



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)	А	25
	AC-1 (≤55°C)	А	20
	AC-1 (≤70°C)	А	18
	AC-3 (≤440V ≤55°C)	А	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	A	15
	48V	A	13
	75V	A	12
	110V	A	6
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series	-0.414		4.0
	≤24V	A	18
	48V	A	18
	75V	A	17
	110V	A	12
IEC may aurrent to in DC1 with 1/D < 1mg with 2 nates in series	220V	A	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	~0 AV /	۸	20
	≤24V	A	20
	48V 75V	A	20
	75V	A	20
	110V	А	15



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT

	220V	А	10	
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series				
	≤24V	А	20	
	48V	А	20	
	75V	A	20	
	110V	A	16	
	220V			
	2200	A	12	
IEC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series				
	≤24V	A	10	
	48V	Α	9	
	75V	Α	8	
	110V	А	2	
	220V	А	_	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-			
	≤24V	А	13	
	48V	A	11	
	75V	А	10	
	110V	А	7	
	220V	А	2	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series				
	≤24V	А	15	
	48V	А	15	
	75V	A	13	
	110V	A	11	
	220V	A	6	
IEC max current le in DC3-DC5 with L/R \leq 15ms with 4 poles in series				
	≤24V	A	15	
	48V	Α	15	
	75V	А	15	
	110V	А	12	
	220V	A	7	
Short-time allowable current for 10s (IEC/EN60947-1)		A	150	
Protection fuse		7	100	
FICIECIIOITIUSE		٨	05	
	gG (IEC)	A	25	
	aM (IEC)	A	10	
Making capacity (RMS value)		Α	90	
Breaking capacity at voltage				
	440V	А	72	
	500V	А	72	
	690V	A	71	
Resistance per pole (average value)		mΩ	2.5	
		11122	2.0	
Power dissipation per pole (average value)		147	4.0	
	Ith	W	1.6	
	AC-3	W	0.2	
Tightening torque for terminals				
	min	Nm	1.5	
	max	Nm	1.8	
	min	Ibin	1.1	
	max	Ibin	1.5	
Tightoning torque for coll terminal	Παλ		1.0	
Tightening torque for coil terminal			0.0	
	min	Nm	0.8	
	max	Nm	1	
	min	lbin	0.8	



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT

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Max number of wires	cimultanagusly connectable	max	Ibin Nr.	0.74
	simultaneously connectable		INF.	2
Conductor section	AWG/Kcmil			
	AWG/KCIIII	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	Шал		0
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	Шал		4
	The state with insulated space by conductor section	min	mm²	1
		max	mm²	4
		Пах		IP20 when
Power terminal prote	ection according to IEC/EN 60529			properly wired
Mechanical features				Propony milou
Operating position				
		normal		Vertical plan
		allowable		±30°
				Screw / DIN rai
Fixing				35mm
Weight			g	362
Conductor section			0	
	AWG/kcmil conductor section			
		max		10
Auxiliary contact cha	racteristics			
Thermal current Ith			А	10
EC/EN 60947-5-1 d	esignation			
LO/LIN 00347-3-1 U				A600 - P600
				A600 - P600
Operating current AC		230V	Α	
		230V 400V	A	3
		400V	А	3 1.9
Operating current AC	215			3
	215	400V 500V	A A	3 1.9 1.4
Operating current AC	C15 C12	400V	А	3 1.9
Operating current AC	C15 C12	400V 500V 110V	A A A	3 1.9 1.4 5.7
Operating current AC	C15 C12	400V 500V 110V 24V	A A A	3 1.9 1.4 5.7 5.7
Operating current AC	C15 C12	400V 500V 110V 24V 48V	A A A A	3 1.9 1.4 5.7 5.7 2.9
Operating current AC	C15 C12	400V 500V 110V 24V 48V 60V	A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3
Operating current AC	C15 C12	400V 500V 110V 24V 48V 60V 110V	A A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
Operating current AC	C15 C12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Operating current AC	C15 C12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55
Operating current AC	C15 C12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
Operating current AC Operating current DC Operating current DC	C15 C12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current AC Operating current DC Operating current DC Operations Mechanical life	C15 C12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A 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 AC Operating current DC Operating current DC Operations Mechanical life Electrical life	C15 C12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	C15 C12 C13	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A 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 AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	C15 C12	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A 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 2000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	215 212 213 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	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 2000000 2000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	215 212 213 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 A Cycles cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 2000000 2000000 2000000 2000000
Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	215 212 213 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	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 2000000 2000000



