



Product designation				Power contactor
Product type designation				BGP09
<b>Contact characteristics</b>				
Number of poles	Nr.			3
Rated insulation voltage $U_i$ IEC/EN	V			500
Rated impulse withstand voltage $U_{imp}$	kV			6
Operational frequency	min	Hz	25	
	max	Hz	400	
IEC Conventional free air thermal current $I_{th}$	A			20
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A	20	
	AC-1 ( $\leq 55^\circ\text{C}$ )	A	18	
	AC-1 ( $\leq 70^\circ\text{C}$ )	A	15	
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A	9	
	AC-4 (400V)	A	4	
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW	2.2	
	400V	kW	4	
	415V	kW	4.3	
	440V	kW	4.5	
	500V	kW	5	
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW	8	
	400V	kW	14	
	500V	kW	16	
Short-time allowable current for 10s (IEC/EN60947-1)	A			96
Protection fuse	gG (IEC)	A	20	
	aM (IEC)	A	10	
Making capacity (RMS value)	A			92
Breaking capacity at voltage	440V	A	72	
	500V	A	72	
Resistance per pole (average value)	$m\Omega$			10
Power dissipation per pole (average value)	$I_{th}$	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	min	mm <sup>2</sup>	0.8
		max	mm <sup>2</sup>	2.5
	Flexible c/w lug conductor section	min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	2.5
	Flexible with insulated spade lug conductor section	min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	2.5
Power terminal protection according to IEC/EN 60529				IP00
<b>Mechanical features</b>				
Operating position		normal allowable		Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight			g	200
Conductor section	AWG/kcmil conductor section	max		12
<b>Auxiliary contact characteristics</b>				
Thermal current I <sub>th</sub>			A	10
IEC/EN 60947-5-1 designation				A600 - Q600
Operating current AC15		230V	A	3
		400V	A	1.9
		500V	A	1.4
Operating current DC12		110V	A	2.9
Operating current DC13		24V	A	2.9
		48V	A	1.4
		60V	A	1.1
		125V	A	0.3
		220V	A	0.1
		600V	A	0.6
<b>Operations</b>				
Mechanical life			cycles	20000000
Electrical life			cycles	500000
<b>Safety related data</b>				
Performance level B10d according to EN/ISO 13489-1		rated load	cycles	500000
		mechanical load	cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1				yes
EMC compatibility				yes
<b>AC coil operating</b>				

Rated AC voltage at 60Hz	V	48
AC operating voltage		
of 60Hz coil powered at 60Hz		
pick-up	min %Us	75
	max %Us	115
drop-out	min %Us	20
	max %Us	55
AC average coil consumption at 20°C		
of 50/60Hz coil 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 powered at 60Hz	in-rush VA	30
	holding VA	4
Dissipation at holding ≤20°C 50Hz	W	0.95
<b>Max cycles frequency</b>		
Mechanical operation	cycles/h	3600
<b>Operating times</b>		
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
	max ms	25
Opening NO	min ms	2
	max ms	3
Closing NC	min ms	3
	max ms	5
Opening NC	min ms	11
	max ms	17
<b>UL technical data</b>		
Full-load current (FLA) for three-phase AC motor		
	at 480V A	7.6
	at 600V A	6.1

Yielded mechanical 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	A	20
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Contact rating of auxiliary 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

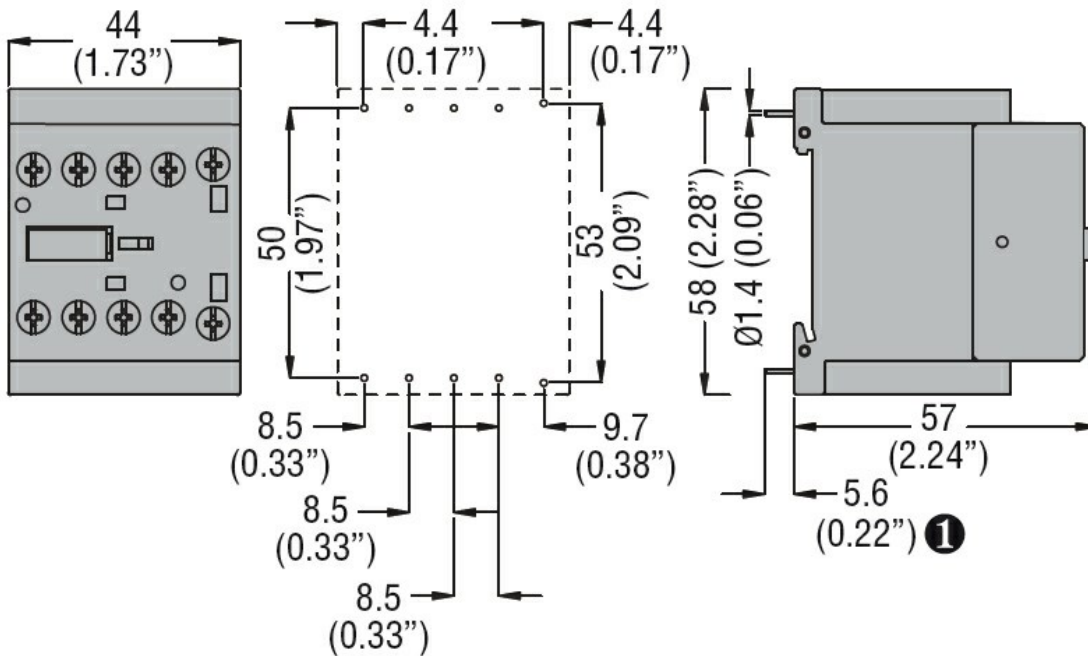
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Resistance & Protection

Pollution degree

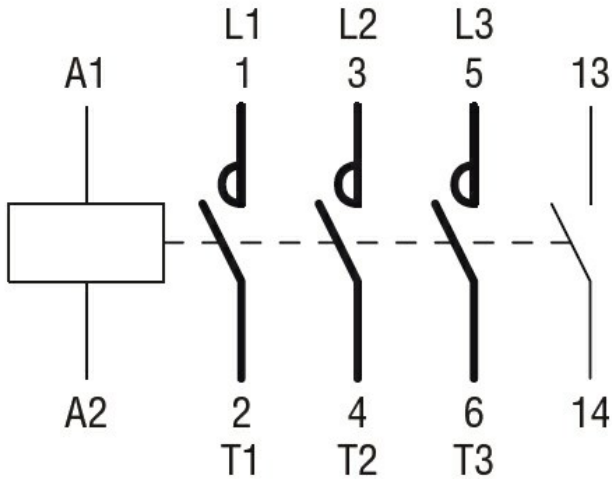
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Dimensions



① Recommended PCB drillings 1.7-2mm.

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