





Product designation			Power contactor
Product type designation			BF09
Contact characteristics		N I	2
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		1.1-	0.5
	min	Hz	25
IFO Commentional from a six the arread account the	max	Hz	400
IEC Conventional free air thermal current Ith		Α	25
Operational current le	AO 4 (440°O)	Δ.	0.5
	AC-1 (≤40°C)	A	25
	AC-1 (≤55°C)	A	20
	AC-1 (≤70°C)	A	18
	AC-3 (≤440V ≤55°C)	A	9
D. I. J.	AC-4 (400V)	Α	4.9
Rated operational power AC-3 (T≤55°C)	0001/		2.2
	230V	kW	2.2
	400V	kW	4.2
	415V	kW	4.5
	440V	kW	4.8
	500V	kW	5.5
D-t1	690V	kW	7.5
Rated operational power AC-1 (T≤40°C)	0001	1-107	٥.5
	230V	kW	9.5
	400V	kW	16
	500V 690V	kW kW	21 27
IEC may current to in DC1 with L/D < 1 mg with 1 notes in paries	090 V	KVV	
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	<0.417	۸	4.5
	≤24V 48V	A	15
	46 V 75 V	A A	13 12
	110V	A	6
	220V	A	<b>0</b>
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	220 V		
120 max current le in DOT with E/N 3 mis with 2 poles in series	≤24V	۸	18
	≤24∨ 48V	A A	18
	75V	A	17
	110V	A	12
	220V	A	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	220 V		<u> </u>
TEO THAN GUITOR TO IT DO I WILL ETC = THIS WILL S POICS IT SCIES	≤24V	Α	20
	48V	A	20
	75V	A	20
	110V	A	15
	1100	7.	.0





	220V	Α	10	
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series				
	≤24V	Α	20	
	48V	Α	20	
	75V	Α	20	
	110V	Α	16	
	220V	Α	12	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series				
	≤24V	Α	10	
	48V	Α	9	
	75V	Α	8	
	110V	Α	2	
	220V	Α	_	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series				
	≤24V	Α	13	
	48V	Α	11	
	75V	Α	10	
	110V	Α	7	
	220V	Α	2	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series				
	≤24V	Α	15	
	48V	Α	15	
	75V	Α	13	
	110V	Α	11	
	220V	Α	6	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series				
·	≤24V	Α	15	
	48V	Α	15	
	75V	Α	15	
	110V	Α	12	
	220V	Α	7	
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)			-	
	lth	W	1.6	
	AC-3	W	0.2	
Tightening torque for terminals			<u> </u>	
2 2 4	min	Nm	1.5	
	max	Nm	1.8	
	min	lbin	1.1	
	max	lbin	1.5	
Tightening torque for coil terminal			- · · <del>-</del>	
	min	Nm	0.8	
	max	Nm	1	
	min	lbin	0.8	
			5.0	



		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	1110/14			
	AWG/Kcmil			4.0
	Clavible w/o live an diretor postion	max		10
	Flexible w/o lug conductor section	min	mama <sup>2</sup>	1
		min	mm² mm²	1 6
	Flexible c/w lug conductor section	max	111111	0
	r lexible 6/w lug corluction section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			•
	r loxible mar inediated opade lag confederer cooler	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	358
Conductor section				
	AWG/kcmil conductor section			
A 10	and the second s	max		10
Auxiliary contact chara Thermal current Ith	acteristics		A	10
	aignation		<u> </u>	10 A600 B600
IEC/EN 60947-5-1 de	•		A	A600 - P600
IEC/EN 60947-5-1 de	•	2201/		A600 - P600
IEC/EN 60947-5-1 de	•	230V	A	A600 - P600 3
IEC/EN 60947-5-1 de	•	400V	A A	A600 - P600 3 1.9
IEC/EN 60947-5-1 de Operating current AC	15		A	A600 - P600 3
IEC/EN 60947-5-1 de Operating current AC	15	400V 500V	A A A	3 1.9 1.4
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V	A A	A600 - P600 3 1.9
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V 500V 110V	A A A	3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V 500V 110V 24V	A A A	3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V 500V 110V	A A A	3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V 500V 110V 24V 48V	A A A A	3 1.9 1.4 5.7 5.7
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V 500V 110V 24V 48V 60V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V 500V 110V 24V 48V 60V 110V	A A A A A	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25
IEC/EN 60947-5-1 de Operating current AC  Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1
IEC/EN 60947-5-1 de Operating current AC  Operating current DC  Operating current DC  Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC  Mechanical life	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC  Electrical life	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 20000000 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 20000000 20000000 yes
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600  3 1.9 1.4  5.7  5.7 2.9 2.3 1.25 1.1 0.55 0.2  20000000 20000000 20000000



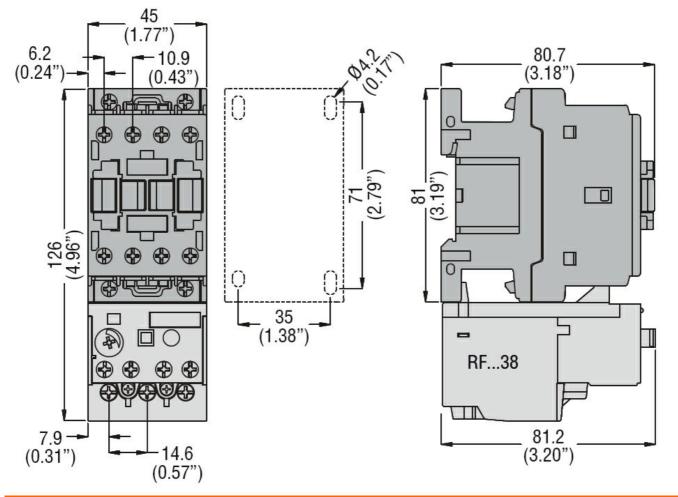


Rated AC voltage at 60Hz		V	230
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up		0/11	
	min	%Us	80
dana aut	max	%Us	110
drop-out		0/116	20
	min	%Us %Us	20 55
AC average coil consumption at 20°C	max	/605	55
of 60Hz coil powered at 60Hz			
or our iz con powered at our iz	in-rush	VA	75
	holding	VA	9
Dissipation at holding ≤20°C 50Hz	nolang	W	2.5
Max cycles frequency		• • • • • • • • • • • • • • • • • • • •	2.0
Mechanical operation		cycles/h	3600
Operating times		3, 5.55/11	
Average time for Us control			
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			
	min	ms	7
III de la stantina	max	ms	18
UL technical data			
Full-load current (FLA) for three-phase AC motor	ot 400\/	۸	7.0
	at 480V	A	7.6
Wielded machanical performance	at 600V	Α	0.375
Yielded mechanical performance			
for single-phase AC motor	110/120V	HP	0.75
	230V	пе HP	2
for three-phase AC motor	230 V	1 11	<u></u>
ioi tillee-pilase Ao illotoi	200/208V	HP	3
	220/230V	HP	3
	460/480V	HP	5
	575/600V	HP	7.5
General USE			
Contactor			
	AC current	Α	25
Auxiliary contacts	· .		
·	AC voltage	V	600
	AC current	Α	10
	DC voltage	V	250
	DC current	Α	1
	DC current		•
Short-circuit protection fuse, 600V	DC current		·



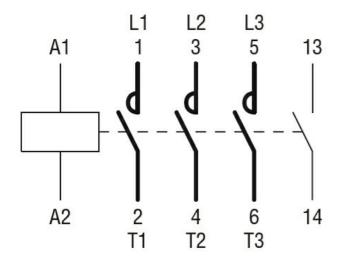


	Short circuit current	kA	100
	Fuse rating	Α	30
	Fuse class		J
Standard fault			·
	Short circuit current	kA	5
	Fuse rating	Α	60
Contact rating of auxiliary contacts according to UL			A600 - P600
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimensions			



Wiring diagrams





## Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60335-1

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