THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 50A, AC COIL 50/60HZ, 110VAC



Product designation			Power contacto
Product type designation			BF50
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operating frequency			
eporaming modulome)	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith	Operational mequency max	A	90
Operating current		- , ,	
operating current	Operational current AC1 (≤40°C)	Α	90
	Operational current AC3 (≤440V ≤55°C)	Α	50
	Operational current AC4 (400V)	Α	28
Rated operational power AC1 (T≤40°C)	operational current (1001)	,,	
	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		Α	400
Protection fuse	,		
	gG (IEC)	Α	100
	aM (IEC)	Α	50
Making capacity (RMS value)		Α	500
Breaking capacity at voltage			
	Breaking capacity 440V	Α	400
	Breaking capacity 500V	Α	352
	Breaking capacity 690V	Α	312
Resistance per pole (average value)	<u> </u>	mΩ	0.8
Power dissipation per pole (average value)			
Power dissipation per pole (average value)	Power dissipation pole (average value) Ith	W	6.5
Power dissipation per pole (average value)	Power dissipation pole (average value) Ith AC3	W W	6.5 2
	AC3	W	2
Fower dissipation per pole (average value) Fightening torque for terminals	AC3	W Nm	4

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Tightening torque for co	oil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	8.0
		max	lbft	0.74
max number of wires s	imultaneously connectable		nr.	2
Conductor section				
	AWG			
		min		14
		max		2
	Flexible w/o lug conductor section			
	3 11 13	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	Tioxible 6, wing conductor coolien	min	mm²	1.5
		max	mm²	35
Power terminal protect	ion according to IEC/EN 60529	IIIdx	111111	IP20 front
Auxiliary contact chara	-			11 20 110111
Operational current AC			А	90
Operational current AC			^	JU
Operating current DC1	3			Canana / DIM nail
		110V	Α	Screw / DIN rail
A mala i a materia di di a ma				35mm
Ambient conditions				
Temperature				
	Operating temperature		0.0	
		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 rail
Mounting				35mm
Weight			g	1.02
Operations				
Mechanical life			Cycles	15000000
Electrical life			Cycles	1400000
Safety related data			·	
	od according to EN/ISO 13489-1			
	3	rated load	Cicli	1400000
		mechanical load	Cicli	15000000
Mirror contats according	ng to IEC/EN 609474-4-1	moonamou iouu	0.000	yes
EMC compatibility	.g .a .E 0/E11 000777 7 1			yes
AC coil operating				y 0.3
AC operating voltage	-t 50/0011			
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/1/	
		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 powered a	t 60Hz		,,,,,	0.00
	·	ck-up			
	pii	ck-up		0/11-	0.05
			min	%Us	0.85
			max	%Us	1.1
	dr	op-out			
			min	%Us	0.4
			max	%Us	0.55
	of 60Hz coil powered at 60)Hz			
		ck-up			
	Pi	on up	min	%Us	0.8
			max	%Us	1.1
	dr	op-out			
			min	%Us	0.2
			max	%Us	0.55
AC operating voltage					
. 5	of 50/60Hz coil powered a	t 50Hz			
	1. 20, 20. 12 co porrorou u	J 	in-rush	VA	210
				VA	15
	-t	+ COLL-	holding	VA	Iΰ
	of 50/60Hz coil powered a	it 60Hz			
			in-rush	VA	195
			holding	VA	13
	of 60Hz coil powered at 60	OHz			
	·		in-rush	VA	210
			holding	VA	15
Dissipation at holding	<20°C 50H - 7		norung	W	5.0
				V V	5.0
Max cycles frequency					
Maalaadaalaalaaaaaattaaa	_			O I /I-	0000
Mechanical operations	3			Cycles/h	3600
Operating times				Cycles/h	3600
Operating times	ontrol			Cycles/h	3600
Operating times				Cycles/h	3600
Operating times	ontrol in AC	losing NO		Cycles/h	3600
Operating times	ontrol in AC	losing NO			
Operating times	ontrol in AC	losing NO	min	ms	12
Operating times	ontrol in AC Cl	-			
Operating times	ontrol in AC Cl	losing NO pening NO	min max	ms ms	12 28
Operating times	ontrol in AC Cl	-	min max min	ms ms	12 28 8
Operating times Average time for Us or	ontrol in AC Cl	-	min max	ms ms	12 28
Operating times Average time for Us of	ontrol in AC CI O	-	min max min	ms ms	12 28 8
Operating times Average time for Us of	ontrol in AC Cl	-	min max min	ms ms	12 28 8
Operating times Average time for Us of	ontrol in AC CI O	-	min max min	ms ms	12 28 8
Operating times Average time for Us of	ontrol in AC CI O	-	min max min max	ms ms ms	12 28 8 22
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Op	-	min max min max at 480V	ms ms ms ms	12 28 8 22
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Oi of three-phase AC motor erformance	pening NO	min max min max at 480V	ms ms ms ms	12 28 8 22
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Op	pening NO	min max min max at 480V at 600V	ms ms ms ms	12 28 8 22 52 41
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Oi of three-phase AC motor erformance	pening NO	min max min max at 480V at 600V	ms ms ms A A	12 28 8 22 52 41
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Oi of three-phase AC motor erformance for single-phase AC motor	pening NO	min max min max at 480V at 600V	ms ms ms ms	12 28 8 22 52 41
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Oi of three-phase AC motor erformance	pening NO	min max min max at 480V at 600V	ms ms ms A A	12 28 8 22 52 41
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Oi of three-phase AC motor erformance for single-phase AC motor	pening NO	min max min max at 480V at 600V	ms ms ms A A	12 28 8 22 52 41
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Oi of three-phase AC motor erformance for single-phase AC motor	pening NO	min max min max at 480V at 600V at 110/120V at 230V at 200/208V	ms ms ms ms	12 28 8 22 52 41 5 10
Operating times Average time for Us of	ontrol in AC CI Oi of three-phase AC motor erformance for single-phase AC motor	pening NO	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 52 41 5 10
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Oi of three-phase AC motor erformance for single-phase AC motor	pening NO	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 52 41 5 10 15 20 40
Deperating times Average time for Us of JL technical data Full-load current (FLA) /ielded mechanical pe	ontrol in AC CI Oi of three-phase AC motor erformance for single-phase AC motor	pening NO	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 52 41 5 10
Operating times Average time for Us of JL technical data Full-load current (FLA)	ontrol in AC CI Op of three-phase AC motor erformance for single-phase AC motor for three-phase AC motor	pening NO	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 52 41 5 10 15 20 40
Deperating times Average time for Us of JL technical data Full-load current (FLA) /ielded mechanical pe	ontrol in AC CI Oi of three-phase AC motor erformance for single-phase AC motor	pening NO	min max min max at 480V at 600V at 110/120V at 230V at 220/230V at 220/230V at 460/480V at 575/600V	ms ms ms A A	12 28 8 22 52 41 5 10 15 20 40 40
Departing times Average time for Us of JL technical data Full-load current (FLA) /ielded mechanical pe	ontrol in AC CI Op of three-phase AC motor erformance for single-phase AC motor for three-phase AC motor	pening NO	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 52 41 5 10 15 20 40

