

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 50/60HZ, 110VAC, 2NO AND 2NC



Product designation			Power contactor
Product type designation			BF09
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	25
Operational current le			
	AC-1 (≤40°C)	Α	25
	AC-1 (≤55°C)	Α	20
	AC-1 (≤70°C)	Α	18
	AC-3 (≤440V ≤55°C)	Α	9
	AC-4 (400V)	Α	4.9
Rated operational power AC-1 (T≤40°C)			
	230V	kW	9.5
	400V	kW	16
	500V	kW	21
	690V	kW	27
Short-time allowable current for 10s (IEC/EN60947-1)		Α	150
Protection fuse			
	gG (IEC)	Α	25
	aM (IEC)	Α	10
Making capacity (RMS value)		Α	90
Breaking capacity at voltage			
	440V	Α	72
	500V	Α	72
	690V	Α	71
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
	Ith	W	1.6
	AC-3	W	0.2
Tightening torque for terminals			
-	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.1
	max	lbin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
wax number of wifes simultaneously conflectable		INI.	۷



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Conductor section			
	AWG/Kcmil		
	max		10
	Flexible w/o lug conductor section		
	min	mm²	1
	max	mm²	6
	Flexible c/w lug conductor section		
	min	mm²	1
	The vittle with inscripted and deliver conductors coefficient	mm²	4
	Flexible with insulated spade lug conductor section min	mm²	1
	max	mm²	4
D (IP20 when
Power terminal protect	tion according to IEC/EN 60529		properly wired
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail 35mm
Weight		g	360
Conductor section			
	AWG/kcmil conductor section		
	max		10
Operations			0000000
Mechanical life Electrical life		cycles	20000000
Safety related data		cycles	2000000
	Od according to EN/ISO 13489-1		
r orrormando lovor Bri	rated load		
		cvcies	2000000
	mechanical load	cycles cycles	2000000 20000000
Mirror contats accordir		-	
	mechanical load	-	20000000
EMC compatibility AC coil operating	mechanical load ng to IEC/EN 609474-4-1	cycles	20000000 YES yes
EMC compatibility AC coil operating Rated AC voltage at 5	mechanical load ng to IEC/EN 609474-4-1	-	20000000 YES
EMC compatibility	mechanical load ng to IEC/EN 609474-4-1 0/60Hz	cycles	20000000 YES yes
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz	cycles	20000000 YES yes
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up	V	20000000 YES yes 110
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up min	v V	20000000 YES yes 110
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up min max	V	20000000 YES yes 110
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up min	v V	20000000 YES yes 110
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out	V Wus %Us	20000000 YES yes 110 80 110
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 0/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min	V WUS %US %US	20000000 YES yes 110 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up	V %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min min max	V %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max	V %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min max	V %Us %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min	V %Us %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55 85 110 20
EMC compatibility AC coil operating Rated AC voltage at 50 AC operating voltage	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min max	V %Us %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 50 AC operating voltage	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min max drop-out min max drop-out min max	V %Us %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55 85 110 20
EMC compatibility AC coil operating Rated AC voltage at 50	mechanical load ng to IEC/EN 609474-4-1 O/60Hz of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min max of 50/60Hz coil powered at 60Hz pick-up min max drop-out min max	V %Us %Us %Us %Us %Us %Us	20000000 YES yes 110 80 110 20 55 85 110 20



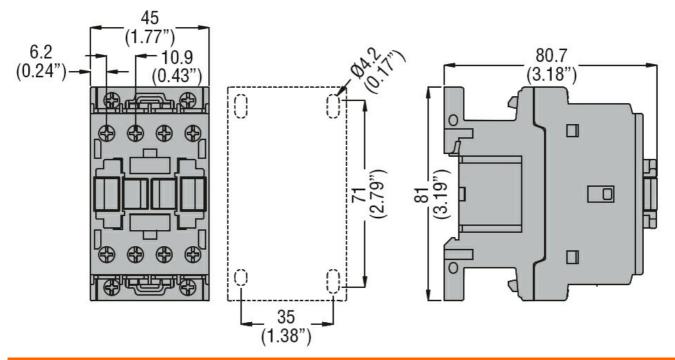


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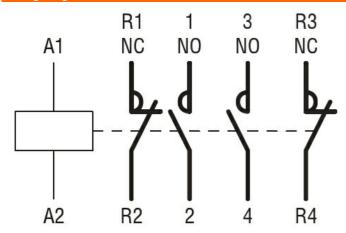
	of 50/60Hz coil powered at 60Hz			_
	,	in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz	riolaling	***	
	of ool 12 coll powered at ool 12	in-rush	VA	75
D'	400°O FOLL-	holding	VA	9
Dissipation at holding	\$20°C 50HZ		W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co				
	in AC			
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			
		min	ms	10
		max	ms	20
	Closing NC			
	· ·	min	ms	14
		max	ms	28
	Opening NC			
	Spanning	min	ms	7
		max	ms	18
UL technical data		тих	1110	10
	for three-phase AC motor			
r dir load odiront (r Ez t	nor times phase he motor	at 480V	Α	7.6
		at 600V	A	9
Yielded mechanical pe	arformana	at 000 v		9
rielueu mechanicai pe				
	for single-phase AC motor	440/400\/	LID	0.0
		110/120V	HP	0.8
	·	230V	HP	2
	for three-phase AC motor			_
		200/208V	HP	3
		220/230V	HP	3
		460/480V	HP	5
		575/600V	HP	7.5
General USE				
	Contactor			
		AC current	Α	25
Ambient conditions				
Temperature				
- h	Operating temperature			
	epotating tomporators	min	°C	-50
		max	°C	70
	Storage temperature	IIIdX		10
	Storage temperature	ma:i.a	°C	60
		min	°C	-60
NA 10's - 1		max	°C	80
Max altitude			m	3000
Resistance & Protection	on			
Pollution degree				3
Dimensions				

ENERGY AND AUTOMATION

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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

cULus

EAC

ETIM classification

ETIM 8.0

BF09T2A110

EC000066 -Power contactor, AC switching