



Product designation	Power contactor BGP09		
Product type designation			
Contact characteristics			
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 ($\leq 40^\circ C$)	A	20
	AC-1 ($\leq 55^\circ C$)	A	18
	AC-1 ($\leq 70^\circ C$)	A	15
	AC-3 ($\leq 440V \leq 55^\circ C$)	A	9
	AC-4 (400V)	A	4
Rated operational power AC-3 ($T \leq 55^\circ C$)	230V	kW	2.2
	400V	kW	4
	415V	kW	4.3
	440V	kW	4.5
	500V	kW	5
Rated operational power AC-1 ($T \leq 40^\circ C$)	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)	mΩ 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	Ibin	9
	max	Ibin	9
Tightening torque for coil terminal	min	Nm	0.8

	max	Nm	1		
	min	Ibin	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	mm ²	0.8		
	max	mm ²	2.5		
Flexible c/w lug conductor section	min	mm ²	1.5		
	max	mm ²	2.5		
Flexible with insulated spade lug conductor section	min	mm ²	1.5		
	max	mm ²	2.5		
Power terminal protection according to IEC/EN 60529	IP00				
Mechanical features					
Operating position	normal allowable	Vertical plan ±30°			
Fixing	Screw / DIN rail 35mm				
Weight	g	198			
Auxiliary contact characteristics					
Thermal current Ith	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		
Operations					
Mechanical life	cycles	20000000			
Electrical life	cycles	500000			
Safety related data					
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	500000		
	mechanical load	cycles	20000000		
EMC compatibility	yes				
AC coil operating					
Rated AC voltage at 50/60Hz	V	24			
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 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 $\leq 20^\circ\text{C}$ 50Hz			W	0.95
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
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	
UL technical data				

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

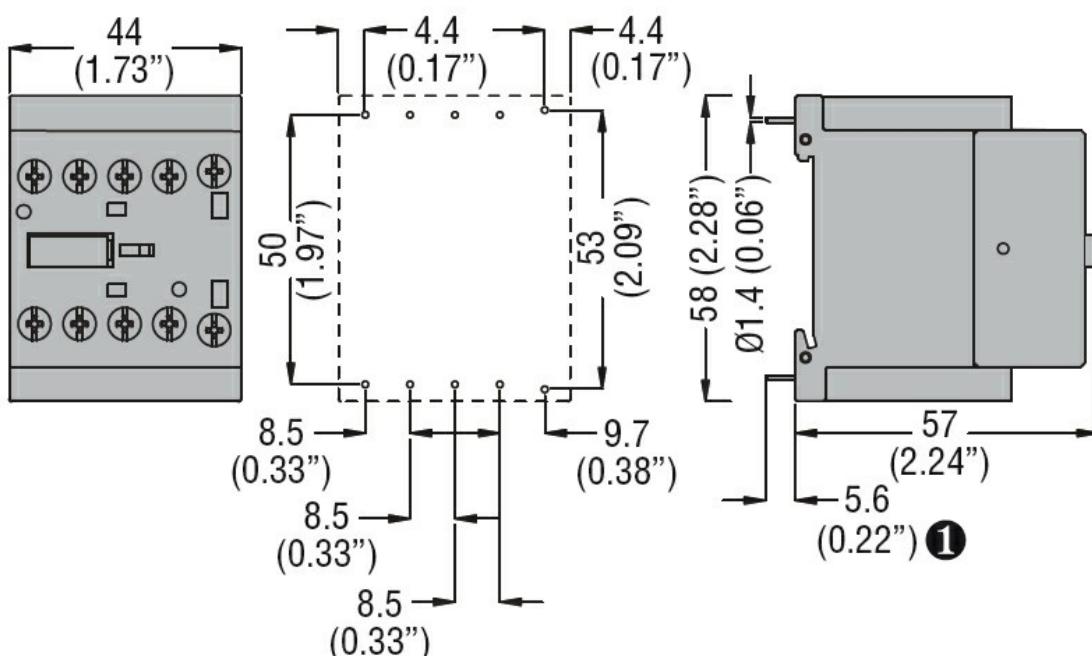
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Resistance & Protection

Pollution degree

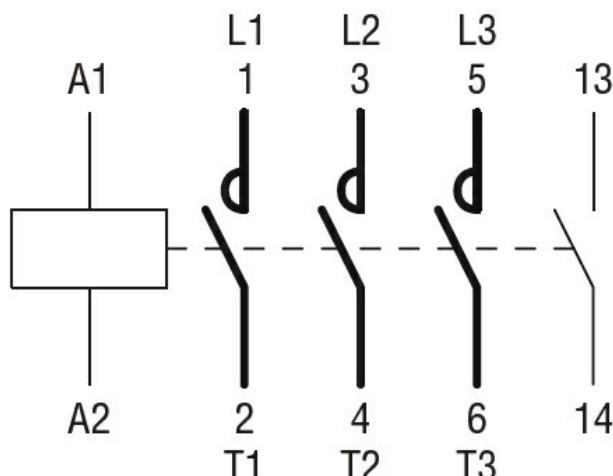
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Dimensions



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