





Product designation Product type designation			Power contactor 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





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	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	A	10
	110V	A	7
	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	22U V		
TEC max current le in DO3-DO3 with E/R > 13ms with 3 poles in series	~2A\/	۸	15
	≤24V 48V	A	15 15
		A	15
	75V	A	13
	110V	A	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)			
. The storpasson por polo (arolago raido)	lth	W	1.6
	AC-3	W	0.2
Tightening torque for terminals	7.0 0	V V	V. <u>~</u>
rightening torque for terminals	min	Nm	1.5
		Nm	1.8
	max		
	min	lbin Ibin	1.1
Tightonian tourns for sail towning!	max	lbin	1.5
Tightening torque for coil terminal	•		0.0
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8





		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	AND #4			
	AWG/Kcmil			4.0
	Florible w/e lug conductor coetion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	IIIax	111111	0
	r lexible 6/W lug conductor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	max		•
		min	mm²	1
		max	mm²	4
				IP20 when
Power terminal prote	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	370
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact char		max		
Thermal current Ith	racteristics	max	A	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation	max	A	
Thermal current Ith IEC/EN 60947-5-1 de	esignation			10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V	A	10 A600 - P600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	esignation 215	230V	A	10 A600 - P600
Thermal current lth IEC/EN 60947-5-1 de Operating current AC	esignation 215	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V	A A	10 A600 - P600 3 1.9
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V 500V	A A A	10 A600 - P600 3 1.9 1.4
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V 500V 110V	A A A	10 A600 - P600 3 1.9 1.4 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V 500V 110V 24V 48V	A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V 500V 110V 24V 48V 60V	A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V	A A A A A	10 A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V 125V	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
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	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
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V 125V	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
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	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	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A 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
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	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 Operating current DC Electrical life Safety related data	esignation 215 212 213	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A 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
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Electrical life Safety related data	esignation 215	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	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 20000000 2000000
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Electrical life Safety related data	esignation 315 312 313 10d 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 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 20000000 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 Performance level B	esignation 212 213 10d 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 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 20000000 20000000 20000000
Thermal current lth IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Electrical life Safety related data Performance level B	esignation 315 312 313 10d 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 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 20000000 20000000





Rated AC voltage at 5	50/60Hz		V	400
AC operating voltage	0,001.12		•	
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up		0/11	
		min	%Us	85
	duan aut	max	%Us	110
	drop-out	min	0/110	20
		min	%Us %Us	55
AC average coil cons	umption at 20°C	max	/005	33
AU average con cons	of 50/60Hz coil powered at 50Hz			
	of 30/00112 coil powered at 30HZ	in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz	nolaling	٧, ١	
	01 00/001 12 0011 poworod at 001 12	in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz			
	5. 55.1 <u>2</u> 55.1 po 115.1 54 43 55.1 <u>2</u>	in-rush	VA	75
		holding	VA	9
Dissipation at holding	≤20°C 50Hz		W	2.5
Max cycles frequency				
man of old in ordinality				
Mechanical operation			cycles/h	3600
Mechanical operation Operating times			cycles/h	3600
Mechanical operation	ontrol		cycles/h	3600
Mechanical operation Operating times	ontrol in AC		cycles/h	3600
Mechanical operation Operating times	ontrol		cycles/h	
Mechanical operation Operating times	ontrol in AC	min	ms	8
Mechanical operation Operating times	ontrol in AC Closing No	min max		
Mechanical operation Operating times	ontrol in AC	min max IO	ms ms	8 24
Mechanical operation Operating times	ontrol in AC Closing No	min max IO min	ms ms	8 24 10
Mechanical operation Operating times	ontrol in AC Closing No Opening N	min max IO min max	ms ms	8 24
Mechanical operation Operating times	ontrol in AC Closing No	min max IO min max	ms ms ms	8 24 10 20
Mechanical operation Operating times	ontrol in AC Closing No Opening N	min max IO min max C min	ms ms ms ms	8 24 10 20
Mechanical operation Operating times	ontrol in AC Closing No Opening No Closing No	min max IO min max C min max	ms ms ms	8 24 10 20
Mechanical operation Operating times	ontrol in AC Closing No Opening N	min max IC	ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times	ontrol in AC Closing No Opening No Closing No	min max IC min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times Average time for Us of	ontrol in AC Closing No Opening No Closing No	min max IC	ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times Average time for Us of	ontrol in AC Closing No Opening No Closing No Opening No	min max IC min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times Average time for Us of	ontrol in AC Closing No Opening No Closing No	min max IC min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times Average time for Us of	ontrol in AC Closing No Opening No Closing No Opening No	min max IC min max	ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us of the control of the co	ontrol in AC Closing No Opening No Closing No Opening No	min max IO min max IC min max IC at 480V	ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us of	ontrol in AC Closing No Opening No Closing No Opening No open	min max IO min max IC min max IC at 480V	ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us of the second o	ontrol in AC Closing No Opening No Closing No Opening No	min max IO min max IC min max IC at 480V	ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us of the second o	ontrol in AC Closing No Opening No Closing No Opening No open	min max IO min max C min max IC min max IC at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us of the control of the co	ontrol in AC Closing No Opening No Closing No Opening No open	min max IO min max C min max IC min max IC at 480V at 600V	ms ms ms ms ms A A	8 24 10 20 14 28 7 18 7.6 0.375
Mechanical operation Operating times Average time for Us of the second o	ontrol in AC Closing No Opening No Closing No Opening No open	min max IO min max C min max IC min max IC at 480V at 600V	ms ms ms ms ms A A	8 24 10 20 14 28 7 18 7.6 0.375

