



Product designation			Power contactor
Product type designation			BF65
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency		i v	0
operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	ΠΙάλ	A	100
		A	100
Operational current le		٨	400
	AC-1 (≤40°C)	A	100
	AC-1 (≤55°C)	A	80
	AC-1 (≤70°C)	A	70
	AC-3 (≤440V ≤55°C)	A	65
	AC-4 (400V)	A	31
Rated operational current AC-3 (T≤55°C)			
	230V	А	65
	400V	А	65
	415V	А	65
	440V	А	65
	500V	А	53
	690V	А	47
	1000V	А	25
Rated operational power AC-1 (T≤40°C)			
	230V	kW	38
	400V	kW	65
	500V	kW	82
	690V	kW	114
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	А	50
	48V	А	50
	75V	А	50
	110V	А	8
	220V	А	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	А	70
	48V	A	70
	48V 75V	A	70
	110V	A	60
	220V		
IFC may current to in DC1 with L/D < 1 me with 2 notes in series	2200	A	9
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	-0111	۸	70
	≤24V	A	70
	48V	A	70
	75V	А	70

BF65T4A110



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	110V	А	60
	220V	А	90
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	А	70
	48V	А	70
	75V	А	70
	110V	А	70
	220V	А	110
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	А	35
	48V	А	25
	75V	А	25
	110V	А	3
	220V	А	_
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 2 poles in series			
	≤24V	А	45
	48V	A	40
	48V 75V	A	40
	110V	A	30
	220V	A	5
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 3 poles in series	220 V	Λ	0
	≤24V	А	55
	48V	A	50
	48V 75V	A	50
	110V	A	35
	220V	A	55 52
IFC may surrent to in DC2 DC5 with L/D < 15ms with 4 poles in series	220 V	A	52
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series	-041/		<u></u>
	≤24V	A	60
	48V	A	60
	75V	A	60
	110V	A	50
	220V	A	65
Short-time allowable current for 10s (IEC/EN60947-1)		А	640
Protection fuse		_	
	gG (IEC)	Α	125
	aM (IEC)	A	80
Making capacity (RMS value)		Α	650
Breaking capacity at voltage			
	440V	А	520
	500V	А	425
	690V	A	376
Resistance per pole (average value)		mΩ	0.8
Power dissipation per pole (average value)			
	lth	W	8
	AC-3	W	3.4
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	Ibin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1



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

BF65T4A110

110VAC

Conductor section          AWG/Kcmil         Flexible w/o lug conductor section         Flexible c/w lug conductor section         Power terminal protection according to IEC/EN 60529         Mechanical features         Operating position         Fixing         Weight         Conductor section         AWG/kcmil conductor section         Operations         Mechanical life         Electrical life         Safety related data         Performance level B10d according to EN/ISO 13489-1         Mirror contats according to IEC/EN 609474-4-1         EMC compatibility         AC coil operating         Rated AC voltage at 50/60Hz	min max max min max min max normal allowable max	Ibin Ibin Nr. mm² mm² mm² g g cycles cycles	0.8 0.74 2 2 1.5 35 1.5 35 IP20 front Vertical plan ±30° Screw / DIN rai 35mm 1240 2 15000000 1400000
Flexible w/o lug conductor section         Flexible c/w lug conductor section         Power terminal protection according to IEC/EN 60529         Mechanical features         Operating position         Fixing         Weight         Conductor section         AWG/kcmil conductor section         Operations         Mechanical life         Electrical life         Safety related data         Performance level B10d according to EN/ISO 13489-1         Mirror contats according to IEC/EN 609474-4-1         EMC compatibility         AC coil operating         Rated AC voltage at 50/60Hz         AC operating voltage	max min max min max normal allowable max	Nr. mm² mm² mm² g g cycles cycles	2 2 1.5 35 1.5 35 IP20 front Vertical plan ±30° Screw / DIN rai 35mm 1240 2 15000000
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AWG/Kcmil         Flexible w/o lug conductor section         Flexible c/w lug conductor section         Power terminal protection according to IEC/EN 60529         Mechanical features         Operating position         Fixing         Weight         Conductor section         AWG/kcmil conductor section         Operations         Mechanical life         Electrical life         Safety related data         Performance level B10d according to EN/ISO 13489-1         mecha         Mirror contats according to IEC/EN 609474-4-1         EMC compatibility         AC coil operating         Rated AC voltage at 50/60Hz         AC operating voltage	min max min max normal allowable max	mm² mm² mm² g g cycles cycles	1.5 35 1.5 35 IP20 front Vertical plan ±30° Screw / DIN rai 35mm 1240 2 2
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Power terminal protection according to IEC/EN 60529 Mechanical features Operating position Fixing Weight Conductor section AWG/kcmil conductor section Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	max min max normal allowable max	mm² mm² mm² g g cycles cycles	35 1.5 35 IP20 front Vertical plan ±30° Screw / DIN rai 35mm 1240 2 15000000
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Mechanical features         Operating position         Fixing         Weight         Conductor section         AWG/kcmil conductor section         Operations         Mechanical life         Electrical life         Safety related data         Performance level B10d according to EN/ISO 13489-1         mecha         Mirror contats according to IEC/EN 609474-4-1         EMC compatibility         AC coil operating         Rated AC voltage at 50/60Hz         AC operating voltage	normal allowable max	g cycles cycles	IP20 front Vertical plan ±30° Screw / DIN rai 35mm 1240 2 15000000
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Operating position Fixing Weight Conductor section AWG/kcmil conductor section Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	allowable max	cycles cycles	±30° Screw / DIN rai 35mm 1240 2 2
Fixing Weight Conductor section AWG/kcmil conductor section Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	allowable max	cycles cycles	±30° Screw / DIN rai 35mm 1240 2 2
Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	max	cycles cycles	±30° Screw / DIN rai 35mm 1240 2 2
Weight Conductor section AWG/kcmil conductor section Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	rated load	cycles cycles	35mm 1240 2 15000000
Weight Conductor section AWG/kcmil conductor section Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	rated load	cycles cycles	1240 2 15000000
Conductor section AWG/kcmil conductor section Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	rated load	cycles cycles	2 15000000
AWG/kcmil conductor section          Operations         Mechanical life         Electrical life         Safety related data         Performance level B10d according to EN/ISO 13489-1         mecha         Mirror contats according to IEC/EN 609474-4-1         EMC compatibility         AC coil operating         Rated AC voltage at 50/60Hz         AC operating voltage	rated load	cycles	15000000
Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	rated load	cycles	15000000
Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	rated load	cycles	15000000
Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage		cycles	
Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage		cycles	
Safety related data Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage			1400000
Performance level B10d according to EN/ISO 13489-1 mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage		cvcles	
mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage		cvcles	
mecha Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage			1400000
Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage	ameaneaa	cycles	15000000
EMC compatibility AC coil operating Rated AC voltage at 50/60Hz AC operating voltage		0,0100	yes
AC coil operating Rated AC voltage at 50/60Hz AC operating voltage			yes
Rated AC voltage at 50/60Hz AC operating voltage			,
AC operating voltage		V	110
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up		%Us	85
	min	%Us %Us	85 110
drop-out	max	/005	110
a op-out	min	%Us	40
	max	%Us	40 55
AC average coil consumption at 20°C	mux	/000	
of 50/60Hz coil powered at 50Hz			
	in-rush	VA	210

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	of 50/60Hz coil powe	ered at 60Hz			
			in-rush	VA	195
			holding	VA	13
	of 60Hz coil powered	d at 60Hz			
	-		in-rush	VA	210
			holding	VA	15
Dissipation at holding	g ≤20°C 50Hz			W	5
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times	-				
Average time for Us of	control				
worage anto for eet	in AC				
		Closing NO			
			min	ms	12
					28
			max	ms	20
		Opening NO			0
			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 (FL/	A) for three-phase AC m	notor			
			at 480V	А	65
			at 600V	А	62
Yielded mechanical p	performance				
	for three-phase AC r	motor			
	· ·		200/208V	HP	20
			220/230V	HP	25
			460/480V	HP	50
			575/600V	HP	60
General USE			01010001		00
	Contactor				
	Contactor		AC current	۸	100
Chart aireuit rate d'a			AC current	A	100
Short-circuit protectic					
	High fault				100
			Short circuit current	kA	100
			Fuse rating	A	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	А	200
			Fuse class		RK5
Ambient conditions					
Femperature					
	Operating temperatu	ıre			
			min	°C	-50
				°C	70
			max	U U	
	Storage temperature	2	max	U	
	Storage temperature	9	min	 ℃	-60

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 BF65T4A110



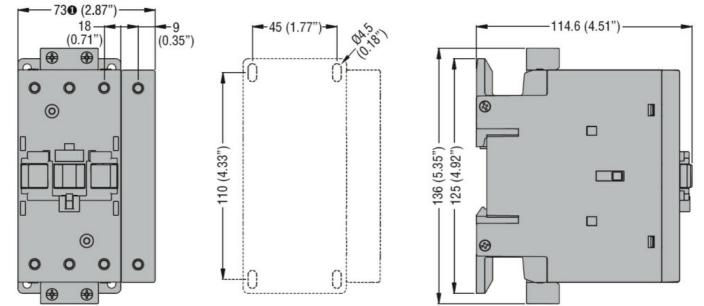
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110VAC

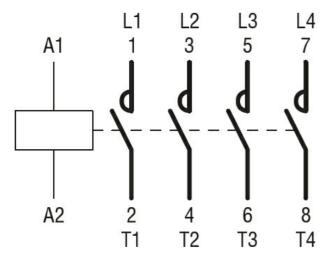
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## BF80T2 82mm/3.23"

## Wiring diagrams



## Certifications and compliance

Complianc	e	
	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	
Certificate	3	
	CCC	
	cULus	
ETIM class	sification	
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ETIM 8.0

EC000066 -Power contactor, AC switching