AC3A (T≤55°C)			
	Rated operational power AC3 (T≤55°C) 230		11
	Rated operational power AC3 (T≤55°C) 400		18.5
	Rated operational power AC3 (T≤55°C) 415		22
	Rated operational power AC3 (T≤55°C) 440		22
	Rated operational power AC3 (T≤55°C) 500	)V kW	22
	Rated operational power AC3 (T≤55°C) 690	)V kW	30
	Rated operational power AC3 (T≤55°C) 100	00VkW	18.5
Short-time allowable current for 10s (IEC/EN6		А	400
Protection fuse			
	gG (IEC)	А	100
	aM (IEC)	A	50
Making capacity (RMS value)		A	400
		A	400
Breaking capacity at voltage		_	
	Breaking capacity 440V	Α	320
	Breaking capacity 500V	А	265
	Breaking capacity 690V	A	256
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	Power dissipation pole (average value) Ith	W	3.9
	AC3	W	1.3
Tightening torque for terminals			
5 ······6 ··· 1·· ··· ···	min	Nm	4
	max	Nm	5
	min	lbft	2.95

lbft

max

3.69



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Tightening torque for c	oil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
	imultaneously connectable		nr.	2
Conductor section				
	AWG			
		min		14
		max		2
	Flexible w/o lug conductor section			4 5
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section		2	
		min	mm²	1.5
<b></b>		max	mm²	35
	tion according to IEC/EN 60529			IP20 front
Auxiliary contact chara			Δ	70
Operational current AC			Α	70
Operating current DC1	3			0
		110V	А	Screw / DIN rail
Ambiant conditions				35mm
Ambient conditions				
Temperature	Operating temperature			
	Operating temperature		° <b>^</b>	50
		min	°C °C	-50
		max	°C	70
	Storage temperature		° <b>^</b>	<u>60</u>
		min	°C °C	-60
		max	°C	80
Max altitude			m	3000
Operating position				
		normal		Vertical plan
		allowable		±30°
Mounting				Screw / DIN rail
			~	35mm
Weight			g	1.02
Operations Mechanical life			Cycles	1500000
			Cycles	1500000
Electrical life			Cycles	1500000
Safety related data	$\mathbf{D}$			
Fenomance level B10	0d according to EN/ISO 13489-1	احمامه	Ciali	150000
		rated load	Cicli	1500000
		mechanical load	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 powere	ed at 60Hz				
		pick-up				
		L	min	%Us	0.85	
			max	%Us	1.1	
		drop-out	Пах	/000		
			min	%Us	0.4	
			max	%Us	0.55	
			Шал	/003	0.00	
	of 60Hz coil powered a					
		pick-up		0/11		
			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 powere	ed at 50Hz				
			in-rush	VA	210	
			holding	VA	15	
	of 50/60Hz coil powere	ed at 60Hz	-			
	· ·		in-rush	VA	195	
			holding	VA	13	
	of 60Hz coil powered a	at 60Hz				
			in-rush	VA	210	
			holding	VA	15	
Dissipation at holding			noiding	W	5.0	
Dissipation at noiuling				~ ~ ~	5.0	
Max avalas fraguesav						
Max cycles frequency						
Mechanical operations				Cycles/h		
Mechanical operations Operating times	:					
Mechanical operations	ontrol					
Mechanical operations Operating times	:					
Mechanical operations Operating times	ontrol	Closing NO		Cycles/h	3600	
Mechanical operations Operating times	ontrol	Closing NO	min		12	
Mechanical operations Operating times	ontrol	-	min max	Cycles/h	3600	
Mechanical operations Operating times	ontrol	Closing NO Opening NO	max	Cycles/h ms	3600 12 28	
Mechanical operations Operating times	ontrol	-		Cycles/h ms	12 28 8	
Mechanical operations Operating times Average time for Us co	ontrol	-	max	Cycles/h ms ms	3600 12 28	
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	
Mechanical operations Operating times Average time for Us co UL technical data	ontrol	Opening NO	max	Cycles/h ms ms ms	12 28 8	
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	
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	
Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC ) for three-phase AC mot	Opening NO	max min max at 480V	Cycles/h ms ms ms ms	12 28 8 22 40	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC ) for three-phase AC mot erformance	Opening NO or	max min max at 480V	Cycles/h ms ms ms ms	12 28 8 22 40	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC ) for three-phase AC mot	Opening NO or	max min max at 480V	Cycles/h ms ms ms ms A A	12 28 8 22 40 32	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC ) for three-phase AC mot erformance	Opening NO or	max min max at 480V at 600V	Cycles/h ms ms ms A A A	12 28 8 22 40	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC ) for three-phase AC mot erformance for single-phase AC m	Opening NO or otor	max min max at 480V at 600V at 110/120V	Cycles/h ms ms ms ms A A	12 28 8 22 40 32	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC ) for three-phase AC mot erformance	Opening NO or otor	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 40 32 3 7.5	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC ) for three-phase AC mot erformance for single-phase AC m	Opening NO or otor	max min max at 480V at 480V at 600V at 600V at 200/208V	Cycles/h ms ms ms ms A A A hp hp	12 28 8 22 40 32 3 7.5 10	
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC ) for three-phase AC mot erformance for single-phase AC m	Opening NO or otor	max min max at 480V at 600V at 600V at 200/208V at 220/208V at 220/230V	Cycles/h ms ms ms Ms A A A hp hp	12 28 8 22 40 32 3 7.5 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 mot erformance for single-phase AC m	Opening NO or otor	max min max at 480V at 480V at 600V at 600V at 230V at 220/208V at 220/230V at 460/480V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 40 32 3 7.5 10 15 30	
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 mot erformance for single-phase AC m	Opening NO or otor	max min max at 480V at 600V at 600V at 200/208V at 220/208V at 220/230V	Cycles/h ms ms ms Ms A A A hp hp	12 28 8 22 40 32 3 7.5 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 mot erformance for single-phase AC m for three-phase AC m	Opening NO or otor	max min max at 480V at 480V at 600V at 600V at 230V at 220/208V at 220/230V at 460/480V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 40 32 3 7.5 10 15 30	
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 mot erformance for single-phase AC m	Opening NO or otor	max min max at 480V at 480V at 600V at 600V at 230V at 220/230V at 220/230V at 460/480V at 575/600V	Cycles/h ms ms ms ms A A A hp hp hp hp hp	12 28 8 22 40 32 3 7.5 10 15 30 30	
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 mot erformance for single-phase AC m for three-phase AC m	Opening NO or otor	max min max at 480V at 480V at 600V at 600V at 230V at 220/208V at 220/230V at 460/480V	Cycles/h ms ms ms ms A A A hp hp hp	12 28 8 22 40 32 3 7.5 10 15 30	

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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

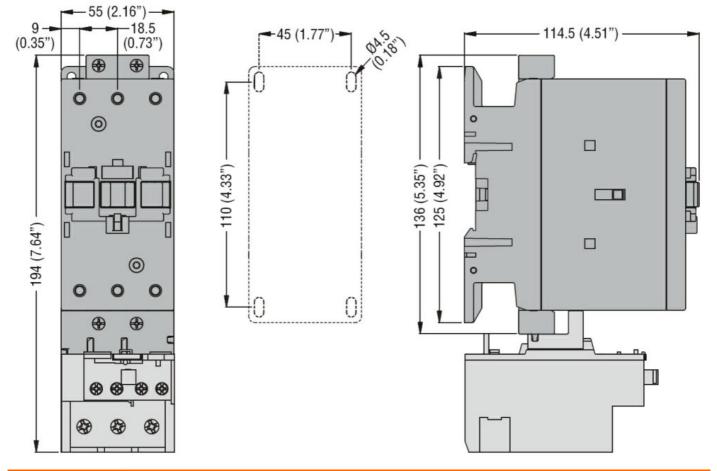


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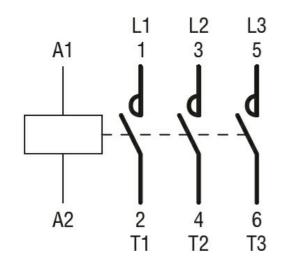
ENERGY AND AUTOMATION

# Other features

## Pollution degree Dimensions



# Wiring diagrams



#### Certifications and compliance

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	

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Certifications

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## **BF4000A024** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 50/60HZ, 24VAC

	UL 60947-4-1
Compliance	
	CCC
	cULus
ETIM 6 classification	

EC000066 - Power contactor, AC switching