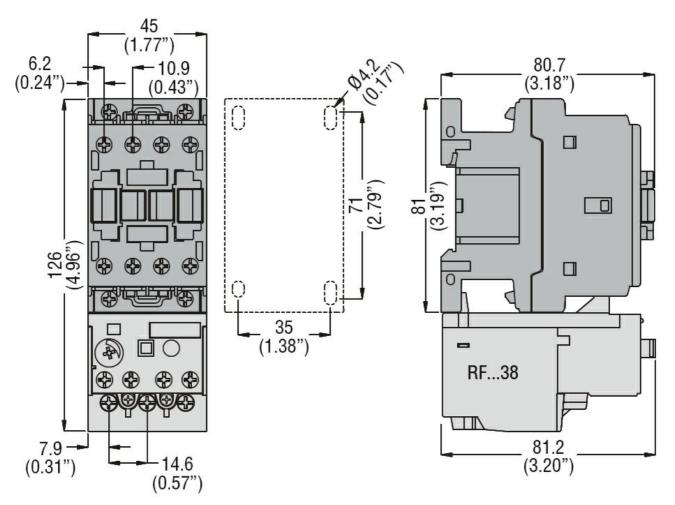




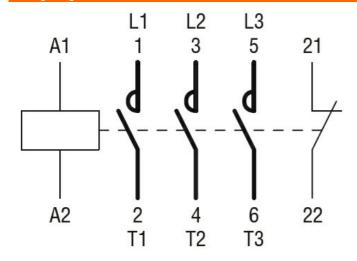
		220/230V	HP	3
		460/480V	HP	5
		575/600V	HP	7.5
General USE				
	Contactor			
		AC current	Α	25
	Auxiliary contacts			
	•	AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	A	1
Short-circuit protect	tion fuse, 600V			
Chart and an protoco	High fault			
	i ligit iddi.	Short circuit current	kA	100
		Fuse rating	A	30
		Fuse class	, ,	J
	Standard fault	1 400 01400		
	Claridard radit	Short circuit current	kA	5
		Fuse rating	A	60
Contact rating of au	xiliary contacts according to UL	r use raining		A600 - P600
Ambient conditions				A000 - F000
Temperature				
remperature				
	Operating temperature		°C	5 0
		min	°C	-50 -70
	<u> </u>	max	٠.	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ction			
Pollution degree				3
Dimensions				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 400VAC, 1NC AUXILIARY CONTACT



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



BF0901A400

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 400VAC, 1NC AUXILIARY CONTACT

CCC	
cULus	
EAC	

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching