



Product designation

Power contactor

Product type designation

BG09

**Contact characteristics**

Number of poles	Nr.	4
Rated insulation voltage $U_i$ IEC/EN	V	690
Rated impulse withstand voltage $U_{imp}$	kV	6
Operational frequency	min max	Hz Hz 25 400
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ ) AC-1 ( $\leq 55^\circ\text{C}$ ) AC-1 ( $\leq 70^\circ\text{C}$ ) AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ ) AC-4 (400V)	A A A A A 20 18 15 9 4
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V 400V 500V 690V	kW kW kW kW 8 14 16 22
Short-time allowable current for 10s (IEC/EN60947-1)	A	96
Protection fuse	gG (IEC) aM (IEC)	A A 20 10
Making capacity (RMS value)	A	92
Breaking capacity at voltage	440V 500V 690V	A A A 72 72 72
Resistance per pole (average value)	m $\Omega$	10
Power dissipation per pole (average value)	$I_{th}$ AC-3	W W 4 0.81
Tightening torque for terminals	min max min max	Nm Nm lbin lbin 0.8 1 9 9
Tightening torque for coil terminal	min max min max	Nm Nm lbin lbin 0.8 1 9 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> 0.75  
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

IP20 when properly wired

### Mechanical features

Operating position

 normal allowable Vertical plan  
±30°

Fixing

 Screw / DIN rail  
35mm

Weight

g 222

### Auxiliary contact characteristics

 Thermal current I<sub>th</sub>

A 10

### 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

### DC coil operating

DC rated control voltage

V 110

DC operating voltage

pick-up

 min %U<sub>s</sub> 75  
max %U<sub>s</sub> 115

drop-out

 min %U<sub>s</sub> 10  
max %U<sub>s</sub> 25

Average coil consumption ≤20°C

 in-rush W 3.2  
holding W 3.2

### Max cycles frequency

Mechanical operation

cycles/h 3600

### Operating times

 Average time for U<sub>s</sub> control

in AC

Closing NO

 min ms 12  
max ms 21

Opening NO

 min ms 9  
max ms 18

Closing NC

in DC	Opening NC	min	ms	17
		max	ms	26
		min	ms	7
		max	ms	17
	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

Rated operational voltage AC (UL) V 600

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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#### Ambient conditions

Temperature

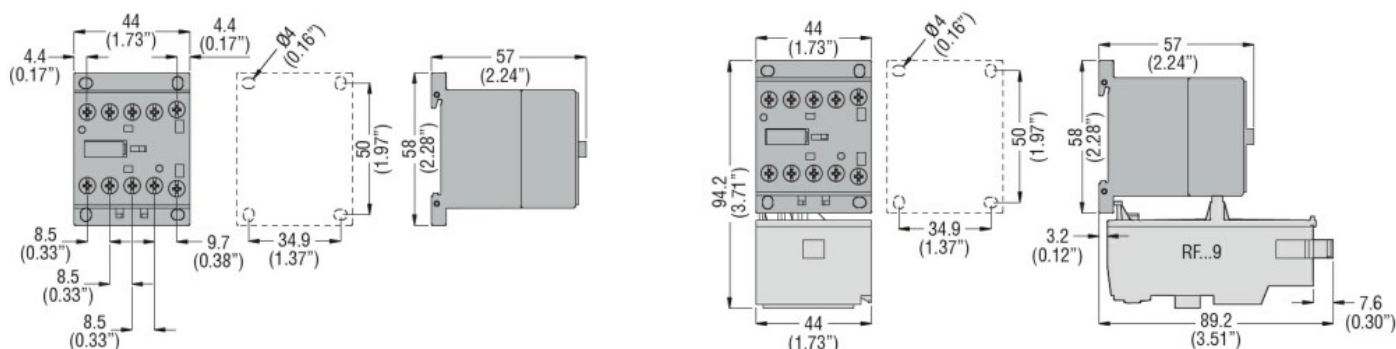
Operating temperature	min	°C	-50
	max	°C	+70
Storage temperature	min	°C	-60
	max	°C	+80

Max altitude m 3000

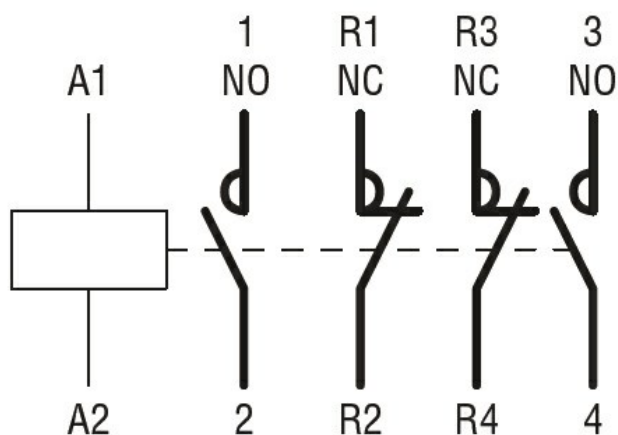
#### Resistance & Protection

Pollution degree 3

#### Dimensions



## 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

CCC  
cULus  
EAC

## ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching