



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°
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Fixing

 Screw / DIN rail  
35mm

Weight

g 179

Conductor section

AWG/kcmil conductor section

max 12

### 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

Mirror contacts according to IEC/EN 60947-4-1

YES

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

drop-out

min	%U <sub>s</sub>	20
max	%U <sub>s</sub>	55

 of 50/60Hz coil powered at 60Hz  
pick-up

min	%U <sub>s</sub>	80
max	%U <sub>s</sub>	115

drop-out

min	%U <sub>s</sub>	20
max	%U <sub>s</sub>	55

AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

in-rush	VA	30
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		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

## Ambient conditions

### Temperature

Operating temperature

min	°C	-50
max	°C	+70

Storage temperature

min	°C	-60
max	°C	+80

Max altitude

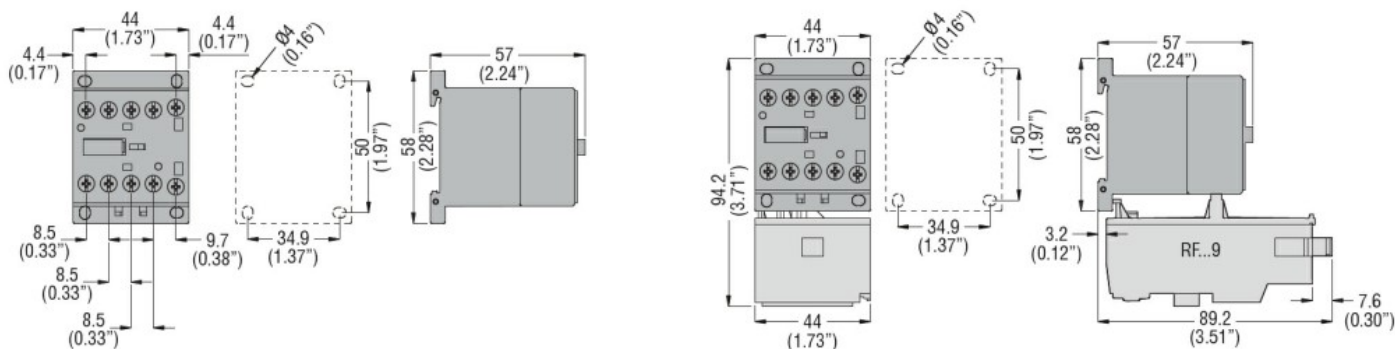
m 3000

## Resistance & Protection

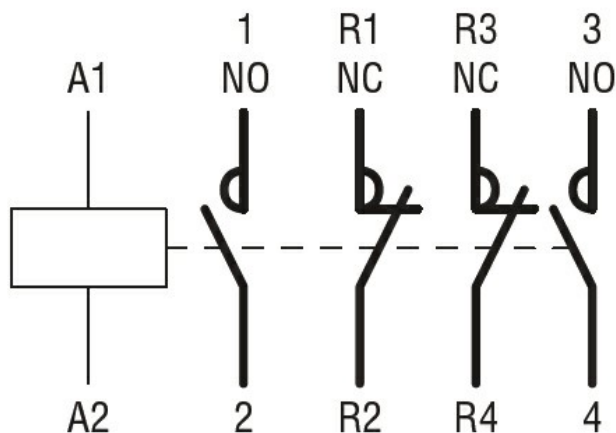
Pollution degree

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

