

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



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			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	100
Operational current le			
•	AC-1 (≤40°C)	Α	100
	AC-1 (≤55°C)	Α	80
	AC-1 (≤70°C)	Α	70
	AC-3 (≤440V ≤55°C)	Α	65
	AC-4 (400V)	Α	31
Rated operational current AC-3 (T≤55°C)	,		
,	230V	Α	65
	400V	Α	65
	415V	Α	65
	440V	Α	65
	500V	Α	53
	690V	Α	47
	1000V	Α	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	Α	50
	48V	Α	50
	75V	Α	50
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	70
	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



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	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	A	110	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series				
	≤24V	Α	35	
	48V	Α	25	
	75V	Α	25	
	110V	Α	3	
	220V	Α	_	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series		_		
	≤24V	A	45	
	48V	A	40	
	75V	A	40	
	110V	A	30	
150 H	220V	Α	5	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	-0.11.4			
	≤24V	A	55	
	48V	A	50	
	75V	A	50	
	110V	A	35 50	
IFO and a compart to in DO2 DO5 with 1/D < 45 and with 4 and a line and a	220V	Α	52	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	-04) /		00	
	≤24V	A	60	
	48V	A	60	
	75V 110V	A A	60	
	220V	A	50 65	
Short time allowable current for 10c (IEC/EN60047.1)	220 V	A	640	
Short-time allowable current for 10s (IEC/EN60947-1) Protection fuse		A	040	
Protection fuse	~C (IEC)	٨	125	
	gG (IEC)	A A	80	
Making capacity (RMS value)	aM (IEC)	A	650	
Breaking capacity at voltage		A	000	
Disaning capacity at voltage	440V	٨	520	
	440 V 500 V	A A	520 425	
	690V	A	376	
Resistance per pole (average value)	090 V	mΩ	0.8	
Power dissipation per pole (average value)		11122	0.8	
r uwei uissipatiuti pei puie (average value)	Ith	W	8	
	AC-3	W	8 3.4	
Tightening torque for terminals	AU-3	٧٧	J. 4	
riginaling torque for terrillials	min	Nlm	1	
	min	Nm Nm	4 5	
	max	Ibin	5 2.95	
	min max	lbin	2.95 3.69	
Tightening torque for coil terminal	max	ווטו	3.03	
rigitering torque for contentinal	min	Nm	0.8	
	min max	Nm	0.8 1	
	Παλ	1 11111	1	



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		min	lbin	0.8
		max	lbin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			4 5
		min	mm² mm²	1.5 35
Dower terminal protect	otion according to IFC/FN 60520	max	mm-	IP20 front
Mechanical features	ction according to IEC/EN 60529			IP20 Iront
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			g	1280
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	1400000
Safety related data				
Performance level B1	10d according to EN/ISO 13489-1			
		rated load	cycles	1400000
		mechanical load	cycles	15000000
	ing to IEC/EN 609474-4-1			yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	50/60Hz, 60Hz			
		min	V	60
		max	V	110
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/11	0011
		min	%Us	80 Us min
	drap aut	max	%Us	110 Us max
	drop-out	max	%Us	≤70 Us min
	of E0/60Hz soil powered at 60Hz	IIIdX	/005	270 OS IIIII
	of 50/60Hz coil powered at 60Hz pick-up			
	<i>ρι</i> υν-αρ	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out	IIIAX	/003	110 00 max
	arop out	max	%Us	≤70 Us min
AC average coil cons	sumption at 20°C	max	,,,,,	
5 a. 5/ago 5011 00110	of 50/60Hz coil powered at 50Hz			
	2. 33, 33. 12 33.1 potroi 34 dt 301 12	in-rush	VA	35120
		holding	VA	1.53.7
		Holaing	• • • •	





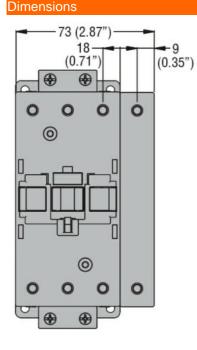
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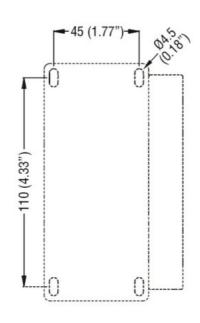
	of 50/60Hz coil po	owered at 60Hz			05 400
			in-rush	VA	35120
	.0000 5011		holding	VA	1.53.7
Dissipation at holding	≤20°C 50Hz			W	12.5
DC coil operating					
DC rated control voltage	ge				
			min	V	60
			max	V	110
DC operating voltage					
	pick-up				
			min	%Us	80 Us min
			max	%Us	110 Us max
	drop-out			0/11	
			max	%Us	≤70 Us min
Average coil consump	tion ≤20°C				
			in-rush	W	2368
			holding	W	1.21,9
Max cycles frequency					4500
Mechanical operation				cycles/h	1500
Operating times					
Average time for Us co					
	in AC	aa			
		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			0.0
			min	ms	20
			max	ms	55
UL technical data					
Full-load current (FLA)) for three-phase AC	motor			
			at 480V	A	65
\(\frac{1}{2} \)	•		at 600V	Α	62
Yielded mechanical pe		0 .			
	for three-phase A	C motor	000/000/	ub	0.0
			200/208V	HP	20
			220/230V	HP	25
			460/480V	HP	50
0 1110=			575/600V	HP	60
General USE					
	Contactor			_	
<u></u>			AC current	A	100
Short-circuit protection					
	High fault				
			Short circuit current	kA	100
			Fuse rating	Α	200
			Fuse class		J
	Standard fault				

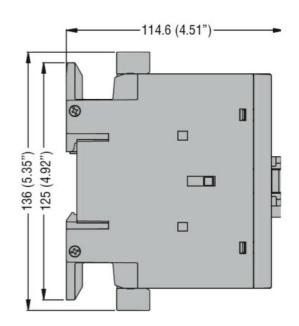


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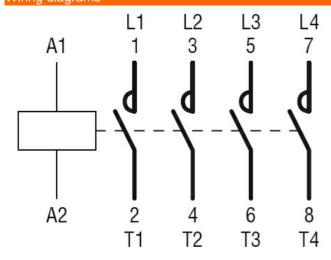
		Short circuit current Fuse rating Fuse class	kA A	10 200 RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protec	tion			
Pollution degree				3
Dimensions				







Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1



BF65T4E110

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	IEC/EN/BS 60947-1
	IEC/EN/BS 60947-4-1
	UL 60947-1
	UL 60947-4-1
Certificates	
	CCC
	cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching