





Product designation Product type designation			Power contactor BGP09
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	500
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
Rated operational power AC-1 (T≤40°C)			
	230V	kW	8
	400V	kW	14
	500V	kW	16
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
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
	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 connect	able	Nr.	2
Conductor section			
AWG/Kcmil			
	max		12
Flexible w/o lug cond	ductor section		
	min	mm²	0.8
	max	mm²	2.5
Flexible c/w lug cond			
	min	mm²	1.5
	max	mm²	2.5
Flexible with insulate	d spade lug conductor section		
	min	mm²	1.5
	max	mm²	2.5
Power terminal protection according to IEC/E	EN 60529		IP00
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail 35mm
Weight		g	200
MEIGHT		9	200
Conductor section	or section		
			12
Conductor section AWG/kcmil conducto	or section max		12
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics		A	12
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics  Thermal current Ith		Α	
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics  Thermal current Ith  IEC/EN 60947-5-1 designation		Α	10
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics  Thermal current Ith  IEC/EN 60947-5-1 designation	max	A	10 A600 - Q600
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics  Thermal current Ith  IEC/EN 60947-5-1 designation	max 230V		10 A600 - Q600
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics  Thermal current Ith  IEC/EN 60947-5-1 designation	230V 400V	A A	10 A600 - Q600 3 1.9
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics  Thermal current Ith  IEC/EN 60947-5-1 designation  Operating current AC15	max 230V	A	10 A600 - Q600
Conductor section  AWG/kcmil conductor  Auxiliary contact characteristics  Thermal current Ith  IEC/EN 60947-5-1 designation  Operating current AC15	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Awailiary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12	230V 400V	A A	10 A600 - Q600 3 1.9
Awg/kcmil conductor  Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Awg/kcmil conductor  Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Awg/kcmil conductor  Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12	230V 400V 500V 110V	A A A	10 A600 - Q600 3 1.9 1.4 2.9
Awg/kcmil conductor  Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12	230V 400V 500V 110V 24V 48V	A A A A	10 A600 - Q600 3 1.9 1.4 2.9
Awg/kcmil conductor  Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12	230V 400V 500V 110V 24V 48V 60V	A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4
Awg/kcmil conductor  Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12	230V 400V 500V 110V 24V 48V 60V 125V	A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3
Awailiary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12  Operating current DC13	230V 400V 500V 110V 24V 48V 60V 125V 220V	A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1
Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15  Operating current DC12  Operating current DC13	230V 400V 500V 110V 24V 48V 60V 125V 220V	A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1
Awailiary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current DC12 Operating current DC13  Operations Mechanical life	230V 400V 500V 110V 24V 48V 60V 125V 220V	A A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current DC12 Operating current DC13  Operations Mechanical life Electrical life	230V 400V 500V 110V 24V 48V 60V 125V 220V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current DC12 Operating current DC13  Operating current DC13  Operations Mechanical life Electrical life Safety related data	230V 400V 500V 110V 24V 48V 60V 125V 220V 600V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current DC12 Operating current DC13  Operating current DC13  Operations Mechanical life Electrical life Safety related data	230V 400V 500V 110V 24V 48V 60V 125V 220V 600V	A A A A A A Cycles cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current DC12 Operating current DC13  Operating current DC13  Operations Mechanical life Electrical life Safety related data	230V 400V 500V 110V 24V 48V 60V 125V 220V 600V	A A A A A A Cycles cycles	10 A600 - Q600  3 1.9 1.4  2.9  2.9 1.4 1.1 0.3 0.1 0.6  20000000 500000
Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current DC12 Operating current DC13  Operating current DC13  Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISC	230V 400V 500V 110V 24V 48V 60V 125V 220V 600V	A A A A A A Cycles cycles	10 A600 - Q600  3 1.9 1.4  2.9  2.9 1.4 1.1 0.3 0.1 0.6  20000000 500000 500000
Conductor section	230V 400V 500V 110V 24V 48V 60V 125V 220V 600V	A A A A A A Cycles cycles	10 A600 - Q600  3 1.9 1.4  2.9  2.9 1.4 1.1 0.3 0.1 0.6  20000000  500000



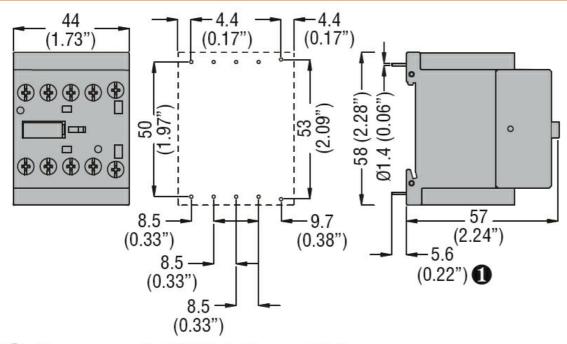


Rated AC voltage at 5	0/60Hz			V	110
AC operating voltage					
	of 50/60Hz coil po				
		pick-up		0/11	
			min	%Us	75
		drop out	max	%Us	115
		drop-out	min	%Us	20
			max	%Us	55
	of 50/60Hz coil po	owered at 60Hz	IIIax	/003	33
	01 30/00112 con pc	pick-up			
		ριοκ αρ	min	%Us	80
			max	%Us	115
		drop-out			
			min	%Us	20
			max	%Us	55
AC average coil consu	umption at 20°C				
-	of 50/60Hz coil po	owered at 50Hz			
	·		in-rush	VA	30
			holding	VA	4
	of 50/60Hz coil po	owered at 60Hz			
			in-rush	VA	25
			holding	VA	3
	of 60Hz coil powe	ered at 60Hz			
			in-rush	VA	30
			holding	VA	4
Dissipation at holding	≤20°C 50Hz			W	0.95
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
	ontrol				
everage time for Us co					
average time for Us co	ontrol in AC	Closing NO			
Average time for Us co		Closing NO	min	me	12
everage time for Us co		Closing NO	min max	ms ms	12 21
average time for Us co			min max	ms ms	12 21
average time for Us co		Closing NO Opening NO	max	ms	21
Average time for Us co			max min	ms ms	9
average time for Us co		Opening NO	max	ms	21
Average time for Us co			max min	ms ms	9
everage time for Us co		Opening NO	max min max	ms ms ms	<ul><li>21</li><li>9</li><li>18</li></ul>
everage time for Us co		Opening NO	max min max min	ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li></ul>
everage time for Us co		Opening NO Closing NC	max min max min	ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li><li>26</li><li>7</li></ul>
everage time for Us o	in AC	Opening NO Closing NC	max min max min max	ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li><li>26</li></ul>
everage time for Us co		Opening NO  Closing NC  Opening NC	max min max min max min	ms ms ms ms	<ul><li>21</li><li>9</li><li>18</li><li>17</li><li>26</li><li>7</li></ul>
everage time for Us co	in AC	Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
everage time for Us o	in AC	Opening NO  Closing NC  Opening NC	max min max min max min max min min max	ms ms ms ms ms ms	21 9 18 17 26 7 17
everage time for Us o	in AC	Opening NO  Closing NC  Opening NC  Closing NO	max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us o	in AC	Opening NO  Closing NC  Opening NC	max min max min max min max min max	ms ms ms ms ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us o	in AC	Opening NO  Closing NC  Opening NC  Closing NO	max min max min max min max min max min max min	ms	21 9 18 17 26 7 17 18 25
everage time for Us of	in AC	Opening NO  Closing NC  Opening NC  Closing NO  Opening NO	max min max min max min max min max	ms ms ms ms ms ms ms ms ms	21 9 18 17 26 7 17
Average time for Us of	in AC	Opening NO  Closing NC  Opening NC  Closing NO	max min max min max min max min max  min max	ms	21 9 18 17 26 7 17 18 25 2
Average time for Us o	in AC	Opening NO  Closing NC  Opening NC  Closing NO  Opening NO	max min max min max min max min max min max min	ms	21 9 18 17 26 7 17 18 25



### Opening NC

		min	ms	11
		max	ms	17
UL technical data				
Full-load current (F	FLA) for three-phase AC motor			
		at 480V	Α	7.6
		at 600V	Α	6.1
Yielded mechanica	al 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	Α	20
Contact rating of a	uxiliary contacts according to UL			A600 - Q600
Ambient conditions	S			
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	+70
	Storage temperature			
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
Resistance & Prot	ection			
Pollution degree				3
Dimensions				

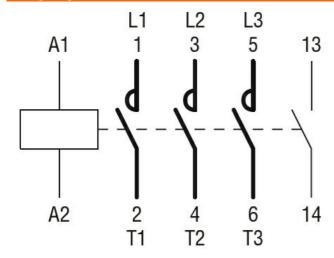


Recommended PCB drillings 1.7-2mm.

**ENERGY AND AUTOMATION** 

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 110VAC, 1NO AUXILIARY CONTACT, REAR PCB SOLDER PIN

#### 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

cURus

EAC

## ETIM classification

**ETIM 8.0** 

EC000066 -Power contactor, AC switching