

# THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC COIL 50/60HZ, 400VAC



Product designation		Power contactor
Product type designation		BF65
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	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)	Α	125
aM (IEC)	Α	80
Making capacity (RMS value)	Α	650
Breaking capacity at voltage		
Breaking capacity 440V	Α	520
Breaking capacity 500V	Α	425
Breaking capacity 690V	Α	376
Resistance per pole (average value)	mΩ	0.8
Power dissipation per pole (average value)		
Power dissipation pole (average value) Ith	W	8
AC3	W	3.4
Finds and a second for township to		
rightening torque for terminals		
rightening torque for terminals min	Nm	4
	Nm Nm	4 5

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Tightening torque for co	oil terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
max number of wires si	imultaneously connectable		nr.	2
Conductor section	·			
	AWG			
		min		14
		max		2
	Flexible w/o lug conductor section			
	3	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	Tiexible 6, Wing conductor coolien	min	mm²	1.5
		max	mm²	35
Power terminal protect	ion according to IEC/EN 60529	IIIdA	111111	IP20 front
Auxiliary contact charact	-			11 20 110111
Operational current AC			А	100
Operational current AC			^	100
Operating current DC1	3			Canacia / DINI nail
		110V	Α	Screw / DIN rail
A mala in material and a malitic man				35mm
Ambient conditions				
Temperature				
	Operating temperature		20	
		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	ss.iailisai isaa	0.000	yes
EMC compatibility	.g .c .E 0/E11 000 71 7 7 1			yes
AC coil operating				y 0.3
AC operating voltage	-f-50/001			
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/17	
		min	%Us	0.8
		max	%Us	1.1
	drop-out			

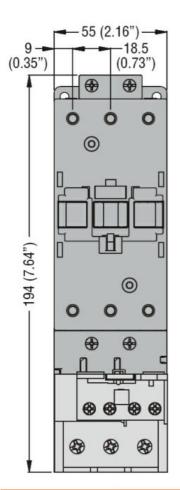


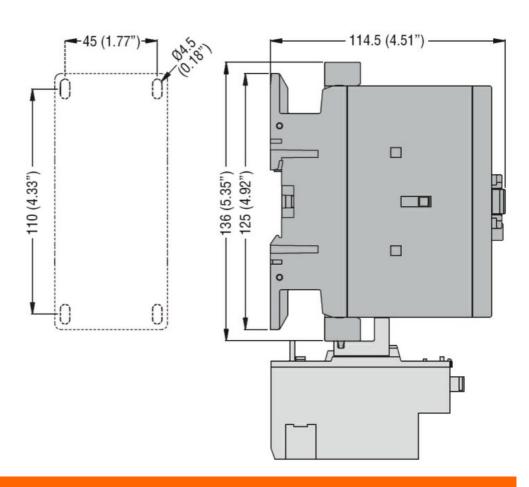


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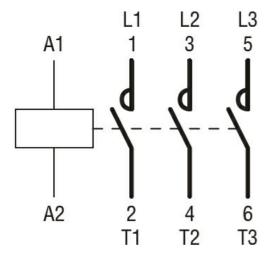
		min	%Us	0.2
		max	%Us	0.55
	of 50/60Hz coil powered at 60Hz	<u></u>		
	pick-up			
	pront dp	min	%Us	0.85
		max	%Us	1.1
	drop-out	IIIdx	/003	1.1
	diop-out	min	%Us	0.4
			%Us	
	. ( 0011	max	%US	0.55
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	0.8
		max	%Us	1.1
	drop-out			
		min	%Us	0.2
		max	%Us	0.55
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	F	in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz	Holding	٧, ١	10
	of 50/00f12 coil powered at 00f12	in-rush	VA	195
	. ( 0011	holding	VA	13
	of 60Hz coil powered at 60Hz			
		in-rush	VA	210
		holding	VA	15
Dissipation at holding	≤20°C 50Hz		W	5.0
Max cycles frequency				
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			
Mechanical operations Operating times	ontrol in AC	min	ms	12
Mechanical operations Operating times	ontrol in AC Closing NO			
Mechanical operations Operating times	ontrol in AC	min max	ms ms	12 28
Mechanical operations Operating times	ontrol in AC Closing NO	min	ms	12 28 8
Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO	min max	ms ms	12 28
Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO Opening NO	min max min	ms ms	12 28 8
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Mechanical operations Operating times Average time for Us of	ontrol in AC Closing NO Opening NO	min max min max	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	ms ms ms ms	12 28 8 22
Mechanical operations Operating times Average time for Us of	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 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 erformance	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 erformance	min max min max at 480V at 600V 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 erformance	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 erformance	min max min max at 480V at 600V 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 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 erformance	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 of 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 of 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  Other features Pollution degree	ontrol in AC Closing NO Opening NO of 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  Other features	ontrol in AC Closing NO Opening NO of 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

**ENERGY AND AUTOMATION** 





### 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





THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC COIL 50/60HZ,

#### ETIM 6 classification

EC000066 - Power contactor, AC switching