





Product designation Product type designation			Power contactor BGF09
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	20
Operational current le			
	AC-1 (≤40°C)	Α	20
	AC-1 (≤55°C)	Α	18
	AC-1 (≤70°C)	Α	15
	AC-3 (≤440V ≤55°C)	Α	9
	AC-4 (400V)	Α	4
Rated operational power AC-3 (T≤55°C)	,		
	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)			
· · · · · · · · · · · · · · · · · · ·	230V	kW	8
	400V	kW	14
	500V	kW	16
	690V	kW	22
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	12
	48V	Α	10
	75V	Α	4
	110V	A	3
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	2201	- , ,	
120 max out on 10 m 201 with 2/1 = 1mo with 2 poice in 30/103	≤24V	Α	15
	48V	A	14
	75V	A	9
	110V	A	8
	220V	A	_
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	220 V	77	
120 max outlone to in 201 with E/N = 1110 with 0 poles in series	≤24V	Α	16
	≤24V 48V	A	16
	75V	A	10
	110V	A	10
	220V	A	
	2200	A	2





IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
·	≤24V	Α	16
	48V	Α	16
	75V	Α	10
	110V	Α	10
	220V	Α	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
120 max can six to in 200 200 man 2/1 (= 10 mo man 1 police in conce	≤24V	Α	7
	48V	A	6
	75V	A	2
	110V	A	1
	220V	A	<u>'</u>
IEC may current to in DC2 DC5 with L/D < 15mg with 2 poles in series	220 V	^	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-04)/	Δ.	0
	≤24V	A	8
	48V	A	8
	75V	Α	5
	110V	A	4
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	10
	48V	Α	10
	75V	Α	6
	110V	Α	5
	220V	Α	0,8
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	10
	48V	Α	10
	75V	Α	6
	110V	Α	5
	220V	Α	0,8
Short-time allowable current for 10s (IEC/EN60947-1)		Α	96
Protection fuse			
	gG (IEC)	Α	20
	aM (IEC)	Α	10
Making capacity (RMS value)	()	Α	92
Breaking capacity at voltage		- , ,	
Distanting supusity at voltage	440V	Α	72
	500V	A	72 72
	690V	A	72 72
Decistance per pela (everage value)	090 V		
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)	1.1	147	4
	Ith	W	4
	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	lbin	9
	max	lbin	9





Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		12
	Flexible w/o lug conductor section		2	0.75
		min	mm² mm²	0.75 2.5
	Flexible c/w lug conductor section	max	111111	2.5
	r lexible c/w lug conductor section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section			
		min	mm²	1.5
		max	mm²	2.5
Power terminal protect	ction according to IEC/EN 60529			IP20 when properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	179
Conductor section				
	AWG/kcmil conductor section			40
Auxiliary contact chara	actoristics	max		12
Thermal current Ith	aciciistics		А	10
EC/EN 60947-5-1 de	esignation			A600 - Q600
Operating current AC				7.000 4000
		230V	Α	3
		400V	Α	1.9
		500V	Α	1.4
Operating current DC	12			
		110V	A	2.9
Operating current DC	13		_	
		24V	A	2.9
		48V 60V	A	1.4
		125V	A A	1.1 0.3
		220V	A	0.3
		600V	A	0.6
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	500000
Safety related data				
Performance level B1	0d according to EN/ISO 13489-1			
		rated load	cycles	500000
Minnon ociatata a con l'		chanical load	cycles	20000000
	ing to IEC/EN 609474-4-1			yes
EMC compatibility				yes
AC coil operating	2011		V	24
Rated AC voltage at 6	SOM 7			





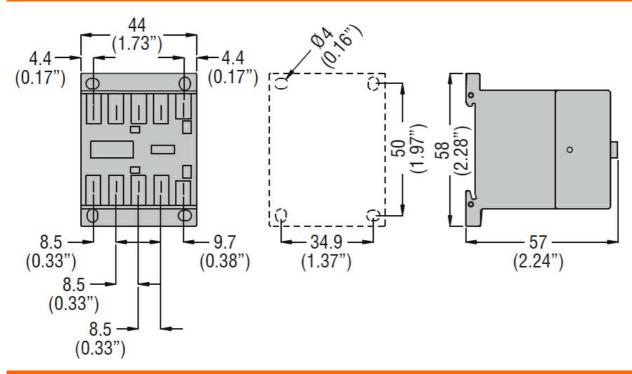
	of 60Hz coil po	wered at 60Hz			
	01 001 12 COII po	pick-up			
		pront dp	min	%Us	75
			max	%Us	115
		drop-out		,,,,,	•
		a. op 0 a.	min	%Us	20
			max	%Us	55
AC average coil cor	nsumption at 20°C				
3		powered at 50Hz			
			in-rush	VA	30
			holding	VA	4
	of 50/60Hz coil	powered at 60Hz			
		•	in-rush	VA	25
			holding	VA	3
	of 60Hz coil po	wered at 60Hz			
	·		in-rush	VA	30
			holding	VA	4
Dissipation at holdir	ng ≤20°C 50Hz		<u> </u>	W	0.95
Max cycles frequen					
Mechanical operation	•			cycles/h	3600
Operating times					
Average time for Us	control				
	in AC				
		Closing NO			
		-	min	ms	12
			max	ms	21
		Opening NO			
		· ·	min	ms	9
			max	ms	18
		Closing NC			
			min	ms	17
			max	ms	26
		Opening NC			
			min	ms	7
			max	ms	17
	in DC				
		Closing NO			
			min	ms	18
					25
			max	ms	
		Opening NO		ms	
		Opening NO		ms ms	2
			max		
		Opening NO Closing NC	max min	ms	2 3
			max min	ms	2 3 3
		Closing NC	max min max	ms ms	2 3
			max min max min	ms ms	2 3 3 5
		Closing NC	max min max min	ms ms	2 3 3 5
		Closing NC	max min max min max	ms ms ms	2 3 3 5
JL technical data		Closing NC	max min max min max min	ms ms ms ms	2 3 3 5
	_A) for three-phase	Closing NC Opening NC	max min max min max min	ms ms ms ms	2 3 3 5
UL technical data Full-load current (Fl	_A) for three-phase	Closing NC Opening NC	max min max min max min	ms ms ms ms	2 3 3 5

for single-phase AC motor





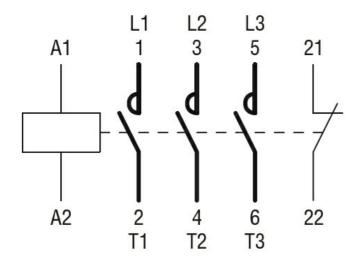
Part Part					
For three-phase AC motor 200/208V			110/120V	HP	0.5
200/208V			230V	HP	1.5
Contactor		for three-phase AC motor			
A60/480V		·	200/208V	HP	2
A60/480V			220/230V	HP	3
S75/600V			460/480V	HP	
Contactor AC current A 20			575/600V	HP	
Contactor AC current A 20	General USE				
AC current		Contactor			
Short-circuit protection fuse, 600V High fault Short circuit current kA 100 Fuse rating A 30 Fuse class J			AC current	Α	20
High fault	Short-circuit protection	on fuse 600V	7.0 00.110.11		
Short circuit current KA 100 Fuse rating A 30 Fuse class J	Chort endant protection				
Fuse rating A 30 Fuse class J		i ligit taalt	Short circuit current	kΔ	100
Fuse class J					
Standard fault			•		
Short circuit current Fuse rating Fuse rating A 30		Standard fault	i use class		<u> </u>
Fuse rating A 30		Standard radit	Short circuit current	ĿΛ	5
Contact rating of auxiliary contacts according to UL A600 - Q600 Ambient conditions Temperature Min °C -50 max °C +70 Storage temperature min °C -60 max °C +80 Max altitude Resistance & Protection Pollution degree					
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	Contact ration of a wi	liam, contacts according to LII	ruse failing	A	
Operating temperature		liary contacts according to UL			A600 - Q600
Operating temperature min °C -50 max °C +70 Storage temperature min °C -60 max °C +80 Max altitude m 3000 Resistance & Protection 9 3					
min max °C -50 max -50 cm Storage temperature min °C -60 max °C +80 Max altitude m 3000 Resistance & Protection 3	Temperature				
max °C +70 Storage temperature min °C -60 max °C +80 Max altitude m 3000 Resistance & Protection Pollution degree 3		Operating temperature			
Storage temperature min °C -60 max °C +80 Max altitude m 3000 Resistance & Protection Second or se			min		
min %C -60 max Max altitude m 3000 Resistance & Protection 3			max	°C_	+70
Max altitudemax°C+80Resistance & Protectionm3000Pollution degree3		Storage temperature			
Max altitude m 3000 Resistance & Protection Pollution degree 3			min	_	
Resistance & Protection Pollution degree 3			max	°C	+80
Pollution degree 3	Max altitude			m	3000
<u> </u>	Resistance & Protect	ion			
Dimensions	Pollution degree				3
	Dimensions				



Wiring diagrams







Certifications and compliance

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