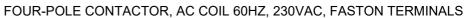




Product designation Power contactor Product type designation BGF09

Product type designation			BGF09
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
- F	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	20
Operational current le			
operational outrons to	AC-1 (≤40°C)	Α	20
	AC-1 (≤55°C)	A	18
	AC-1 (≤70°C)	A	15
	AC-3 (≤440V ≤55°C)	A	9
	AC-3 (<u>3440V</u> <u>355 C)</u> AC-4 (400V)	A	4
Poted enerational newer AC 1 (T<10°C)	AC-4 (400V)		4
Rated operational power AC-1 (T≤40°C)	2201/	LAAA	0
	230V	kW	8
	400V	kW	14
	500V	kW	16
150	690V	kW	22
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	.0.10.4		
	≤24V	Α	12
	48V	Α	10
	75V	Α	4
	110V	Α	3
	220V	A	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	15
	48V	Α	14
	75V	Α	9
	110V	Α	8
	220V	Α	=
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	16
	48V	Α	16
	75V	Α	10
	110V	Α	10
	220V	Α	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			
		≤24V	Α	7
		48V	Α	6
		75V	Α	2
		110V	Α	1
		220V	Α	_
IEC max current le in	DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
		≤24V	Α	8
		48V	Α	8
		75V	Α	5
		110V	Α	4
		220V	Α	_
IEC max current le in	DC3-DC5 with L/R ≤ 15ms with 3 poles in series	-		
	2 00 2 00 mm 2/10 = 10/100 mm 0 poiso m 00/100	≤24V	Α	10
		48V	A	10
		75V	A	6
		110V	A	5
		220V	A	0,8
IEC may ourrent to in	DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		0,0
iec max current le in	DC3-DC5 with L/R \square 15ms with 4 poles in series	<04)/	۸	4.0
		≤24V	A	10
		48V	A	10
		75V	A	6
		110V	A	5
	(1.0.4.2.4.2.4.2.4.4.4.4.4.4.4.4.4.4.4.4.4	220V	Α	0,8
	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 ve	oltage			
		440V	Α	72
		500V	Α	72
		690V	Α	72
Resistance per pole (a	average value)		mΩ	10
Power dissipation per	pole (average value)			
	,	Ith	W	4
		AC-3	W	0.81
Tightening torque for t	erminals			
3 3 1		min	Nm	0.8
		max	Nm	1
		min	lbin	9
		max	lbin	9
Tightening torque for o	poil terminal	Пих	10111	<u> </u>
riginioning torque for t	on tomina	min	Nm	0.8
		min		
		max	Nm Ihin	1
		min	lbin Ibin	9
Max arms and the	simultana a calu a ann a - 4-1-1-	max	Ibin	9
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		12
	Flexible w/o lug conductor section			
		min	mm²	0.75





FOUR-POLE CONTACTOR, AC COIL 60HZ, 230VAC, FASTON TERMINALS

		max	mm²	2.5
	Flexible c/w lug conductor section	Тих		2.0
	ğ	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor se			
		min	mm²	1.5
=		max	mm²	2.5 IP20 when
Power terminal protect	ion according to IEC/EN 60529			properly wired
Mechanical features				, , ,
Operating position				
		normal		Vertical plan
		allowable		±30° Screw / DIN rail
Fixing				35mm
Weight			g	180
Conductor section				
	AWG/kcmil conductor section			
		max		12
Auxiliary contact character	cteristics		^	4.0
Thermal current Ith IEC/EN 60947-5-1 des	ignation		Α	10 A600
Operations	ignation			A000
Mechanical life			cycles	20000000
Electrical life			cycles	500000
Safety related data				
Performance level B10	d according to EN/ISO 13489-1			
		rated load	cycles	500000
Mirror contate accordin	ng to IEC/EN 609474-4-1	mechanical load	cycles	20000000
EMC compatibility	ig to IEC/EN 609474-4-1			yes
AC coil operating				yes
Rated AC voltage at 60)Hz		V	230
AC operating voltage				
	of 60Hz coil powered at 60Hz			
	pick-up		0/11	7-
		min	%Us %Us	75 115
	drop-out	max	/005	110
	a. 5p - 5a.	min	%Us	20
		max	%Us	55
AC average coil consu	•			
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA VA	30
	of 50/60Hz coil powered at 60Hz	holding	VA	4
	or 50/00112 con powered at 00112	in-rush	VA	25
		holding	VA	3
	of 60Hz coil powered at 60Hz			
		in-rush	VA	30
B:	400°O FOLL	holding	VA	4
Dissipation at holding s Max cycles frequency	\$20°C 50HZ		W	0.95
Mechanical operation			cycles/h	3600
moonanioai operation			Jy 0103/11	



