

**ENERGY AND AUTOMATION** 

### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 65A, AC COIL 60HZ, 48VAC



Product designation			Power contactor
Product type designation			BF65
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
Specialistic desired	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	100
Operational current le			
Operational current to	AC-1 (≤40°C)	Α	100
	AC-1 (≤55°C)	A	80
	AC-1 (≤70°C)	A	70
	AC-3 (≤440V ≤55°C)	A	65
	AC-3 (3440V 333 C) AC-4 (400V)	A	31
Rated operational power AC-3 (T≤55°C)	AC-4 (400V)	^	31
Nated operational power AC-3 (1200 C)	230V	kW	18.5
	400V	kW	30
	400 V 415 V		30 37
		kW	
	440V	kW	37
	500V 690V	kW kW	37
	1000V	kW	45 30
Rated operational current AC-3 (T≤55°C)	1000 V	KVV	30
Nated operational current AC-3 (1200 C)	230V	٨	65
	400V	A	
	400 V 415 V	A	65 65
		A	
	440V	A	65
	500V	A	53
	690V	A	47
D-1-1-2-2-4-3-3-4-3-4-3-4-3-4-4-4-4-4-4-4-4-4	1000V	A	25
Rated operational power AC-1 (T≤40°C)	0001/	1-147	20
	230V	kW	38
	400V	kW	65
	500V	kW	82
150	690V	kW	114
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	40 AV /		50
	≤24V	A	50
	48V	A	50
	75V	A	50
	110V	A	8
150	220V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	.0.0.1		70
	≤24V	Α	70



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	48V	Α	70
	75V	Α	70
	110V	Α	60
	220V	Α	9
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	70
	48V	Α	70
	75V	Α	70
	110V	Α	60
	220V	Α	90
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			_
·	≤24V	Α	70
	48V	Α	70
	75V	Α	70
	110V	Α	70
	220V	Α	110
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
120 max sunsince in 200 200 mai 270 = 10me mai 1 poise in conce	≤24V	Α	35
	48V	A	25
	75V	A	25
	110V	A	3
	220V	A	<del>-</del>
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
ILO max current le in DO3-DO3 with E/N = 13ms with 2 poles in series	≤24V	Α	45
	≥24 V 48 V		
	46 V 75 V	A A	40 40
	75V 110V		
	220V	A	30 5
IFC many asymptotic in DC2 DC5 with L/D < 45 mag with 2 males in agriculture.	2200	Α	<u> </u>
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	40.4V		
	≤24V	A	55
	48V	A	50
	75V	A	50
	110V	Α	35
150 DOS DOS 111 L/D - 45	220V	Α	52
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series		_	
	≤24V	Α	60
	48V	Α	60
	75V	Α	60
	110V	Α	50
	220V	A	65
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			
	440V	Α	520
	500V	Α	425
	690V	Α	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
· · · · · · · · · · · · · · · · · · ·	Ith	W	8
	AC-3	W	3.4
Tightening torque for terminals			_





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		min	Nm	4
		max	Nm	5
		min	lbin	2.95
		max	Ibin	3.69
Tightening torque for	coil terminal			
rigittorining torquo for		min	Nm	0.8
		max	Nm	1
				0.8
		min	lbin	
<del></del>		max	lbin	0.74
•	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	Ç	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	TONIDIO O, WIND COTTONIO SECTION	min	mm²	1.5
	.: LEO/EN 00500	max	mm²	35
	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	1020
Conductor section				
Conductor Section	AWG/kcmil conductor section			
	AVVG/KCITIII COTIQUETOT Section	may		2
Operations		max		
Operations				45000000
Mechanical life			cycles	15000000
Electrical life			cycles	1400000
Safety related data				
Performance level B1	l 0d according to EN/ISO 13489-1			
		rated load	cycles	1400000
		mechanical load	cycles	15000000
Mirror contats accord	ing to IEC/EN 609474-4-1			yes
EMC compatibility	-			yes
AC coil operating				,
Rated AC voltage at 6	S0Hz		V	48
AC operating voltage			v	-TU
Ac operating voitage				
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil cons	umption at 20°C			
ygu 30110	of 60Hz coil powered at 60Hz			
	or our iz con powered at our iz	in-rush	VA	210
		holding	VA	15

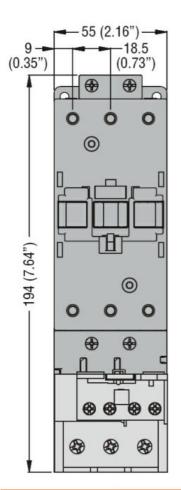


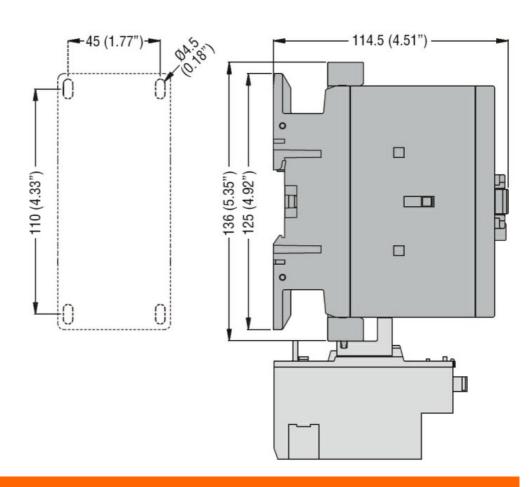
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Dissipation at holding				W	5
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us of					
	in AC	Closing NO			
		Closing NO	min	ms	12
			max	ms	28
		Opening NO	max	1110	20
		opolinig 110	min	ms	8
			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	) tor three-phase A	C motor		_	
			at 480V	A	65
V'alla Lavada d'ada			at 600V	Α	62
Yielded mechanical p		۸ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰ ۰			
	for three-phase A	AC motor	200/2001	UD	20
			200/208V 220/230V	HP HP	20 25
			460/480V	HP	50
			575/600V	HP	60
General USE			010/000 V		00
Conoral COL	Contactor				
	00.114010.		AC current	Α	100
Short-circuit protectio	n fuse, 600V				
•	High fault				
	Ū		Short circuit current	kA	100
			Fuse rating	Α	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	Α	200
			Fuse class		RK5
Ambient conditions					
Temperature	0				
	Operating tempe	rature		۰.	50
			min	°C	-50 70
	Storogo tompera	turo	max	<u> </u>	70
	Storage tempera	iture	min	°C	-60
			min	°C	-60 80
Max altitude			max		3000
Resistance & Protect	ion			m	3000
Pollution degree	ion —				3
					5

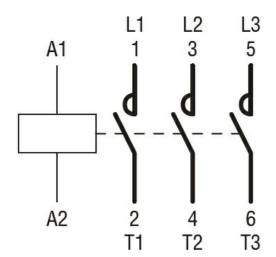


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#### Wiring diagrams



#### 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



#### BF6500A04860

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

cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching