



			•
Product designation			Power contactor
Product type designation			BF09
Contact characteristics			
Number of poles		Nr.	3
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-3 (T≤55°C)			
	230V	kW	2.2
	400V	kW	4.2
	415V	kW	4.5
	440V	kW	4.8
	500V	kW	5.5
	690V	kW	7.5
Rated operational power AC-1 (T≤40°C)			
	230V	kW	9.5
	400V	kW	16
	500V	kW	21
	690V	kW	27
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	15
	48V	Α	13
	75V	Α	12
	110V	Α	6
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
·	≤24V	Α	18
	48V	Α	18
	75V	Α	17
	110V	Α	12
	220V	Α	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
•	≤24V	Α	20
	48V	Α	20
	75V	Α	20
	110V	Α	15
	• •	-	-



	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	220 V		-
The max same it is in 200 200 with E/X = 10ms with 6 poics in somes	≤24V	Α	15
	48V	Α	15
	75V	A	13
	110V	A	11
	220V	A	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		0
TEC Max current le in DC3-DC3 with E/N = 13ms with 4 poles in series	≤24V	Α	15
	324 V 48 V	A	15
	75V	A	15
	110V	A	12
	220V	A	7
Short time allowable current for 100 (IEC/ENG0047.1)	220 V		150
Short-time allowable current for 10s (IEC/EN60947-1)		A	130
Protection fuse	~C (IEC)	۸	0.5
	gG (IEC)	A	25
Malian and it (DMO at a)	aM (IEC)	A	10
Making capacity (RMS value)		Α	90
Breaking capacity at voltage			70
	440V	A	72
	500V	A	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	lbin	0.8





CONTACTEUR BF09, 3P+1NO, 9A AC3, 230V 50/60HZ - IEC/EN/BS 60335-1

		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 ²	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		Α	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

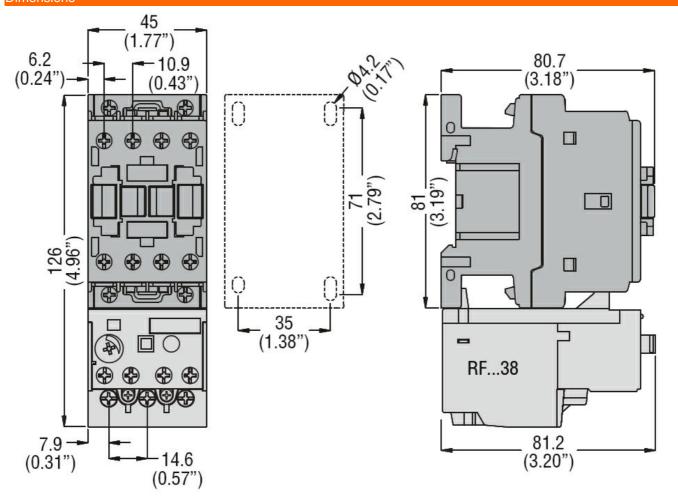


ENERGY AND AUTOMATION

Rated AC voltage a				V	230
AC operating voltage	_				
	of 60Hz coil powered at 6				
	р	oick-up		0/11	
			min	%Us	80
	_	lt	max	%Us	110
	a	Irop-out		0/116	20
			min	%Us %Us	20
C average soil se	noumntion at 20°C		max	%US	55
C average con co	nsumption at 20°C	2011-			
	of 60Hz coil powered at 6	JUHZ	in-rush	VA	75
			holding	VA VA	9
Dissipation at haldi	ng <20°C FOLI-		noluling	W	
Dissipation at holdi	_			VV	2.5
Max cycles frequer				ovoloo/b	2600
Mechanical operati	OH			cycles/h	3600
Operating times	c control				
verage time for U					
	in AC	Nosina NO			
	C	Closing NO	!		0
			min	ms ms	8
		On an in a NO	max	ms	24
	C	Opening NO			40
			min	ms	10
		Nacina NC	max	ms	20
	C	Closing NC	min		4.4
			min	ms	14
		On an in a NC	max	ms	28
	C	Opening NC	min		7
			min	ms	7 18
JL technical data			max	ms	10
	LA) for three-phase AC motor				
dii-ioad current (F	LA) for timee-phase AC motor		at 480V	٨	7.6
			at 600V	A A	0.375
/ialdad machaniaa	l porformanco		at 000 v	A	0.373
'ielded mechanica	for single-phase AC moto	۲.			
	for single-phase AC mold	ונ	110/120V	HP	0.75
			230V	HP	2
	for three phase AC mater		230 V	ПГ	
	for three-phase AC motor	I	200/208V	HP	3
			200/208V 220/230V	HP	3
			460/480V	HP	3 5
			575/600V	HP HP	5 7.5
General USE			373/0000	ПР	1.5
DENEIAI UOE	Contactor				
	Contactor		AC current	٨	25
	Auxiliant contacts		AC current	Α	25
	Auxiliary contacts		A C	17	600
			AC voltage	V	600
			AC current	A	10
			DC voltage	V	250
Chart alreadt	tion from 600V		DC current	Α	1
Short-circuit protec					
	High fault				



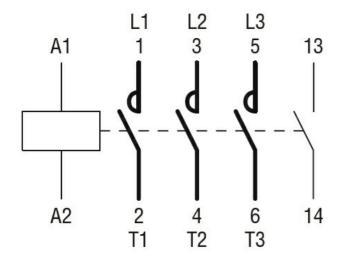
	Short circuit current	kA	100
	Fuse rating	Α	30
	Fuse class		J
Standard fault			
	Short circuit current	kA	5
	Fuse rating	Α	60
Contact rating of auxiliary contacts according to UL			A600 - P600
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			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



Wiring diagrams



ENERGY AND AUTOMATION



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