





Product designation			Power contactor
Product type designation			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	Ibin	9
Max number of wires simultaneously connectable	Nr.	2
Conductor section		
AWG/Kcmil		
max		12
Flexible w/o lug conductor section		
min	mm²	0.8
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
Power terminal protection according to IEC/EN 60529		IP00
Mechanical features		
Operating position		
normal		Vertical plan
allowable		±30°
Fixing		Screw / DIN rail
		35mm
Weight	g	198
Conductor section AWG/kcmil conductor section max	3	12
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics		12
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith	A	12
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation		12
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15		12 10 A600 - Q600
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15		12 10 A600 - Q600
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V	A	12 10 A600 - Q600 3 1.9
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V	A	12 10 A600 - Q600
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12	A A A	12 10 A600 - Q600 3 1.9 1.4
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12	A A A	12 10 A600 - Q600 3 1.9
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13	A A A	12 10 A600 - Q600 3 1.9 1.4
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13	A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13	A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current lth IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V	A A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V	A A A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V	A A A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V	A A A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current lth IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations	A A A A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations Mechanical life	A A A A A A A A A Cycles	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current lth IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations Mechanical life Electrical life	A A A A A A A	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
AWG/kcmil conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations Mechanical life Electrical life Safety related data	A A A A A A A A A Cycles	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
AWG/kcmil conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations Mechanical life Electrical life Safety related data	A A A A A A A A A Cycles	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
AWG/kcmil conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations Mechanical life Electrical life Safety related data	A A A A A A A A A Cycles	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6
Awg/kcmil conductor section Awg/kcmil conductor section max Auxiliary contact characteristics Thermal current lth IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1	A A A A A A A A Cycles cycles	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6 20000000 500000
Awsiliary contact characteristics Thermal current Ith IEC/EN 60947-5-1 designation Operating current AC15 Operating current DC12 Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 600V Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load	A A A A A A A A Cycles cycles	12 10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.1 0.3 0.1 0.6 20000000 500000
Conductor section AWG/kcmil conductor section max Auxiliary contact characteristics Thermal current lth IEC/EN 60947-5-1 designation Operating current AC15 230V 400V 500V Operating current DC12 110V Operating current DC13 24V 48V 60V 125V 220V 600V Operations Mechanical life Electrical life Safety related data Performance level B10d according to EN/ISO 13489-1 rated load	A A A A A A A A Cycles cycles	12 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



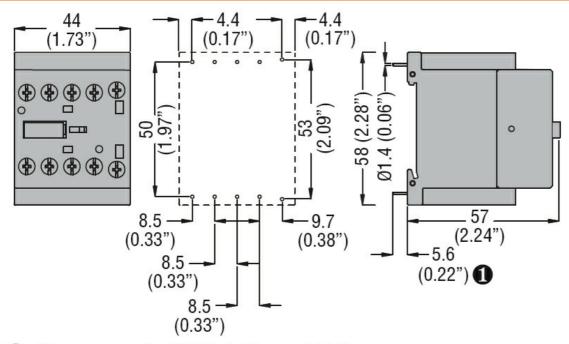


Rated AC voltage at 5	0/60Hz			V	24
AC operating voltage					
	of 50/60Hz coil po				
		pick-up		0/11	
			min	%Us	75
		drop out	max	%Us	115
		drop-out	min	%Us	20
			max	%Us	55
	of 50/60Hz coil po	owered at 60Hz	IIIax	/003	33
	01 30/001 12 COII pt	pick-up			
		ριοκ αρ	min	%Us	80
			max	%Us	115
		drop-out			
			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 power	ered at 60Hz			
			in-rush	VA	30
			holding	VA	4
Dissipation at holding	≤20°C 50Hz			W	0.95
Max cycles frequency					0000
Mechanical operation				cycles/h	3600
Operating times	ontrol				
Average time for Us co					
	in AC	Closing NO			
		Closing NO	min	ms	12
		Closing NO	min max	ms ms	12 21
			min max	ms ms	12 21
		Closing NO Opening NO	max	ms	21
			max min	ms ms	9
		Opening NO	max min	ms ms	9
		Opening NO Closing NC	max min max	ms ms ms	21918
		Opening NO	max min max min	ms ms ms	219181726
		Opening NO Closing NC	max min max min	ms ms ms	2191817267
	in AC	Opening NO Closing NC	max min max min max	ms ms ms	219181726
		Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms	2191817267
	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
	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
	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
	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
	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
	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
	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 3
	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



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				

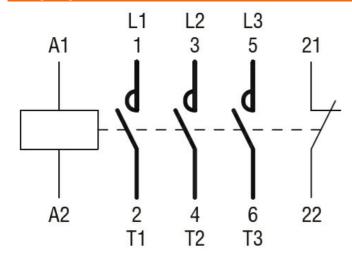


Recommended PCB drillings 1.7-2mm.

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 9A, AC COIL 50/60HZ, 24VAC, 1NC 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