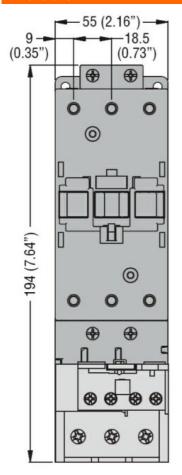
ENERGY AND AUTOMATION

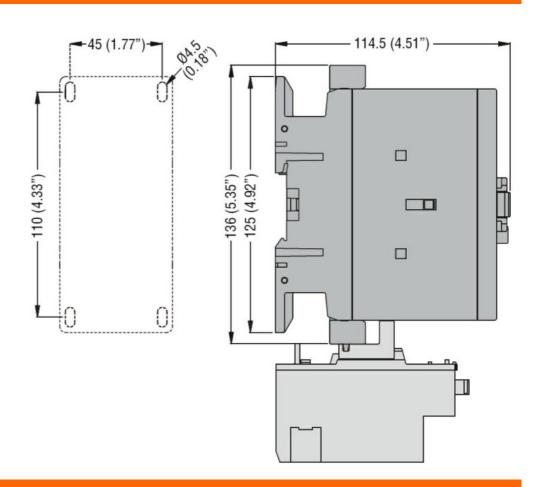
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Other features

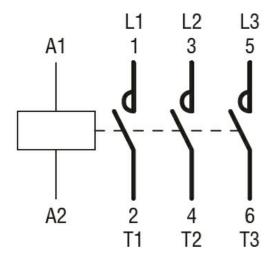
Pollution degree 3

Dimensions





Wiring diagrams



Certifications and compliance

Certifications

BF5000A110

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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UL 60947-4-1

Compliance

cULus

ETIM 6 classification

EC000066 - Power contactor, AC switching