



Product designation			Power contactor
Product type designation Contact characteristics			BF09
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		ιτν	0
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	Пах	A	25
Operational current le		7.	20
	AC-1 (≤40°C)	А	25
	AC-1 (≤55°C)	A	20
	AC-1 (≤70°C)	A	18
	AC-3 (≤440V ≤55°C)	A	9
	AC-4 (400V)	А	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 $L/R \le 1$ ms with 1 poles in series			
	≤24V	А	15
	48V	А	13
	75V	А	12
	110V	A	6
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	A	18
	48V	A	18
	75V	A	17
	110V	A	12
	220V	A	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	-0.11		20
	≤24V	A	20
	48V	A	20
	75V	A	20
	110V	A	15



BF0910A230 CONTACTEUR BF09, 3P+1NO, 9A AC3, 230V 50/60HZ

	220V	А	10
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	А	20
	48V	А	20
	75V	А	20
	110V	А	16
	220V	А	12
IEC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series			
	≤24V	А	10
	48V	А	9
	75V	А	8
	110V	А	2
	220V	А	_
IEC max current le in DC3-DC5 with L/R \leq 15ms with 2 poles in series			
	≤24V	А	13
	48V	A	11
	75V	A	10
	110V	A	7
	220V	A	2
IEC max current le in DC3-DC5 with L/R \leq 15ms with 3 poles in series	220 V	Λ	L
The max current le in DC3-DC3 with $L/R \le 15$ ms with 5 poles in series	≤24V	۸	15
	≤24V 48V	A	15
	48V 75V	A	15
		A	13
	110V	A	11
	220V	Α	6
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series			
	≤24V	A	15
	48V	A	15
	75V	A	15
	110V	A	12
	220V	A	7
Short-time allowable current for 10s (IEC/EN60947-1)		Α	150
Protection fuse			
	gG (IEC)	А	25
	aM (IEC)	А	10
Making capacity (RMS value)		А	90
Breaking capacity at voltage			
	440V	А	72
	500V	А	72
	690V	А	71
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			-
	Ith	W	1.6
	AC-3	Ŵ	0.2
Tightening torque for terminals		••	•- -
	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
		Ibin	1.5
Tightoning torque for coil terminal	max	חומו	1.0
Tightening torque for coil terminal		N lun-	0.9
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8



Maximum		max	lbin	0.74
	simultaneously connectable		Nr.	2
Conductor section	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section	max		10
		min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
	5	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Power terminal prote	ction according to IEC/EN 60529			IP20 when
· · · ·	clion according to IEC/EN 00323			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rai
			~	35mm
Weight Conductor section			g	358
Conductor section	AWG/kcmil conductor section			
	AWG/KCMII Conductor Section	may		10
Auxiliary contact char	ractoristics	max		10
Thermal current Ith			А	10
IEC/EN 60947-5-1 de	esignation		Α	A600 - P600
Operating current AC				7,000 1,000
		230V	А	3
			<i>/</i> \	0
			А	1.9
		400V	A A	1.9 1.4
Operating current DC	212			1.9 1.4
Operating current DC	212	400V 500V	Α	1.4
		400V		
		400V 500V	Α	1.4
		400V 500V 110V	A	1.4 5.7
		400V 500V 110V 24V	A A A	1.4 5.7 5.7
		400V 500V 110V 24V 48V	A A A A	1.4 5.7 5.7 2.9
		400V 500V 110V 24V 48V 60V 110V 125V	A A A A A	1.4 5.7 5.7 2.9 2.3 1.25 1.1
		400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A	1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Operating current DC		400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A A	1.4 5.7 5.7 2.9 2.3 1.25 1.1
Operating current DC		400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operations Mechanical life		400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A Cycles	1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current DC Operations Mechanical life Electrical life		400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operations Mechanical life Electrical life Safety related data	213	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A Cycles	1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current DC Operations Mechanical life Electrical life Safety related data		400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A Cycles cycles	1.4 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000
Operating current DC Operations Mechanical life Electrical life Safety related data	213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A Cycles cycles	1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 2000000
Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	213 10d according to EN/ISO 13489-1 me	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A Cycles cycles	1.4 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000
	213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A Cycles cycles	1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 2000000

