





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
150	690V	kW	22
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	40 AV /	•	4.0
	≤24V	A	12
	48V	A	10
	75V	A	4
	110V 220V	A	3
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	220 V	A	_
TEC max current le in DCT with L/R \(\simes \) mis with 2 poles in series	≤24V	۸	15
	≤24 V 48 V	A A	15 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 surrout to in 201 with 2/1 = 1110 with 6 polos in selles	≤24V	Α	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2
	220 V		





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	220 \$	- , ,	
The max current to in 600-600 with E/N = 10m3 with 2 poics in series	≤24V	Α	0
	48V	A	8 8
	75V	A	5
	75 V 110 V	A	5 4
IEC may autrent to in DC2 DC5 with 1/D < 45m-1 with 2 m-1 m 1/2	220V	A	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	10.43.4	•	10
	≤24V	A	10
	48V	A	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			
	440V	Α	72
	500V	Α	72
	690V	Α	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
. The discipation por pole (avolage value)	Ith	W	4
	AC-3	W	0.81
Tightening torque for terminals	70-3	v v	0.01
rightening torque for terminals	min	Nlm	Λ Θ
	min	Nm Nm	0.8
	max	Nm	1
	min	lbin	9
This control is a second to control	max	lbin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9
	max	lbin	9



Man and discount	elevelte a construction of the level		N.I.	
Conductor section	simultaneously connectable		Nr.	2
Conductor Section	AWG/Kcmil			
	AWG/Rahiii	max		12
	Flexible w/o lug conductor section	max		12
	Toxisio W/o lag conductor cochon	min	mm²	0.75
		max	mm²	2.5
	Flexible 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
•	ction according to IEC/EN 60529			IP20 when properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
_	all	lowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	181
Conductor section				
	AWG/kcmil conductor section			
A 10		max		12
Auxiliary contact char	acteristics		^	4.0
Thermal current Ith	nianation		Α	10 A600 - Q600
IEC/EN 60947-5-1 de Operating current AC				A600 - Q600
Operating current AC	13	230V	Α	3
		400V	A	1.9
		500V	A	1.4
Operating current DC	12			
1 0		110V	Α	2.9
Operating current DC	13			
		24V	Α	2.9
		48V	Α	1.4
		60V	Α	1.1
		125V	Α	0.3
		220V	A	0.1
Operations		600V	Α	0.6
Operations Machanical life			ovele e	2000000
Mechanical life Electrical life			cycles cycles	20000000 500000
Safety related data			cycles	300000
	10d according to EN/ISO 13489-1			
. Shormando lovoi Di	_	ed load	cycles	500000
	mechanic		cycles	2000000
Mirror contats accord	ing to IEC/EN 609474-4-1		- ,	yes
EMC compatibility	~			yes
AC coil operating				
Rated AC voltage at 5	50/60Hz		V	230
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 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	mption at 20°C			
	of 50/60Hz coil powered at 50Hz			
	2. 2.5, 202 25 ponorou at 001/2	in-rush	VA	30
		holding	VA	4
	of 50/60Hz coil powered at 60Hz	riolality	V/ \	•
	of 50/001 12 con powered at our 12	in-rush	VA	25
		holding	VA	3
	of 60Hz coil powered at 60Hz	Holding	V/\	<u> </u>
	of our 12 coil powered at our 12	in-rush	VA	30
			VA VA	4
Dissipation at halding	200°C EOLI-	holding	W	
Dissipation at holding ≤	20 C 50H2		VV	0.95
Max cycles frequency Mechanical operation				
Mechanical oberation			a, , a l a a /la	2000
-			cycles/h	3600
Operating times	ntrol		cycles/h	3600
-			cycles/h	3600
Operating times	in AC		cycles/h	3600
Operating times				
Operating times	in AC	min	ms	12
Operating times	in AC Closing NO	min max		
Operating times	in AC	max	ms ms	12 21
Operating times	in AC Closing NO	max min	ms ms	12 21 9
Operating times	in AC Closing NO Opening NO	max	ms ms	12 21
Operating times	in AC Closing NO	max min max	ms ms ms	12 21 9 18
Operating times	in AC Closing NO Opening NO	max min max min	ms ms ms ms	12 21 9 18
Operating times	in AC Closing NO Opening NO Closing NC	max min max	ms ms ms	12 21 9 18
Operating times	in AC Closing NO Opening NO	max min max min max	ms ms ms ms	12 21 9 18 17 26
Operating times	in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms	12 21 9 18 17 26
Operating times	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max	ms ms ms ms	12 21 9 18 17 26
Operating times	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	12 21 9 18 17 26
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	12 21 9 18 17 26 7
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	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO	max min max min max min max min max	ms ms ms ms ms ms	12 21 9 18 17 26 7
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	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO	max min max min max min max min max	ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO	max min max min max min max min max	ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO	min max	ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO	min max	ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO	min max	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC in DC Closing NO Opening NO	min max	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17
Operating times	in AC Closing NO Opening NO Closing NC Opening NC In DC Closing NO Opening NO Closing NO Closing NO	min max	ms ms ms ms ms ms ms	12 21 9 18 17 26 7 17

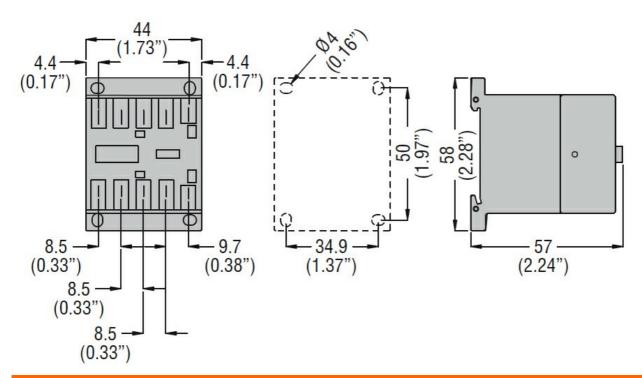




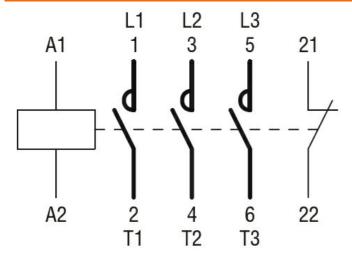
		max	ms	17
UL technical data				
Full-load current (FLA) for	or three-phase AC motor			
		at 480V	Α	7.6
		at 600V	Α	6.1
Yielded mechanical perf	formance			
	for single-phase AC motor			
		110/120V	HP	0.5
		230V	HP	1.5
	for three-phase AC motor			
		200/208V	HP	2
		220/230V	HP	3
		460/480V	HP	5
-		575/600V	HP	5
General USE				
	Contactor			
		AC current	Α	20
Short-circuit protection f	use, 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	30
	y 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	1			
Pollution degree				3
Dimensions				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT, FASTON TERMINALS



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