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT

Rated AC voltage at 5	0/60Hz			V	48
AC operating voltage					
	of 50/60Hz coil power	red at 50Hz			
		pick-up			
			min	%Us	80
			max	%Us	110
		drop-out			
			min	%Us	20
			max	%Us	55
	of 50/60Hz coil power				
		pick-up			
			min	%Us	85
			max	%Us	110
		drop-out		o () 1	
			min	%Us	20
			max	%Us	55
AC average coil consu					
	of 50/60Hz coil power	ed at 50Hz	• •	١ / ٨	75
			in-rush	VA	75
			holding	VA	9
	of 50/60Hz coil power	red at 60Hz	in much	١/٨	70
			in-rush	VA VA	70 6.5
	of COLIZ and noward		holding	VA	0.0
	of 60Hz coil powered		in-rush	VA	75
			holding	VA VA	9
Dissipation at holding	<20°C 50H-		noiding	W	2.5
Max cycles frequency	SZU C 50112			vv	2.0
				cycles/h	3600
Mechanical operation				cycles/h	3600
Mechanical operation Operating times	ontrol			cycles/h	3600
Mechanical operation				cycles/h	3600
Mechanical operation Operating times	ontrol in AC	Closing NO		cycles/h	3600
Mechanical operation Operating times		Closing NO	min		
Mechanical operation Operating times		Closing NO		ms	8
Mechanical operation Operating times			min max		
Mechanical operation Operating times		Closing NO Opening NO		ms	8 24
Mechanical operation Operating times			max	ms ms	8
Mechanical operation Operating times		Opening NO	max	ms ms ms	8 24 10
Mechanical operation Operating times			max	ms ms ms	8 24 10
Mechanical operation Operating times		Opening NO	max min max	ms ms ms ms	8 24 10 20
Mechanical operation Operating times		Opening NO	max min max min	ms ms ms ms ms	8 24 10 20 14
Mechanical operation Operating times		Opening NO Closing NC	max min max min	ms ms ms ms ms	8 24 10 20 14 28 7
Mechanical operation Operating times Average time for Us c		Opening NO Closing NC	max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times Average time for Us co UL technical data	in AC	Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms ms	8 24 10 20 14 28 7
Mechanical operation Operating times Average time for Us co UL technical data		Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms ms	8 24 10 20 14 28 7
Mechanical operation Operating times Average time for Us co UL technical data	in AC	Opening NO Closing NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18 7.6
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC) for three-phase AC mo	Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us co UL technical data	in AC) for three-phase AC mo erformance	Opening NO Closing NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18 7.6
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC) for three-phase AC mo	Opening NO Closing NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18 7.6 0.375
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC) for three-phase AC mo erformance	Opening NO Closing NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms A A HP	8 24 10 20 14 28 7 18 7.6 0.375 0.75
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC) for three-phase AC mo erformance for single-phase AC r	Opening NO Closing NC Opening NC	max min max min max min max at 480V at 600V	ms ms 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 co UL technical data Full-load current (FLA)	in AC) for three-phase AC mo erformance	Opening NO Closing NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms A A HP	8 24 10 20 14 28 7 18 7.6 0.375 0.75

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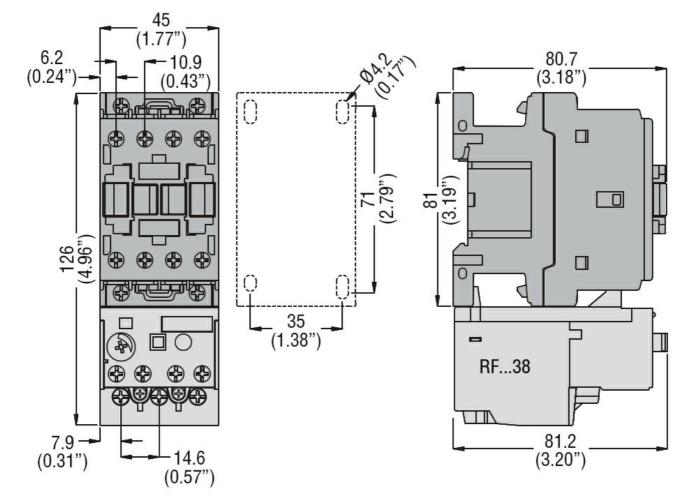
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT

ENERGY AND AUTOMATION				
		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 protection	on 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 auxi	liary contacts according to UL			A600 - P600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			

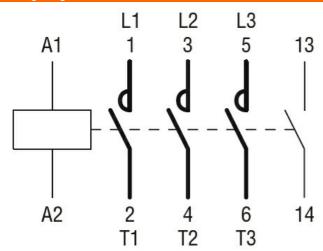
	min	°C	-60	
	max	°C	80	
Max altitude		m	3000	
Resistance & Protection				
Pollution degree			3	
Dimensions				



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 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

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BF0910A048 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT

CULus EAC ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching