



Product designation			Power contactor BGF09
Product type designation Contact characteristics			BGF09
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		κv	0
Operational frequency	min	Hz	25
	min	Hz	400
IEC Conventional free air thermal current Ith	max	<u>п</u> 2 А	20
		A	20
Operational current le		٨	20
	AC-1 (≤40°C)	A	20
	AC-1 (≤55°C)	A	18
	AC-1 (≤70°C)	A	15
	AC-3 (≤440V ≤55°C)	A	9
	AC-4 (400V)	A	4
Rated operational power AC-3 (T≤55°C)	000)/		
	230V	kW	2.2
	400V	kW	4
	415V	kW	4.3
	440V	kW	4.5
	500V	kW	5
	690V	kW	5
Rated operational power AC-1 (T≤40°C)	000)/	1.1.47	0
	230V	kW	8
	400V	kW	14
	500V	kW	16
	690V	kW	22
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series	-0.01		10
	≤24V	A	12
	48V	A	10
	75V	A	4
	110V	A	3
	220V	A	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	A	15
	48V	A	14
	75V	A	9
	110V	A	8
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	<b>.</b>	-	
	≤24V	A	16
	48V	A	16
	75V	A	10
	110V	A	10



## **11BGF0910A048** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT, FASTON TERMINALS

	220V	А	2
EC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	А	16
	48V	А	16
	75V	А	10
	110V	А	10
	220V	A	2
EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 1 poles in series			
	≤24V	A	7
	48V	A	6
	75V	Α	2
	110V	Α	1
	220V	A	_
EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 2 poles in series			
	≤24V	Α	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	A	-
EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 3 poles in series			
	≤24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
$\Gamma_{0}$ where $\Gamma_{0}$ is $\Gamma_{0}$ $\Gamma_{0}$ is $\Gamma_{0}$ in the second secon	220V	A	0,8
EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 4 poles in series	<0.011		4.0
	≤24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	<u>A</u>	0,8
Short-time allowable current for 10s (IEC/EN60947-1)		A	96
Protection fuse			00
	gG (IEC)	A	20
	aM (IEC)	A	10
Making capacity (RMS value)		А	92
Breaking capacity at voltage	4.4017		70
	440V	A	72
	500V	A	72
	690V	<u>A</u>	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	Ith	W	4
T' 1 ( ' ( (	AC-3	W	0.81
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	lbin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	9



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iviax number of wires		max	Ibin	9
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			40
	Elevible/a has see sheeten as stice	max		12
	Flexible w/o lug conductor section	min	mm2	0.75
		min	mm² mm²	0.75 2.5
	Flovible o/w lug conductor costion	max	11111-	2.0
	Flexible c/w lug conductor section	min	mm²	1.5
			mm²	2.5
	Elevible with inculated anode lug conductor acation	max	11111	2.0
	Flexible with insulated spade lug conductor section	min	mm²	1.5
				2.5
		max	mm²	
Power terminal prote	ction according to IEC/EN 60529			IP20 when
Mechanical features				properly wired
Operating position				
		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rai
Fixing				35mm
Weight			g	180
Conductor section			9	100
	AWG/kcmil conductor section			
		max		12
Auxiliary contact char	acteristics	max		12
Thermal current Ith			А	10
IEC/EN 60947-5-1 de	esignation		7.	A600 - Q600
Operating current AC				7.000 0000
		230V	А	3
		200V 400V	A	1.9
		400V 500V	A	1.4
Operating current DC	12	300 V	7	1.7
operating current De	12	110V	А	2.9
	10	1100	A	2.9
Operating current DC				
Operating current DC	,13	<b>℃</b> /\/	٨	20
Operating current DC	,13	24V 48V	A	2.9
Operating current DC	,13	48V	А	1.4
Operating current DC	,13	48V 60V	A A	1.4 1.1
Operating current DC	,13	48V 60V 125V	A A A	1.4 1.1 0.3
Operating current DC	,13	48V 60V 125V 220V	A A A A	1.4 1.1 0.3 0.1
Operating current DC	,13	48V 60V 125V	A A A	1.4 1.1 0.3
Operations	,13	48V 60V 125V 220V	A A A A	1.4 1.1 0.3 0.1 0.6
Operations Mechanical life		48V 60V 125V 220V	A A A A A cycles	1.4 1.1 0.3 0.1 0.6 20000000
Operations Mechanical life Electrical life		48V 60V 125V 220V	A A A A	1.4 1.1 0.3 0.1 0.6
Operations Mechanical life Electrical life Safety related data		48V 60V 125V 220V	A A A A A cycles	1.4 1.1 0.3 0.1 0.6 20000000
Operations Mechanical life Electrical life Safety related data	10d according to EN/ISO 13489-1	48V 60V 125V 220V 600V	A A A A cycles cycles	1.4 1.1 0.3 0.1 0.6 20000000 500000
Operations Mechanical life Electrical life Safety related data	10d according to EN/ISO 13489-1	48V 60V 125V 220V 600V	A A A A cycles cycles	1.4 1.1 0.3 0.1 0.6 20000000 500000
Operations Mechanical life Electrical life Safety related data Performance level B <sup>2</sup>	10d according to EN/ISO 13489-1	48V 60V 125V 220V 600V	A A A A cycles cycles	1.4 1.1 0.3 0.1 0.6 20000000 500000 500000 500000 20000000
Operations Mechanical life Electrical life Safety related data Performance level B <sup>2</sup> Mirror contats accord	10d according to EN/ISO 13489-1	48V 60V 125V 220V 600V	A A A A cycles cycles	1.4 1.1 0.3 0.1 0.6 20000000 500000 500000 500000 20000000 yes
Operations Mechanical life Electrical life Safety related data Performance level B Mirror contats accord EMC compatibility	10d according to EN/ISO 13489-1	48V 60V 125V 220V 600V	A A A A cycles cycles	1.4 1.1 0.3 0.1 0.6 20000000 500000 500000 500000 20000000
Operations Mechanical life Electrical life Safety related data Performance level B <sup>2</sup>	10d according to EN/ISO 13489-1 med ling to IEC/EN 609474-4-1	48V 60V 125V 220V 600V	A A A A cycles cycles	1.4 1.1 0.3 0.1 0.6 20000000 500000 500000 500000 20000000 yes

