





Product designation Product type designation			Power contactor BF09
Contact characteristics			DI 00
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	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 storpasion 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	A1440.04			
	AWG/Kcmil			10
	Clavible w/s live and voter as tion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		min	mm² mm²	1 6
	Flexible c/w lug conductor section	max	111111	0
	r lexible 6/w rug corrudctor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			•
	r loxilote mar integrated opage rag contactor cooler.	min	mm²	1
		max	mm²	4
D	t'			IP20 when
Power terminal protec	etion according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	366
Conductor section				
	AWG/kcmil conductor section			
A 11		max		10
Auxiliary contact chara	acteristics			
The amount of the			۸	4.0
Thermal current Ith	aignation		Α	10 4600 B600
IEC/EN 60947-5-1 de	•		Α	10 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
Operating current ACC	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	A600 - P600 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	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
Operating current ACC	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
Operating current ACC	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 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 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 a			V	400
AC operating voltag	-			
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80
		min max	%Us	110
	drop-out	IIIdx	/603	110
	drop out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	, pick-up			
		min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
C average coil co	nsumption at 20°C			
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
	4-2/2-11	holding	VA	9
	of 50/60Hz coil powered at 60Hz			70
		in-rush	VA	70
	of COLLE poil required of COLLE	holding	VA	6.5
	of 60Hz coil powered at 60Hz	in-rush	VA	75
		holding	VA VA	9
Ni i 4i 4 -		riolaling	V/~	
ilegination at noidi	ng <20°C 50Hz		۱۸/	2.5
	ng ≤20°C 50Hz		W	2.5
Max cycles frequer	ncy			
Nax cycles frequer Nechanical operation	ncy		W cycles/h	
Max cycles frequer Mechanical operation Operating times	on			
Max cycles frequer Mechanical operation Operating times	on			
Max cycles frequer Mechanical operation Operating times	on s control			
Max cycles frequer Mechanical operation Operating times	s control in AC	min		3600
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO	min max	cycles/h	3600
Max cycles frequer Mechanical operation Operating times	s control in AC	max	cycles/h	3600 8 24
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO	max min	cycles/h ms ms ms	3600 8 24 10
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO Opening NO	max	cycles/h ms ms	3600 8 24
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO	max min max	ms ms ms ms	3600 8 24 10 20
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO Opening NO	max min max min	cycles/h ms ms ms ms ms	3600 8 24 10 20
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO Opening NO Closing NC	max min max	ms ms ms ms	3600 8 24 10 20
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO Opening NO	max min max min max	ms ms ms ms ms	3600 8 24 10 20 14 28
Max cycles frequer Mechanical operation Operating times	s control in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms ms	3600 8 24 10 20 14 28 7
Max cycles frequer Mechanical operation Operating times Exverage time for U	s control in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms ms	3600 8 24 10 20 14 28
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data	s control in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms ms	3600 8 24 10 20 14 28 7
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data	s control in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms ms ms	3600 8 24 10 20 14 28 7 18
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data	s control in AC Closing NO Opening NO Closing NC Opening NC	max min max min max at 480V	ms ms ms ms ms ms	3600 8 24 10 20 14 28 7 18
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data Full-load current (F	s control 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	3600 8 24 10 20 14 28 7 18
Max cycles frequer Mechanical operation Deperating times Average time for U JL technical data	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max at 480V	ms ms ms ms ms ms	3600 8 24 10 20 14 28 7 18
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data Full-load current (F	s control in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max at 480V	ms ms ms ms ms ms	3600 8 24 10 20 14 28 7 18
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data Full-load current (F	s control 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	3600 8 24 10 20 14 28 7 18
Max cycles frequer Mechanical operation Departing times Average time for U JL technical data Full-load current (F	s control 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	3600 8 24 10 20 14 28 7 18 7.6 0.375

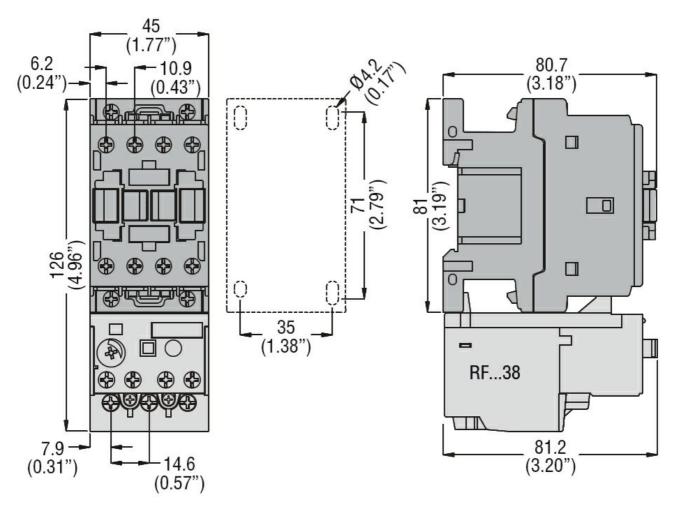




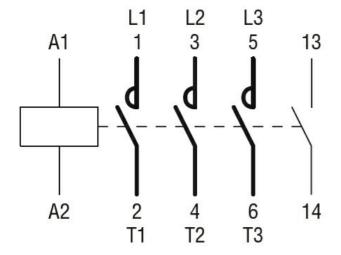
		220/230V	HP	3
		460/480V	HP	5
		575/600V	HP	7.5
General USE				
	Contactor			
		AC current	Α	25
	Auxiliary contacts			
	·	AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protect	tion fuse, 600V			
	High fault			
	· ·	Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	60
Contact rating of 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				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 400VAC, 1NO 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

CCC



BF0910A400

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 400VAC, 1NO AUXILIARY CONTACT

cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching