



Product designation Power contactor
Product type designation BGP09

Contact characteristics

Number of poles	Nr.	4
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-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 Ω	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	200
Conductor section	AWG/kcmil conductor section			
		max		12
Auxiliary contact characteristics				
Thermal current I _{th}			A	10
IEC/EN 60947-5-1 designation				A600
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 60947-4-1				yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 60Hz			V	230
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
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

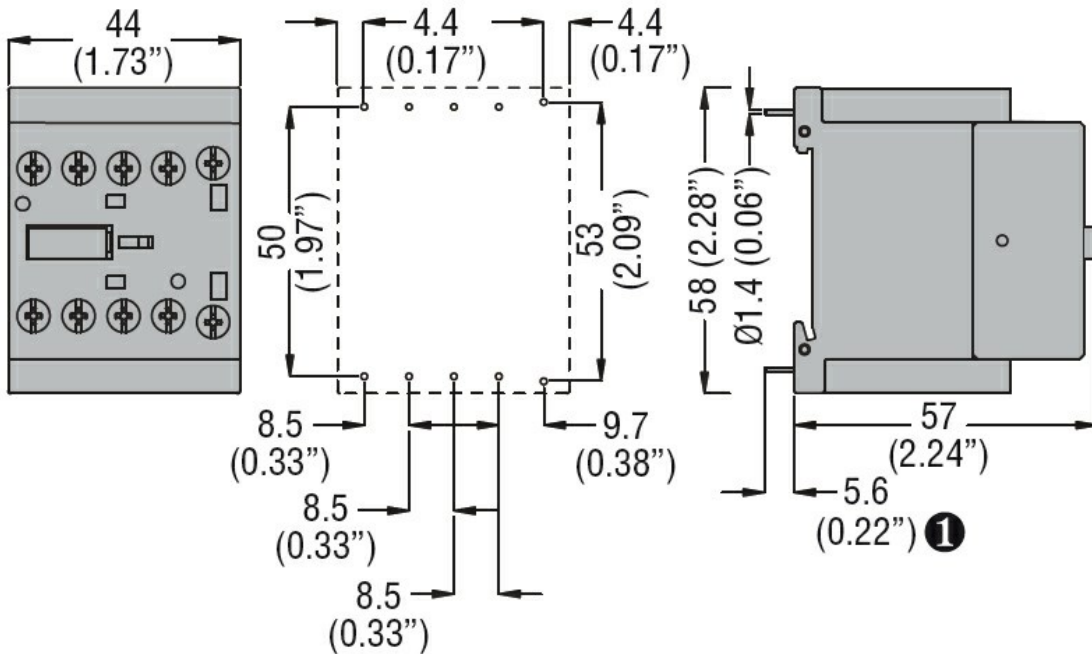
Yielded mechanical performance			
for single-phase AC motor			
	110/120V	HP	0.5
	230V	HP	1.5
for three-phase AC motor			
	200/208V	HP	2
	220/230V	HP	3
	460/480V	HP	5
	575/600V	HP	5

General USE			
Contactor			
	AC current	A	20

Ambient conditions

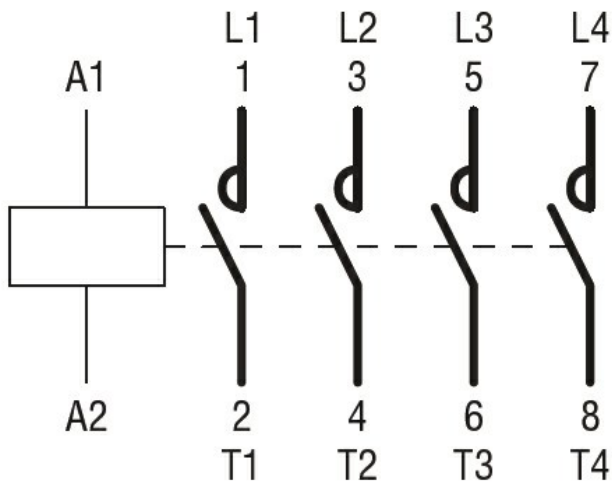
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	+70
Storage temperature			
	min	°C	-60

	max	°C	+80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
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