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AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	75
		max	%Us	115
	drop-out			
		min	%Us	20
		max	%Us	55
	of E0/60Hz and powered at 60Hz	max	/003	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	115
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consu	motion at 20°C		,	
Ao average con conse				
	of 50/60Hz coil powered at 50Hz	•	1/4	20
		in-rush	VA	30
		holding	VA	4
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	25
		holding	VA	3
	of 60Hz coil powered at 60Hz			<u> </u>
		in-rush	VA	20
				30
		holding	VA	4
Dissipation at holding :	≤20°C 50Hz		W	0.95
Max cycles frequency				
Mechanical operation			cycles/h	3600
Mechanical operation			cycles/h	3600
Mechanical operation Operating times	potrol		cycles/h	3600
Mechanical operation			cycles/h	3600
Mechanical operation Operating times	in AC		cycles/h	3600
Mechanical operation Operating times				
Mechanical operation Operating times	in AC	min	ms	12
Mechanical operation Operating times	in AC Closing NO	min max		
Mechanical operation Operating times	in AC		ms	12
Mechanical operation Operating times	in AC Closing NO		ms	12
Mechanical operation Operating times	in AC Closing NO	max	ms ms ms	12 21 9
Mechanical operation Operating times	in AC Closing NO Opening NO	max	ms ms	12 21
Mechanical operation Operating times	in AC Closing NO	max min max	ms ms ms ms	12 21 9 18
Mechanical operation Operating times	in AC Closing NO Opening NO	max min max min	ms ms ms ms ms	12 21 9 18 17
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC	max min max	ms ms ms ms	12 21 9 18
Mechanical operation Operating times	in AC Closing NO Opening NO	max min max min max	ms ms ms ms ms	12 21 9 18 17 26
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC	max min max min	ms ms ms ms ms	12 21 9 18 17 26 7
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms ms	12 21 9 18 17 26
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms ms	12 21 9 18 17 26 7
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms ms	12 21 9 18 17 26 7
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max min	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 18
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NC	max min max min max min max	ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max min max	ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 17
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NC	max min max min max min max min max min	ms ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 17 18 25 2
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO Opening NO Opening NO	max min max min max min max min max	ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 17
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NC	max min max min max min max min max min	ms ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 17 18 25 2
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO Opening NO Opening NO	max min max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 17 18 25 2 3
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO Opening NO Opening NO	max min max min max min max min max min max min	ms ms ms ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 17 18 25 2 3 3
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO Opening NO Opening NO	max min max min max min max min max min max	ms ms ms ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17 17 18 25 2 3

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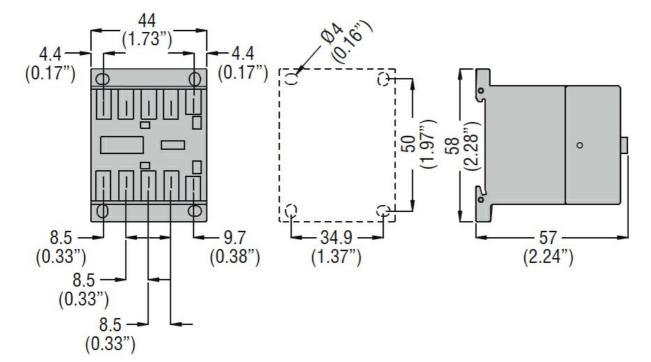
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	min	ms	11
	max	ms	17
UL technical data			
Full-load current (FLA) for three-phase AC motor			
	at 480V	А	7.6
	at 600V	Α	6.1
Yielded mechanical performance			
for single-phase AC motor			
	110/120V	HP	0.5
	230V	HP	1.5
for three-phase AC motor			
	200/208V	HP	2
	220/230V	HP	3
	460/480V	HP	5
	575/600V	HP	5
General USE			
Contactor			
	AC current	А	20
Short-circuit protection fuse, 600V			
High fault			
i ligh radit	Short circuit current	kA	100
	Fuse rating	A	30
	Fuse class	~	J
Standard fault	1 436 61833		J
Stanuaru laut	Short circuit current	kA	5
			30
Or start action of an ellipse contracts according to 11	Fuse rating	A	
Contact rating of auxiliary contacts according to UL			A600 - Q600
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			

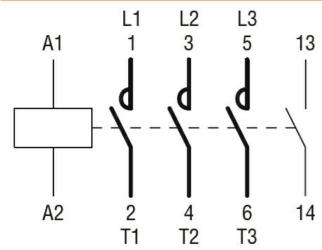
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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 48VAC, 1NO AUXILIARY CONTACT, FASTON TERMINALS



Wiring diagrams



## Certifications and compliance

Certifications and con		
Compliance		
	CSA C22.2 n° 60947-1	
	CSA C22.2 n° 60947-4-1	
	IEC/EN 60947-1	
	IEC/EN 60947-4-1	
	UL 60947-1	
	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
	EAC	
ETIM classification		
ETIM 8.0		EC000066 - Power contactor, AC switching