



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)	$\text{m}\Omega$			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	240
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>DC coil operating</b>			

DC rated control voltage		V	48
DC operating voltage			
	pick-up	min	%Us 75
		max	%Us 115
	drop-out	min	%Us 10
		max	%Us 25
Average coil consumption $\leq 20^{\circ}\text{C}$			
	in-rush	W	3.2
	holding	W	3.2

**Max cycles frequency**

Mechanical operation		cycles/h	3600
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**Operating times**

Average time for $U_s$ 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

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

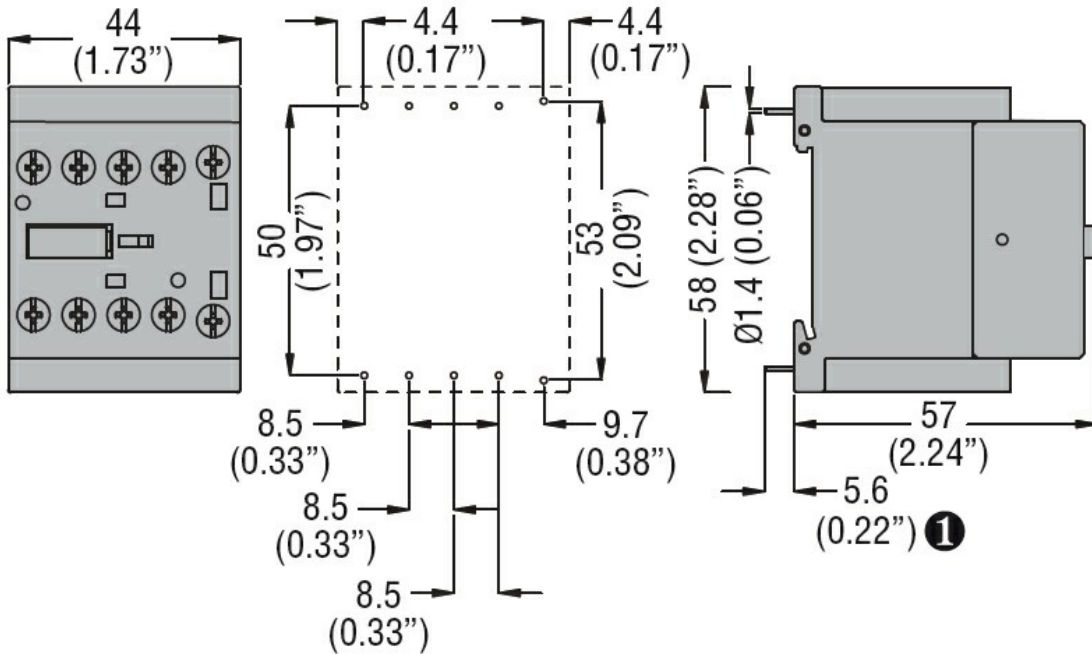
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Resistance & Protection

Pollution degree

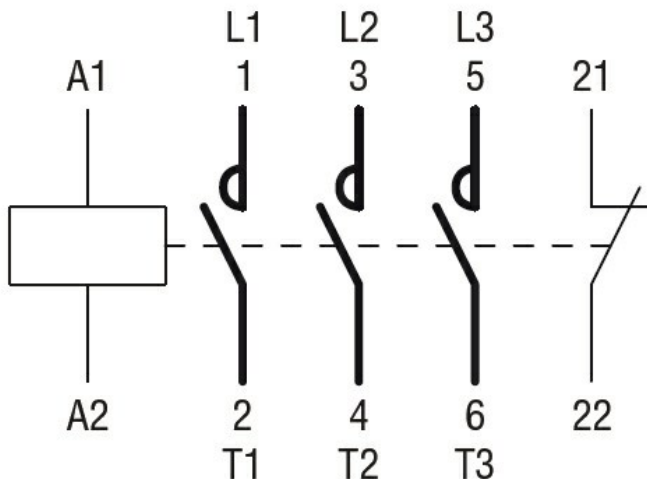
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Dimensions



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