## BF50T4A230



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 90A, AC COIL 50/60HZ, 230VAC



Product designation Power contactor Product type designation **BF50** Contact characteristics 4 Number of poles nr. 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 90 А 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/EN60947-1) А 400 Protection fuse gG (IEC) А 100 50 aM (IEC) А Making capacity (RMS value) 500 А Breaking capacity at voltage А 400 Breaking capacity 440V Breaking capacity 500V А 352 Breaking capacity 690V А 312 Resistance per pole (average value) mΩ 0.8 Power dissipation per pole (average value) W 6.5 Power dissipation pole (average value) Ith W AC3 2 Tightening torque for terminals

BF50T4A230

4

5

2.95 3.69

Nm Nm

lbft

lbft

min

max min

max



BF50T4A230 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 90A, AC COIL 50/60HZ, 230VAC

Tightening torque for coil terminal Nm 0.8 min max Nm 1 min lbft 0.8 0.74 lbft max max number of wires simultaneously connectable 2 nr. Conductor section AWG 14 min 2 max Flexible w/o lug conductor section min mm<sup>2</sup> 1.5 mm² 35 max Flexible c/w lug conductor section mm<sup>2</sup> 1.5 min mm<sup>2</sup> 35 max Power terminal protection according to IEC/EN 60529 IP20 front Auxiliary contact characteristics Operational current AC1 (≤40°C) А 90 **Operating current DC13** Screw / DIN rail 110V А 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 rail
			35mm
Weight		g	1.24
Operations			
Mechanical life		Cycles	15000000
Electrical life		Cycles	1400000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load	Cicli	1400000
	mechanical load	Cicli	15000000
Mirror contats according to IEC/EN 609474-4-1			yes
EMC compatibility			yes

AC coil operating AC operating voltage

operating venage

of 50/60Hz coil powered at 50Hz

pick-up

min %Us 0.8 max %Us 1.1

drop-out

BF50T4A230



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 90A, AC COIL 50/60HZ, 230VAC

			min	%Us	0.2	
			max	%Us	0.55	
	of 50/60Hz coil powere	d at 60Hz	Пах	/000	0.00	
	or solouriz coil powere					
		pick-up		0/11-	0.05	
			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				
		plott up	min	%Us	0.8	
				%Us	1.1	
			max	%05	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		noiding	V/ (	10	
			in much	\ /A	405	
			in-rush	VA	195	
			holding	VA	13	
	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					3600	
Mechanical operations				Cycles/I	n 3600	
Mechanical operations Operating times					n 3600	
Mechanical operations	ontrol				n 3600	
Mechanical operations Operating times					n 3600	
Mechanical operations Operating times	ontrol	Closing NO			n 3600	
Mechanical operations Operating times	ontrol	Closing NO	min		n 3600 12	
Mechanical operations Operating times	ontrol	Closing NO	min max	Cycles/I		
Mechanical operations Operating times	ontrol	-		Cycles/I	12	
Mechanical operations Operating times	ontrol	Closing NO Opening NO	max	Cycles/I ms ms	12 28	
Mechanical operations Operating times	ontrol	-	max	Cycles/I ms ms ms	12 28 8	
Mechanical operations Operating times Average time for Us co	ontrol	-	max	Cycles/I ms ms	12 28	
Mechanical operations Operating times Average time for Us co UL technical data	ontrol in AC	Opening NO	max	Cycles/I ms ms ms	12 28 8	
Mechanical operations Operating times Average time for Us co UL technical data	ontrol	Opening NO	max min max	Cycles/I 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	Cycles/I 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 mot	Opening NO	max min max	Cycles/I 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/I 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 mot	Opening NO or	max min max at 480V	Cycles/I 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 mot	Opening NO or	max min max at 480V	Cycles/I ms ms ms s	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 mot	Opening NO or	max min max at 480V at 600V at 110/120V	Cycles/I ms ms ms A 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 mot erformance for single-phase AC m	Opening NO or otor	max min max at 480V at 600V	Cycles/I ms ms ms s	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 mot	Opening NO or otor	max min max at 480V at 480V at 600V at 110/120V at 230V	Cycles/I ms ms ms ms A A A hp	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 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/I 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 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/I ms ms ms Ms A 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 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 230V at 220/230V at 460/480V	Cycles/I ms ms ms ms A 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 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/I ms ms ms Ms A 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 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 230V at 220/230V at 460/480V	Cycles/I ms ms ms ms A 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 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 230V at 220/230V at 460/480V	Cycles/I ms ms ms ms A 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 mot erformance for single-phase AC mo for three-phase AC mo	Opening NO or otor	max min max at 480V at 480V at 600V at 600V at 230V at 230V at 220/230V at 460/480V	Cycles/I ms ms ms ms A A A hp hp hp	12 28 8 22 52 41 5 10 15 20 40	

BF50T4A230

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

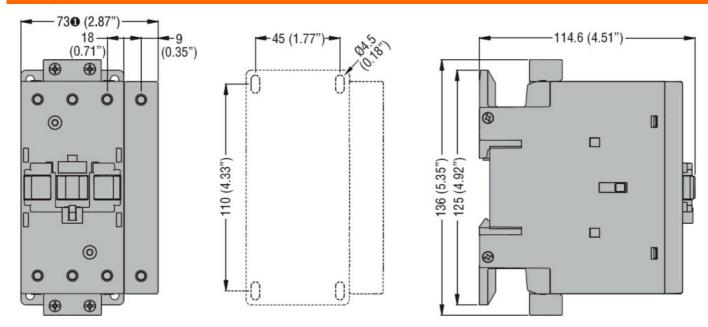


FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 90A, AC COIL 50/60HZ, 230VAC

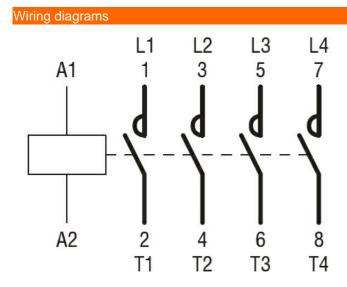
ENERGY AND AUTOMATION

## 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 classificati	on

EC000066 - Power contactor, AC switching

BF50T4A230

BF50T4A230

3