

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 40A, AC COIL 50/60HZ, 400VAC



Product designation			Power contactor
Product type designation			BF40
Contact characteristics			
Number of poles		nr.	3
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		Α	70
Operating current			
	Operational current AC1 (≤40°C)	Α	70
	Operational current AC3 (≤440V ≤55°C)	Α	40
	Operational current AC4 (400V)	Α	24
Rated operational power AC1 (T≤40°C)			
	230V	kW	26
	400V	kW	46
	500V	kW	58
	690V	kW	79
Rated operational power AC3 (T≤55°C)			
	230V	kW	11
	400V	kW	18.5
	415V	kW	22
	440V	kW	22
	500V	kW	22
	690V	kW	30
	1000V	kW	18.5
Short-time allowable current for 10s (IEC/EN	60947-1)	Α	400
Protection fuse			
	gG (IEC)	Α	100
	aM (IEC)	Α	50
Making capacity (RMS value)		Α	400
Breaking capacity at voltage			
<u>.</u>	Breaking capacity 440V	Α	320
	Breaking capacity 500V	Α	265
	Breaking capacity 690V	Α	256
Resistance per pole (average value)	<u> </u>	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		<u> </u>	-
2	min	Nm	4
	max	Nm	5
	min	lbft	2.95
	max	lbft	3.69
	IIIdA	1011	0.00



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Tightening torque for c	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	8.0
		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			_
	Tioxibio W/o lag conadctor coction	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	Παλ	111111	
	r lexible c/w rug corrudctor section	min	mm²	1.5
Dance to make all a sets at	tion according to IEO/EN COSOO	max	mm²	35
	tion according to IEC/EN 60529			IP20 front
Auxiliary contact chara			Λ	70
Operational current AC	• • •		Α	70
Operating current DC1	3			0 /5
		110V	Α	Screw / DIN rail
A colling to the				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°
				Screw / DIN rail
Mounting				35mm
Weight			g	1.02
Operations			9	
Mechanical life			Cycles	15000000
Electrical life			Cycles	1500000
Safety related data			Cycles	1300000
· · · · · · · · · · · · · · · · · · ·	Od according to FN/ISO 12490 1			
renormance level B10	0d according to EN/ISO 13489-1	ا د دا اد حدد	0:-!:	4500000
		rated load	Cicli	1500000
	. IEO/EN 000 /= / /	mechanical load	Cicli	15000000
	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	max		· · ·
	arop out			





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		min	%Us	0.2
		max	%Us	0.55
	of 50/60Hz coil powered at 60Hz		,,,,,	
	pick-up			
	ριοιν αρ	min	%Us	0.85
		max	%Us	1.1
	drop-out	IIIdx	7003	1.1
	drop-out	min	%Us	0.4
			%Us	0.55
	. (0011	max	%08	0.55
	of 60Hz coil powered at 60Hz			
	pick-up		0/11	0.0
		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	<u>_</u>		
	0. 00,001.2 00 po0.0 a 002	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz	Holding	٧, ١	
	of doll 12 coll powered at doll 12	in-rush	VA	210
Dissipation at halding	<00°O 5011-	holding	VA	15
Dissipation at holding	≤20°C 50HZ		W	5.0
A A A A A A A A A A A A A A A A A A A				
Max cycles frequency			0 1 "	2222
Mechanical operations			Cycles/h	3600
Mechanical operations Operating times			Cycles/h	3600
Mechanical operations	ontrol		Cycles/h	3600
Mechanical operations Operating times	ontrol in AC		Cycles/h	3600
Mechanical operations Operating times	ontrol		Cycles/h	3600
Mechanical operations Operating times	ontrol in AC	min	Cycles/h	12
Mechanical operations Operating times	ontrol in AC			
Mechanical operations Operating times	ontrol in AC	min	ms	12
Mechanical operations Operating times	ontrol in AC Closing NO	min	ms	12
Mechanical operations Operating times	ontrol in AC Closing NO	min max	ms ms	12 28
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NO	min max min	ms ms	12 28 8
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NO Opening NO	min max min	ms ms	12 28 8
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NO	min max min max	ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NO Opening NO	min max min max at 480V	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of three-phase AC motor	min max min max	ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us co	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance	min max min max at 480V	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of three-phase AC motor	min max min max at 480V at 600V	ms ms ms ms	12 28 8 22 40 32
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance	min max min max at 480V at 600V	ms ms ms A A	12 28 8 22 40 32
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V	ms ms ms ms	12 28 8 22 40 32
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance	min max min max at 480V at 600V at 110/120V at 230V	ms ms ms A A	12 28 8 22 40 32 3 7.5
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 200/208V	ms ms ms ms	12 28 8 22 40 32 3 7.5
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 200/208V at 220/230V	ms ms ms A A	12 28 8 22 40 32 3 7.5
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms ms	12 28 8 22 40 32 3 7.5
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 200/208V at 220/230V	ms ms ms A A	12 28 8 22 40 32 3 7.5
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 40 32 3 7.5
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA) Yielded mechanical pe	Closing NO Opening NO Opening NO Of three-phase AC motor erformance for single-phase AC motor for three-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 40 32 3 7.5
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA) Yielded mechanical pe	ontrol in AC Closing NO Opening NO of for three-phase AC motor erformance for single-phase AC motor	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 40 32 3 7.5

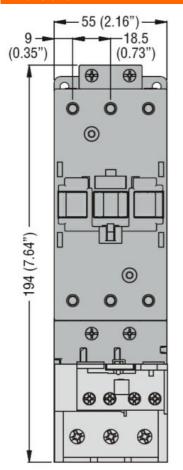
ENERGY AND AUTOMATION

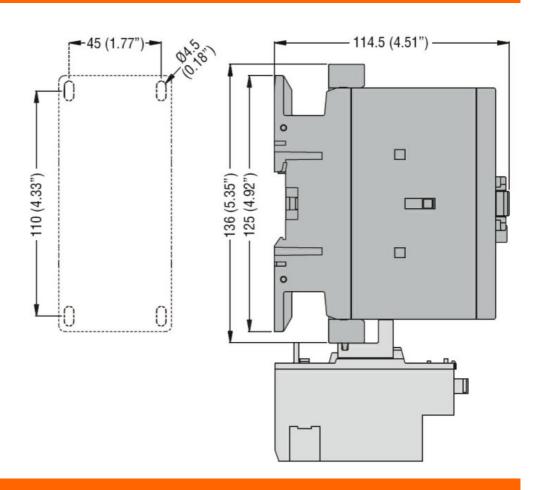
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Other features

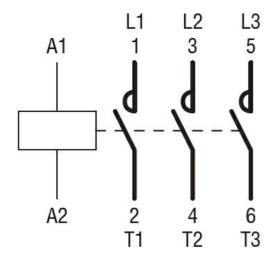
Pollution degree 3

Dimensions





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



BF4000A400

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UL 60947-4-1

Compliance

cULus

ETIM 6 classification

ENERGY AND AUTOMATION

EC000066 - Power contactor, AC switching