

BF8000A04860 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 60HZ, 48VAC



Product designation			Power contactor
Product type designation			BF80
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		А	115
Operational current le			
	AC-1 (≤40°C)	А	115
	AC-1 (≤55°C)	А	95
	AC-1 (≤70°C)	А	80
	AC-3 (≤440V ≤55°C)	А	80
	AC-4 (400V)	А	38
Rated operational power AC-3 (T≤55°C)			
	230V	kW	22
	400V	kW	45
	415V	kW	45
	440V	kW	45
	500V	kW	55
	690V	kW	55
	1000V	kW	37
Rated operational current AC-3 (T≤55°C)			
	230V	А	80
	400V	А	80
	415V	А	80
	440V	А	80
	500V	А	78
	690V	А	57
	1000V	А	28
Rated operational power AC-1 (T≤40°C)			
	230V	kW	43
	400V	kW	76
	500V	kW	95
	690V	kW	120
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
•	≤24V	А	70
	48V	А	60
	75V	А	60
	110V	А	8
	220V	А	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
•	≤24V	А	100

ENERGY AND AUTOMATION

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	48V	А	100
	75V	А	100
	110V	А	80
	220V	А	9
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	100
	48V	A	100
	75V	A	100
	110V	A	85
	220V	A	95
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series	2201	Α	55
	≤24V	А	100
	48V	A	100
	48V 75V		
		A	100
	110V	A	100
	220V	A	115
IEC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series		_	
	≤24V	А	40
	48V	А	30
	75V	A	30
	110V	А	3
	220V	Α	_
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series			
	≤24V	А	60
	48V	А	50
	75V	А	50
	110V	А	40
	220V	А	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
·	≤24V	А	80
	48V	A	70
	75V	A	70
	110V	A	60
	220V	A	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	2200	Α	04
IEC max current le in DCS-DCS with E/ICS Toms with 4 poles in series	≤24V	А	90
	48V		
		A	90
	75V	A	90
	110V	A	75
	220V	<u>A</u>	80
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse	o (1- o)		405
	gG (IEC)	A	125
	aM (IEC)	A	80
Making capacity (RMS value)		A	800
Breaking capacity at voltage			
	440V	А	640
	500V	А	625
	690V	А	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	lth	W	7.9
	AC-3	W	3.8
Tightening torque for terminals			



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		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for a	coil terminal			
nghioning torquo for t		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable	Пах	Nr.	2
Conductor section			111.	2
Conductor section	ANAC/Kamil			
	AWG/Kcmil			0
		max		2
	Flexible w/o lug conductor section		2	
		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
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
				Screw / DIN rail
Fixing				35mm
Weight			g	1020
Conductor section			3	
	AWG/kcmil conductor section			
		max		2
Operations		THEX		2
Mechanical life			cycles	15000000
Electrical life	<u></u>		•	1300000
			cycles	1300000
Safety related data	0d according to EN/ISO 13489-1			
Performance level B1				
	ou according to EN/ISO 15469-1	note d lo o d		400000
		rated load	cycles	1300000
		rated load mechanical load	cycles cycles	15000000
	ing to IEC/EN 609474-4-1		•	
EMC compatibility			•	15000000
EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1		cycles	15000000 yes yes
EMC compatibility	ing to IEC/EN 609474-4-1		•	15000000 yes
EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1		cycles	15000000 yes yes
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 60Hz		cycles	15000000 yes yes
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz		cycles	15000000 yes yes
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 60Hz	mechanical load	V	15000000 yes yes 48
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	mechanical load	v v %Us	15000000 yes yes 48 80
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz pick-up	mechanical load	V	15000000 yes yes 48
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz	mechanical load	V V %Us %Us	15000000 yes yes 48 80 110
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 60Hz of 60Hz coil powered at 60Hz pick-up	mechanical load	V V %Us %Us %Us	15000000 yes yes 48 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	ing to IEC/EN 609474-4-1 30Hz of 60Hz coil powered at 60Hz pick-up drop-out	mechanical load	V V %Us %Us	15000000 yes yes 48 80 110
EMC compatibility AC coil operating Rated AC voltage at 6	ing to IEC/EN 609474-4-1 50Hz of 60Hz coil powered at 60Hz pick-up drop-out	mechanical load	V V %Us %Us %Us	15000000 yes yes 48 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	ing to IEC/EN 609474-4-1 30Hz of 60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max	V V %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	ing to IEC/EN 609474-4-1 50Hz of 60Hz coil powered at 60Hz pick-up drop-out	mechanical load	V V %Us %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55 210
EMC compatibility AC coil operating Rated AC voltage at 6 AC operating voltage	ing to IEC/EN 609474-4-1 50Hz of 60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max	V V %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55



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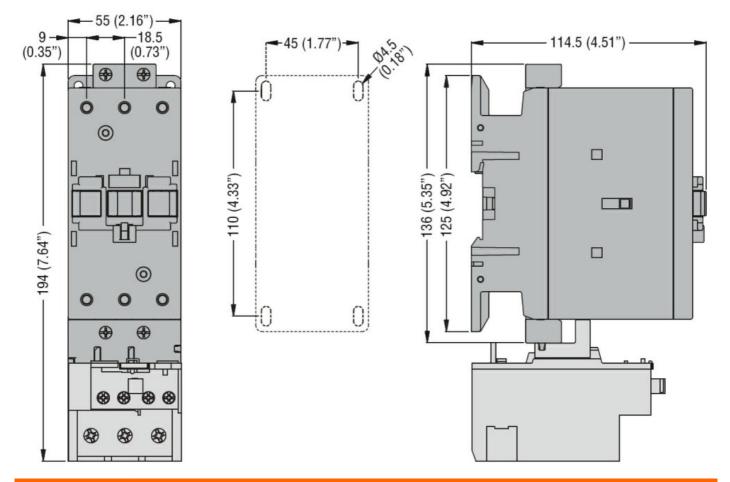
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Dissipation at holding	<20°C 50H7			W	5
Max cycles frequency				VV	5
Max cycles nequency Mechanical operation				ovelee/b	2600
				cycles/h	3000
Operating times					
Average time for Us c					
	in AC				
		Closing NO			
			min	ms	12
			max	ms	28
		Opening NO			-
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
Full-load current (FLA) for three-phase A	C motor			
`			at 480V	А	77
			at 600V	А	77
Yielded mechanical p	erformance				
	for three-phase /	AC motor			
			200/208V	HP	25
			220/230V	HP	30
			460/480V	HP	60
			575/600V	HP	75
General USE			575/0007	111	15
	Contactor				
	Contactor			٨	445
	. (AC current	A	115
Short-circuit protection					
	High fault				
			Short circuit current	kA	100
			Fuse rating	А	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	Α	200
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating tempe	rature			
			min	°C	-50
			max	°C	70
	Storage tempera	ture			
	0 - 1 - 1		min	°C	-60
			max	°Č	80
Max altitude			max	 	3000
Resistance & Protecti	on				
Pollution degree					3
Dimensions					J

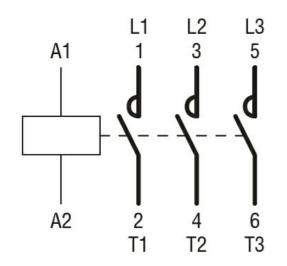
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Wiring diagrams



Certifications and compliance

Compliance	
	CSA C22.2 n° 60947-1
	CSA C22.2 n° 60947-4-1
	IEC/EN/BS 60947-1
	IEC/EN/BS 60947-4-1
	UL 60947-1
	UL 60947-4-1
Certificates	
	CCC



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cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching