



Product designation	Power contactor		
Product type designation	BGP09		
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 ($\leq 40^\circ\text{C}$)	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)	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	I _{bin}	9
	max	I _{bin}	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	Vertical plan	
	allowable	±30°	
Fixing	Screw / DIN rail 35mm		
Weight	g	200	
Auxiliary contact characteristics			
Thermal current I _{th}	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
Mirror contacts according to IEC/EN 609474-4-1	Yes		
EMC compatibility	yes		
AC coil operating			
Rated AC voltage at 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 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

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

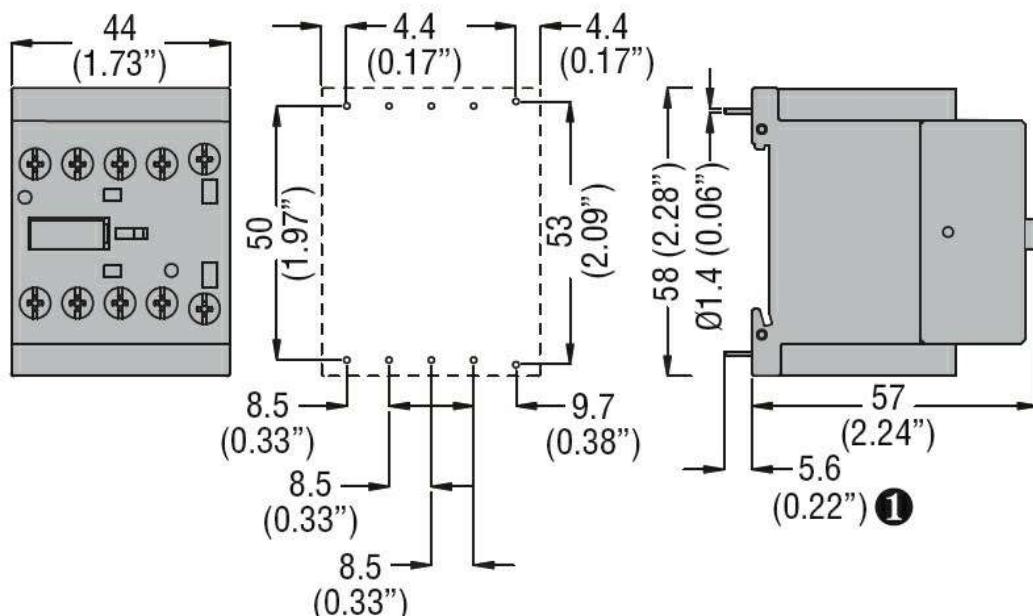
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Resistance & Protection

Pollution degree

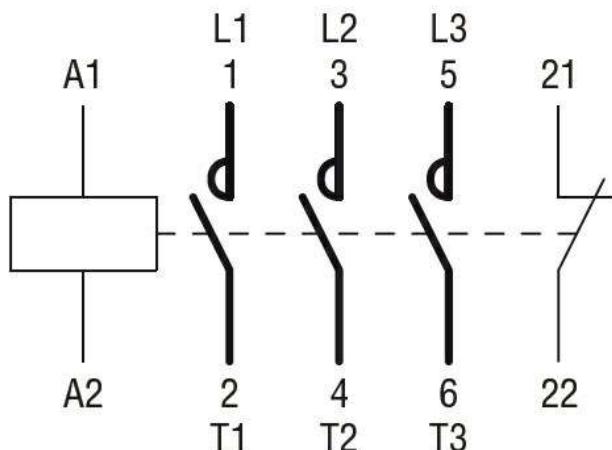
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Dimensions



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