



Product designation			Power contactor
Product type designation			BF09
Contact characteristics		Nie	4
Number of poles Rated insulation voltage Ui IEC/EN		Nr. V	4 690
		kV	6
Rated impulse withstand voltage Uimp Operational frequency		ĸv	0
Operational frequency	min	Hz	25
	min	Hz	400
IEC Conventional free air thermal current Ith	max	A	25
Operational current le		A	25
Operational current le	AC-1 (≤40°C)	А	25
	AC-1 (≤40 C) AC-1 (≤55°C)	A	20
	AC-1 (≤35 C) AC-1 (≤70°C)	A	18
	AC-3 (≤440V ≤55°C)	A	9
	AC-3 (34407 355 C) AC-4 (400V)	A	9 4.9
Rated operational power AC-1 (T≤40°C)	AC-4 (400V)	~	4.5
	230V	kW	9.5
	200V 400V	kW	16
	400V 500V	kW	21
	690V	kW	27
Short-time allowable current for 10s (IEC/EN60947-1)	0001	A	150
Protection fuse		7	100
	gG (IEC)	А	25
	aM (IEC)	A	10
Making capacity (RMS value)		A	90
Breaking capacity at voltage		7.	
Diodiang oup aony at voltage	440V	А	72
	500V	A	72
	690V	A	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	Ibin	1.1
	max	lbin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8
	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2



Conductor section	AWG/Kcmil		
	AWG/KCIIII max		10
	Flexible w/o lug conductor section		10
	min	mm²	1
	max	mm²	6
	Flexible c/w lug conductor section	_	
	min		1
	max Flexible with insulated spade lug conductor section	mm²	4
	riexible with insulated space ug conductor section min	mm²	1
	max	•	4
Dower terminal protect			IP20 when
-	tion according to IEC/EN 60529		properly wired
Mechanical features			
Operating position			
	normal allowable		Vertical plan ±30°
	allowable		±30 Screw / DIN rail
Fixing			35mm
Weight		g	348
Conductor section			
	AWG/kcmil conductor section		
Oneretiene	max		10
Operations Mechanical life		oveloe	20000000
Electrical life		cycles cycles	2000000
Safety related data		Cycles	2000000
	0d according to EN/ISO 13489-1		
	rated load	cycles	2000000
	mechanical load	cycles	2000000
	ng to IEC/EN 609474-4-1		YES
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 6	UHz	V	575
AC operating voltage	of 60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	80
	max		110
	drop-out		
	min		20
	max	%Us	55
AC average coil consu	•		
	of 60Hz coil powered at 60Hz	VA	75
	in-rush holding		75 9
Dissipation at holding		W	2.5
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times		-	
Average time for Us co	ontrol		
	in AC		

in AC

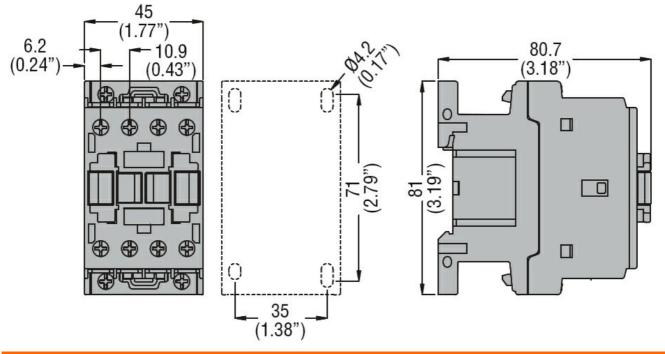
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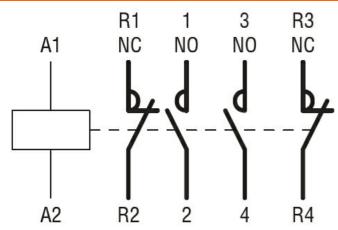
FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 25A, AC COIL 60HZ, 575VAC, 2NO AND 2NC

Closing NO min ms 8 max ms 24 Opening NO min ms 10 max ms 20 20 Closing NC min ms 14 max ms 28 28 Opening NC min ms 7 Max ms 7 38 38 UL technical data min ms 7 Full-load current (FLA) for three-phase AC motor min ms 7 Yielded mechanical performance for single-phase AC motor 110/120V HP 0.8 220/230V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 460/480V HP 5 575/60V HP 7.5 General USE Contactor AC current A 25 Ambient conditions max *C -60 max *C Temperature min °C -60 max *C 60					
max ms 24 Opening NO min ms 10 max ms 20 Closing NC min ms 28 Opening NC min ms 28 Opening NC min ms 7 max ms 18 10 UL technical data max ms 18 UL technical data max ms 18 UL technical data max ms 10 Vielded mechanical performance at 800V A 9 Yielded mechanical performance for three-phase AC motor 10/120V HP 3 220/230V HP 3 220/230V HP 3 for three-phase AC motor 200/208V HP 3 3 General USE Contactor X 25 Ambient conditions max *C 50 Temperature Colarge temperature max *C 50 Max atitude </td <td></td> <td>Closing NO</td> <td></td> <td></td> <td>0</td>		Closing NO			0
Opening NO min ms 10 max max ms 20 Closing NC min ms 14 max ms 28 Opening NC min ms 7 max ms 7 7 max ms 18 7 UL technical data ms 7.6 7 Full-load current (FLA) for three-phase AC motor at 480V A 7.6 for single-phase AC motor at 600V A 9 Yielded mechanical performance for three-phase AC motor 110/120V HP 0.8 220/230V HP 2					
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max ms 20 Closing NC min ms 14 max ms 28 Opening NC min ms 18 UL technical data rmax ms 18 Full-load current (FLA) for three-phase AC motor at 480V A 7.6 4600V A 9 9 Yielded mechanical performance for single-phase AC motor 110/120V HP 0.8 230V HP 2 2 6 110/20V HP 3 220/203V HP 3 220/203V HP 3 220/203V HP 3 220/203V HP 3 220/203V HP 3 460/480V HP 5 General USE Contactor AC current A 25 Ambient conditions max *C 70 Temperature min *C -50 max *C 70 100 Storag		Opening NO			10
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Opening NC min ms 7 Min ms 7 max ms 18 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 7.6 Yielded mechanical performance at 600V A 9 Yielded mechanical performance for single-phase AC motor HP 0.8 230V HP 2 110/120V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 General USE contactor A 25 Ambient conditions K 25 Temperature Max altitude K 70 Storage temperature min °C 70 Max altitude R 3 3					
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max ms 18 UL technical data		Opening NC			7
UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 7.6 at 600V A 9 Yielded mechanical performance for single-phase AC motor 230V HP 220/208V HP 3 220/208V 460/480V HP 3 460/480V HP 3 460/480V HP 575/600V HP 7 5 General USE Contactor Arbient conditions X Temperature Min Operating temperature min Storage temperature min max °C Max attitude m Resistance & Protection X Pollution degree 3					
Itell-load current (FLA) for three-phase AC motor at 480V A 7.6 at 480V A 9 Yielded mechanical performance for single-phase AC motor 110/120V HP 0.8 200/208V HP 2 for three-phase AC motor 200/208V HP 3 Ad60/480V HP 5 Ad60/480V HP 5 Adecurrent A 25 Adecurrent <th< td=""><td></td><td></td><td>max</td><td>ms</td><td>18</td></th<>			max	ms	18
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at 600V A 9 Yielded mechanical performance for single-phase AC motor 110/120V HP 0.8 230V HP 2 110/120V HP 0.8 for three-phase AC motor 200/208V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 460/480V HP 5 575/600V HP 7.5 General USE Contactor AC current A 25 Ambient conditions AC current A 25 Ambient conditions A 25 Temperature Operating temperature min °C -50 Max altitude min °C -60 -60 Max altitude min 3 -60 -60	Full-load current (FLA	ior three-phase AC motor			7.0
Yielded mechanical performance for single-phase AC motor 110/120V HP 0.8 230V HP 2 for three-phase AC motor 200/208V HP 3 220/230V HP 3 220/230V HP 3 460/480V HP 5 575/600V HP 7.5 General USE Contactor AC current A 25 Ambient conditions AC current A 25 Temperature Operating temperature min °C -50 max °C 70 Storage temperature min °C -60 Max altitude m 3000 Resistance & Protection 3 400					
for single-phase AC motor 110/120V HP 0.8 230V HP 2 for three-phase AC motor 200/208V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 General USE Contactor HP 7.5 S General USE Contactor AC current A 25 Ambient conditions X X X X Temperature Operating temperature Min °C -50 Max altitude min °C -50 Min Max altitude min °C 80 Min Max altitude min 3 X X			at 600V	A	9
110/120V HP 0.8 230V HP 2 for three-phase AC motor 200/208V HP 3 220/230V HP 3 220/208V HP 3 220/230V HP 3 220/208V HP 3 460/480V HP 5 575/600V HP 7.5 General USE Contactor AC current A 25 Ambient conditions	Yielded mechanical p				
230V HP 2 for three-phase AC motor 200/208V HP 3 220/230V HP 3 220/230V HP 3 220/230V HP 3 2460/480V HP 5 General USE Contactor AC current A 25 Ambient conditions AC current A 25 Ambient conditions Max 25 3 Temperature Operating temperature min °C -50 Max altitude min °C -60 -60 Max altitude m 3000 -600		for single-phase AC motor			
for three-phase AC motor 200/208V HP 3 220/230V HP 3 460/480V HP 5 General USE Contactor AC current A 25 Ambient conditions AC current A 25 Temperature Operating temperature min °C -50 Max altitude min °C -60 Max altitude m 3000 Resistance & Protection 3					
200/208V HP 3 220/230V HP 3 220/230V HP 3 460/480V HP 5 575/600V HP 7.5 General USE Contactor AC current A 25 Ambient conditions Temperature Operating temperature			230V	HP	2
220/230V HP 3 460/480V HP 5 575/600V HP 7.5 General USE Contactor AC current A 25 Ambient conditions		for three-phase AC motor			
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575/600V HP 7.5 General USE Contactor AC current A 25 Ambient conditions					
General USE AC current A 25 Ambient conditions Temperature min °C -50 Max °C 70 Storage temperature min °C -60 -60 Max altitude m 3000 Resistance & Protection 3					
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AC current A 25 Ambient conditions Temperature Operating temperature Min °C -50 max °C 70 Storage temperature min °C -60 Max altitude m 3000 Resistance & Protection Pollution degree 3	General USE				
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Storage temperature min °C -60 max °C 80 Max altitude m 3000 Resistance & Protection Pollution degree 3			min	°C	-50
min max°C °C-60 80Max altitudem3000Resistance & ProtectionPollution degree3			max	°C	70
min max°C °C-60 80Max altitudem3000Resistance & ProtectionPollution degree3		Storage temperature			
Max altitudem3000Resistance & Protection3			min	°C	-60
Resistance & Protection Pollution degree 3			max	°C	80
Pollution degree 3	Max altitude			m	3000
Pollution degree 3	Resistance & Protect	ion			
	Pollution degree				3





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		EC000066 - Power contactor, AC switching