BF0910A230



CONTACTEUR BF09, 3P+1NO, 9A AC3, 230V 50/60HZ

Rated AC voltage at 5	0/60Hz		V	230
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/11-	0.0
		min	%Us	80
	drop-out	max	%Us	110
	urop-out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz	max	/000	
	pick-up			
		min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consu				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz	in wich	\/A	75
		in-rush holding	VA VA	75 9
Dissipation at holding	<20°C 50H-	noiuing	W	2.5
Max cycles frequency	S20 C 50HZ		VV	2.5
Mechanical operation			cycles/h	3600
Operating times			0,0100/11	0000
	ontrol			
	ontrol in AC			
	in AC			
		min	ms	8
	in AC	min max	ms ms	8 24
	in AC			
	in AC Closing NO	max	ms ms	24 10
	in AC Closing NO Opening NO	max	ms	24
	in AC Closing NO	max min max	ms ms ms	24 10 20
	in AC Closing NO Opening NO	max min max min	ms ms ms	24 10 20 14
	in AC Closing NO Opening NO Closing NC	max min max	ms ms ms	24 10 20
	in AC Closing NO Opening NO	max min max min max	ms ms ms ms	24 10 20 14 28
Average time for Us o	in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms	24 10 20 14 28 7
Average time for Us o	in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms	24 10 20 14 28
Average time for Us control of the second se	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	24 10 20 14 28 7
Average time for Us co	in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms ms ms	24 10 20 14 28 7 18
Average time for Us co	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms ms	24 10 20 14 28 7 18 7.6
Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC opening NC	max min max min max min max	ms ms ms ms ms ms	24 10 20 14 28 7 18
Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC opening NC opening NC erformance	max min max min max min max at 480V	ms ms ms ms ms ms	24 10 20 14 28 7 18 7.6
Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms A A	24 10 20 14 28 7 18 7.6 0.375
Average time for Us control of the second se	in AC Closing NO Opening NO Closing NC Opening NC opening NC opening NC erformance	max min max min max min max at 480V	ms ms ms ms ms ms	24 10 20 14 28 7 18 7.6
Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC opening NC opening NC erformance	max min max min max min max at 480V at 600V	ms ms ms ms ms A A HP	24 10 20 14 28 7 18 7.6 0.375 0.75
Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Closing NC Opening NC opening NC opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms A A HP	24 10 20 14 28 7 18 7.6 0.375 0.75

BF0910A230

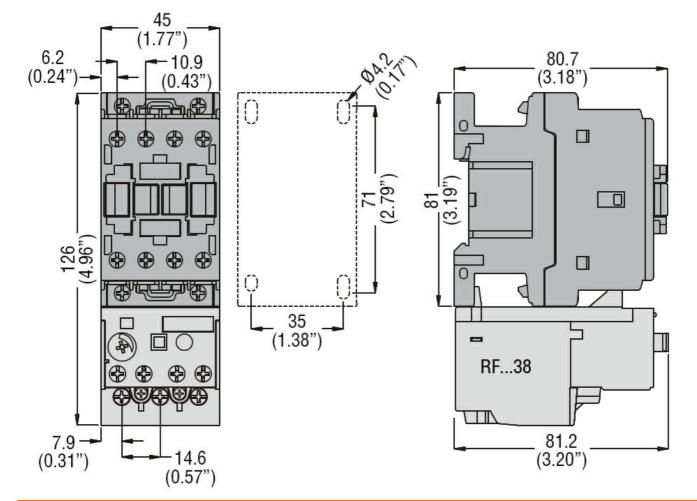


BF0910A230 CONTACTEUR BF09, 3P+1NO, 9A AC3, 230V 50/60HZ

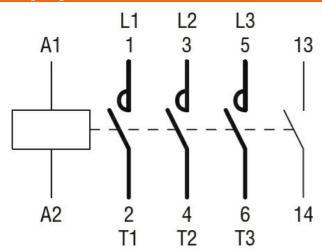
		220/230V	HP	3
		460/480V	HP	5
		575/600V	HP	7.5
General USE				
	Contactor			
		AC current	А	25
	Auxiliary contacts			
	-	AC voltage	V	600
		AC current	А	10
		DC voltage	V	250
		DC current	А	1
Short-circuit protec	tion fuse, 600V			
	High fault			
	-	Short circuit current	kA	100
		Fuse rating	А	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	А	60
Contact rating of auxiliary contacts according to UL				A600 - P600
Ambient conditions				
Temperature				
	Operating temperature		° ^	50
		min	°C	-50
		max	°C	70
	Storage temperature		° 0	00
		min	°C	-60
Mary altitude		max	°C	80
Max altitude			m	3000
Resistance & Prote				<u>^</u>
Pollution degree				3
Dimensions				



BF0910A230 CONTACTEUR BF09, 3P+1NO, 9A AC3, 230V 50/60HZ



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
The state	an and the described in this described as a distribution of the distribution of an interval theory. The description of the description



	cULus	
	EAC	
ETIM classification		

ETIM 8.0

EC000066 -Power contactor, AC switching