ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 100A, AC COIL 50/60HZ, 110VAC



Product designation Product type designation		Power contactor BF65
Contact characteristics		
Number of poles	nr.	4
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	100
Operating current		
Operational current AC1 (≤40°C)	Α	100
Operational current AC3 (≤440V ≤55°C)	Α	65
Operational current AC4 (400V)	Α	31
Rated operational power AC1 (T≤40°C)		
230V	kW	38
400V	kW	65
500V	kW	82
690V	kW	114
Rated operational power AC3 (T≤55°C)		
230V	kW	18.5
400V	kW	30
415V	kW	37
440V	kW	37
500V	kW	37
690V	kW	45
1000V	kW	30
Short-time allowable current for 10s (IEC/EN60947-1)	Α	640
Protection fuse	_	
gG (IEC)	A	125
aM (IEC)	A	80
Making capacity (RMS value)	Α	650
Breaking capacity at voltage		
Breaking capacity 440V	A	520
Breaking capacity 500V	A	425
Breaking capacity 690V	Α	376
Resistance per pole (average value)	mΩ	0.8
Power dissipation per pole (average value)	14/	0
Power dissipation pole (average value) Ith	W	8
Tightoning torque for terminals	W	3.4
Tightening torque for terminals min	Nm	4
max	Nm	5
min	lbft	2.95
max	lbft	3.69

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Tightening torque for c	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
max number of wires s	simultaneously connectable		nr.	2
Conductor section				
	AWG			
	7.11.0	min		14
		max		2
	Flexible w/o lug conductor section	IIIdX		
	r lexible w/o lug conductor section	min	mm²	1.5
		max	mm²	35
	Florible of the panductor agation	IIIax	111111	30
	Flexible c/w lug conductor section			4 5
		min	mm²	1.5
		max	mm²	35
-	tion according to IEC/EN 60529			IP20 front
Auxiliary contact chara			^	100
Operational current AC			Α	100
Operating current DC1	3			
		110V	Α	Screw / DIN rail
				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	1.24
Operations			<u> </u>	
Mechanical life			Cycles	15000000
Electrical life			Cycles	1400000
Safety related data			Cycles	1400000
•	Od according to EN/ISO 13489-1			
r enomiance level bit	ou according to Etwiso 13469-1	rated load	Cicli	1400000
Minnen acretata a consta	- +- IEC/EN COC474 4 4	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			

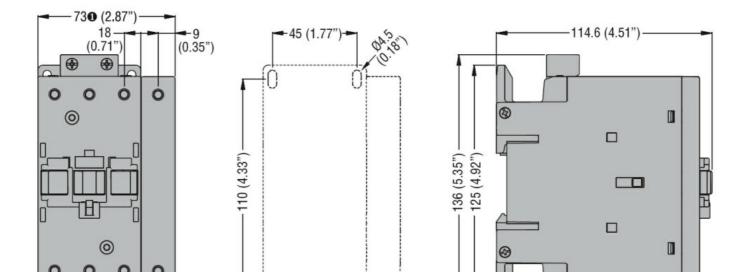


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		min	%Us	0.2
		max	%Us	0.55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	0.85
		max	%Us	1.1
	drop-out			
		min	%Us	0.4
		max	%Us	0.55
	of 60Hz coil powered at 60Hz			
	pick-up		0/11	
		min	%Us	0.8
		max	%Us	1.1
	drop-out		0/11-	0.0
		min	%Us	0.2
A.O. an a nation of called		max	%Us	0.55
AC operating voltage	of FO/GOLLT gold newared at FOLLT			
	of 50/60Hz coil powered at 50Hz	in-rush	VA	210
			VA VA	
	of FO/GOLLT and powered at GOLLT	holding	VA	15
	of 50/60Hz coil powered at 60Hz	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz	Holding	ν <u>Λ</u>	13
	or our iz con powered at our iz	in-rush	VA	210
		holding	VA	15
Dissipation at holding	<20°C 50Hz	Holding	W	5.0
			• • •	0.0
Max cycles frequency				
Max cycles frequency Mechanical operations			Cycles/h	3600
Mechanical operations			Cycles/h	3600
			Cycles/h	3600
Mechanical operations Operating times			Cycles/h	3600
Mechanical operations Operating times	ontrol in AC		Cycles/h	3600
Mechanical operations Operating times	ontrol	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 28 8
Mechanical operations Operating times Average time for Us co	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 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 ofor 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	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 ofor three-phase AC motor	min max min max at 480V at 600V	ms ms ms ms	12 28 8 22 65 62
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	min max min max at 480V at 600V	ms ms ms A A	12 28 8 22 65 62
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	min max min max at 480V at 600V at 200/208V at 220/230V	ms ms ms A A	12 28 8 22 65 62 20 25
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	min max min max at 480V at 600V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 65 62 20 25 50
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	min max min max at 480V at 600V at 200/208V at 220/230V	ms ms ms A A	12 28 8 22 65 62 20 25
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA)	ontrol in AC Closing NO Opening NO for three-phase AC motor erformance for three-phase AC motor	min max min max at 480V at 600V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 65 62 20 25 50
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	min max min max at 480V at 600V at 200/208V at 220/230V at 460/480V at 575/600V	ms ms ms A A	12 28 8 22 65 62 20 25 50 60
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA) Yielded mechanical per General USE	ontrol in AC Closing NO Opening NO for three-phase AC motor erformance for three-phase AC motor	min max min max at 480V at 600V at 220/230V at 220/230V at 460/480V	ms ms ms A A	12 28 8 22 65 62 20 25 50
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA) Yielded mechanical per General USE Other features	ontrol in AC Closing NO Opening NO for three-phase AC motor erformance for three-phase AC motor	min max min max at 480V at 600V at 200/208V at 220/230V at 460/480V at 575/600V	ms ms ms A A	12 28 8 22 65 62 20 25 50 60
Mechanical operations Operating times Average time for Us of UL technical data Full-load current (FLA) Yielded mechanical per General USE	ontrol in AC Closing NO Opening NO for three-phase AC motor erformance for three-phase AC motor	min max min max at 480V at 600V at 200/208V at 220/230V at 460/480V at 575/600V	ms ms ms A A	12 28 8 22 65 62 20 25 50 60

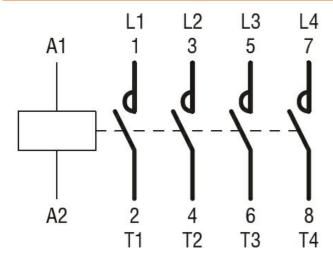
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① BF80T2 82mm/3.23"

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

UL 60947-4-1

Compliance

cULus

ETIM 6 classification

EC000066 - Power contactor, AC switching