



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)	A	25
	AC-1 (≤55°C)	A	20
	AC-1 (≤70°C)	A	18
	AC-3 (≤440V ≤55°C)	A	9
	AC-4 (400V)	A	4.9
Rated operational power AC-3 (T≤55°C)	2201/	1.1.1.7	2.2
	230V 400V	kW	2.2
	400V 415V	kW kW	4.2
	415V 440V	kw	4.5 4.8
	440V 500V	kW	4.0 5.5
	690V	kW	7.5
Rated operational power AC-1 (T≤40°C)	0001		1.5
	230V	kW	9.5
	400V	kW	16
	500V	kW	21
	690V	kW	27
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	≤24V	А	15
	48V	A	13
	75V	A	12
	110V	А	6
	220V	А	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	18
	48V	А	18
	75V	А	17
	110V	А	12
	220V	А	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	20
	48V	А	20
	75V	А	20
	110V	А	15



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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 60HZ, 230VAC, 1NC AUXILIARY CONTACT

	220V	А	10	
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series				
	≤24V	Α	20	
	48V	А	20	
	75V	А	20	
	110V	А	16	
	220V	А	12	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series				
	≤24V	А	10	
	48V	А	9	
	75V	А	8	
	110V	A	2	
	220V	A	_	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	2201			
TEC max current le in DC5-DC5 with E/IC3 T5ms with 2 poles in series	≤24V	٨	13	
	≤24V 48V	A		
		A	11	
	75V	A	10	
	110V	A	7	
	220V	A	2	
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series				
	≤24V	А	15	
	48V	А	15	
	75V	А	13	
	110V	А	11	
	220V	А	6	
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series				
	≤24V	А	15	
	48V	А	15	
	75V	А	15	
	110V	А	12	
	220V	А	7	
Short-time allowable current for 10s (IEC/EN60947-1)		А	150	
Protection fuse				
	gG (IEC)	А	25	
	aM (IEC)	A	10	
Making capacity (RMS value)		A	90	
Breaking capacity at voltage		7.	00	
Eleaning oupdoiry at rollago	440V	А	72	
	440V 500V	A	72 72	
	690V		72 71	
	0907	A		
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	



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 60HZ, 230VAC, 1NC AUXILIARY CONTACT

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Max number of wires	simultaneously connectable	max	Ibin Nr.	0.74
Conductor section			INF.	2
Conductor section	AWG/Kcmil			
	AWG/RCIIII	may		10
	Flexible w/o lug conductor section	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	max		0
	The side of white conductor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	max		т
		min	mm²	1
		max	mm²	4
		max		IP20 when
Power terminal protect	ction according to IEC/EN 60529			properly wired
Mechanical features				p
Operating position				
		normal		Vertical plan
		allowable		±30°
				Screw / DIN rai
Fixing				35mm
Weight			g	352
Conductor section			-	
	AWG/kcmil conductor section			
		max		10
		mux		
Auxiliary contact chara	acteristics	Шах		
Auxiliary contact chara Thermal current Ith	acteristics	Ших	A	10
		IIIda	A	
Thermal current Ith	esignation		A	10
Thermal current lth IEC/EN 60947-5-1 de	esignation	230V	A 	10
Thermal current lth IEC/EN 60947-5-1 de	esignation			10 A600 - P600
Thermal current lth IEC/EN 60947-5-1 de	esignation	230V	A	10 A600 - P600 3
Thermal current lth IEC/EN 60947-5-1 de	esignation 15	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 15	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 15 12	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V 110V	A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V	A A A A	10 A600 - P600 3 1.9 1.4 5.7
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V 48V	A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V 48V 60V	A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V 48V 60V 110V	A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation 15 12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A Cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life	esignation 15 12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation 15 12 13	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A Cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation 15 12	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 2000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation 15 12 13 0d according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 2000000 2000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	esignation 15 12 13 Od according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 2000000 2000000 2000000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	esignation 15 12 13 0d according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	10 A600 - P600 3 1.9 1.4 5.7 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 2000000 2000000



BF0901A23060 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 60HZ,

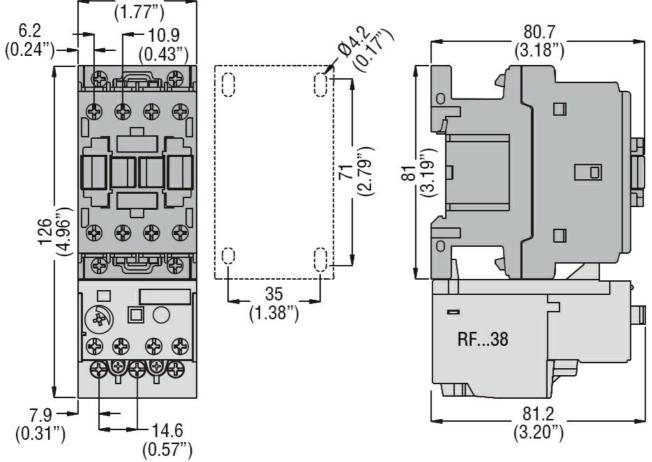
230VAC, 1NC AUXILIARY CONTACT

AC operating voltage	Ηz		V	230
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out	min	0/110	20
		min	%Us %Us	20 55
AC average coil consum	ntion at 20°C	max	7005	55
-	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding ≤2	20°C 50Hz		W	2.5
Max cycles frequency				2.0
Mechanical operation			cycles/h	3600
Operating times			,	
Average time for Us con	trol			
-	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	-	7
		min max	ms ms	7 18
JL technical data		IIIdA	1113	10
	or three-phase AC motor			
		at 480V	А	7.6
				110
		at 600V		0.375
/ielded mechanical perf	ormance	at 600V	A	0.375
		at 600V		0.375
	ormance for single-phase AC motor	at 600V 110/120V		0.375
			A	
		110/120V	A HP	0.75
	for single-phase AC motor	110/120V	A HP	0.75
	for single-phase AC motor	110/120V 230V 200/208V 220/230V	A HP HP HP HP	0.75 2 3 3
	for single-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V	A HP HP HP HP HP	0.75 2 3 3 5
	for single-phase AC motor	110/120V 230V 200/208V 220/230V	A HP HP HP HP	0.75 2 3 3
General USE	for single-phase AC motor for three-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V	A HP HP HP HP HP	0.75 2 3 3 5
General USE	for single-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V 575/600V	A HP HP HP HP HP	0.75 2 3 3 5 7.5
General USE	for single-phase AC motor for three-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V	A HP HP HP HP HP	0.75 2 3 3 5
General USE	for single-phase AC motor for three-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	A HP HP HP HP HP A	0.75 2 3 3 5 7.5 25
General USE	for single-phase AC motor for three-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage	A HP HP HP HP HP A V	0.75 2 3 3 5 7.5 25 600
General USE	for single-phase AC motor for three-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current	A HP HP HP HP HP A V A	0.75 2 3 3 5 7.5 25 600 10
General USE	for single-phase AC motor for three-phase AC motor	110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current DC voltage	A HP HP HP HP HP HP V A V	0.75 2 3 3 5 7.5 25 600 10 250
General USE	for single-phase AC motor for three-phase AC motor Contactor Auxiliary contacts	110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current AC voltage AC current	A HP HP HP HP HP A V A	0.75 2 3 3 5 7.5 25 600 10



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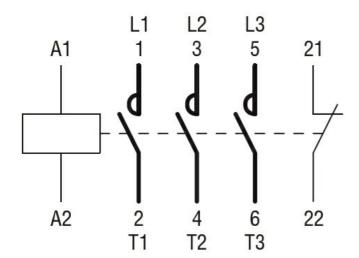
		Short circuit current	kA	100
		Fuse rating	А	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	А	60
Contact rating of au	xiliary contacts according to UL			A600 - P600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ction			
Pollution degree				3
Dimensions				
	45			
r=				



Wiring diagrams

BF0901A23060





Certifications and compliance

Comp	liance

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