ENERGY AND AUTOMATION

Operating times					
Average time for Us co	ontrol				
	in AC				
		Closing NO			
		_	min	ms	12
			max	ms	21
		Opening NO			
			min	ms	9
			max	ms	18
		Closing NC			
		ū	min	ms	17
			max	ms	26
		Opening NC			
			min	ms	7
			max	ms	17
	in DC				
		Closing NO			
		Ŭ	min	ms	18
			max	ms	25
		Opening NO			
		. 5	min	ms	2
			max	ms	3
		Closing NC			
		Ŭ	min	ms	3
			max	ms	5
		Opening NC			
		1 0	min	ms	11
			max	ms	17
UL technical data					
UL technical data Full-load current (FLA)	for three-phase AC	motor			
	for three-phase AC	motor	at 480V	A	7.6
	for three-phase AC	motor			
Full-load current (FLA)	·	motor	at 480V	A	7.6
	erformance		at 480V	A	7.6
Full-load current (FLA)	·		at 480V at 600V	A A	7.6 6.1
Full-load current (FLA)	erformance		at 480V	A	7.6
Full-load current (FLA)	erformance for single-phase A0	C motor	at 480V at 600V 110/120V	A A HP	7.6 6.1 0.5
Full-load current (FLA)	erformance	C motor	at 480V at 600V 110/120V 230V	A A HP HP	7.6 6.1 0.5 1.5
Full-load current (FLA)	erformance for single-phase A0	C motor	at 480V at 600V 110/120V 230V 200/208V	A A HP HP	7.6 6.1 0.5 1.5
Full-load current (FLA)	erformance for single-phase A0	C motor	at 480V at 600V 110/120V 230V	A A HP HP	7.6 6.1 0.5 1.5
Full-load current (FLA)	erformance for single-phase A0	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V	A A HP HP	7.6 6.1 0.5 1.5
Full-load current (FLA)	erformance for single-phase A0	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V	A A HP HP HP	7.6 6.1 0.5 1.5
Full-load current (FLA) Yielded mechanical pe	erformance for single-phase AC for three-phase AC	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V	A A HP HP HP	7.6 6.1 0.5 1.5
Full-load current (FLA) Yielded mechanical pe	erformance for single-phase A0	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V	A A HP HP HP HP HP	7.6 6.1 0.5 1.5 2 3 5 5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V	A A HP HP HP	7.6 6.1 0.5 1.5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor fuse, 600V	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V	A A HP HP HP HP HP	7.6 6.1 0.5 1.5 2 3 5 5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	A A HP HP HP HP HP	7.6 6.1 0.5 1.5 2 3 5 5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor fuse, 600V	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	A A HP HP HP HP HP	7.6 6.1 0.5 1.5 2 3 5 5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor fuse, 600V	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current Short circuit current Fuse rating	A A HP HP HP HP HP	7.6 6.1 0.5 1.5 2 3 5 5 5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor fuse, 600V High fault	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	A A HP HP HP HP HP	7.6 6.1 0.5 1.5 2 3 5 5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor fuse, 600V	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current Fuse rating Fuse class	A A HP HP HP HP HP A	7.6 6.1 0.5 1.5 2 3 5 5 5
Yielded mechanical pe	for single-phase AC for three-phase AC Contactor fuse, 600V High fault	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current Short circuit current Fuse rating Fuse class Short circuit current	A A HP HP HP HP HP KA A KA	7.6 6.1 0.5 1.5 2 3 5 5 5 20
Full-load current (FLA) Yielded mechanical per General USE Short-circuit protection	for single-phase AC for three-phase AC Contactor fuse, 600V High fault	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current Fuse rating Fuse class	A A HP HP HP HP HP A	7.6 6.1 0.5 1.5 2 3 5 5 5
Full-load current (FLA) Yielded mechanical pe	for single-phase AC for three-phase AC Contactor fuse, 600V High fault	C motor	at 480V at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current Short circuit current Fuse rating Fuse class Short circuit current	A A HP HP HP HP HP KA A KA	7.6 6.1 0.5 1.5 2 3 5 5 5 20



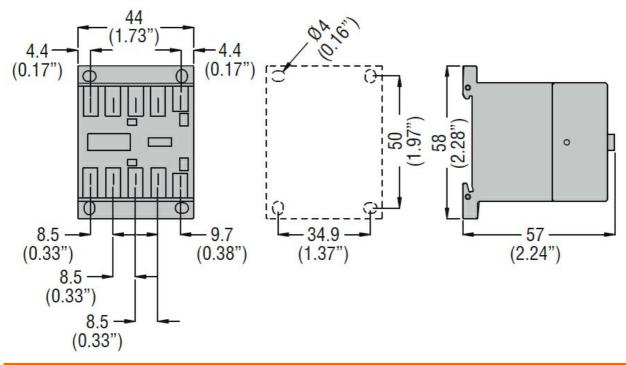
Operating temperature

	min	°C	-50
	max	°C	+70
Storage temperature			
	min	°C	-60
	max	°C	+80
Max altitude		m	3000
Resistance & Protection			

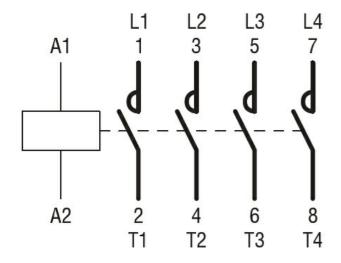
R

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



ENERGY AND AUTOMATION

11BGF09T4A23060

FOUR-POLE CONTACTOR, AC COIL 60HZ, 230VAC, FASTON TERMINALS

	UL 60947-1	
	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
	EAC	
FTIM classification	n	

ETIM 8.0

EC000066 -Power contactor, AC switching