



Product designation				Power contactor
Product type designation				BG09
<b>Contact characteristics</b>				
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	Hz		25
	max	Hz		400
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
	690V	kW		22
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
	690V	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	$I_{bin}$		9
	max	$I_{bin}$		9
Tightening torque for coil terminal	min	Nm		0.8
	max	Nm		1
	min	$I_{bin}$		9
	max	$I_{bin}$		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
<b>Mechanical features</b>				
Operating position			normal allowable	Vertical plan ±30°
Fixing				Screw / DIN rail 35mm
Weight				g 224
Conductor section	AWG/kcmil conductor section		max	12
<b>Auxiliary contact characteristics</b>				
Thermal current I <sub>th</sub>			A	10
<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 mechanical load	cycles 500000 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	60
DC operating voltage	pick-up		min	%Us 75
			max	%Us 115
	drop-out		min	%Us 10
			max	%Us 25
Average coil consumption ≤20°C			in-rush holding	W 3.2 W 3.2
<b>Max cycles frequency</b>				
Mechanical operation				cycles/h 3600
<b>Operating times</b>				
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	min	ms	17
		max	ms	26
	Opening NC	min	ms	7
		max	ms	17
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	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

Contacteur

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

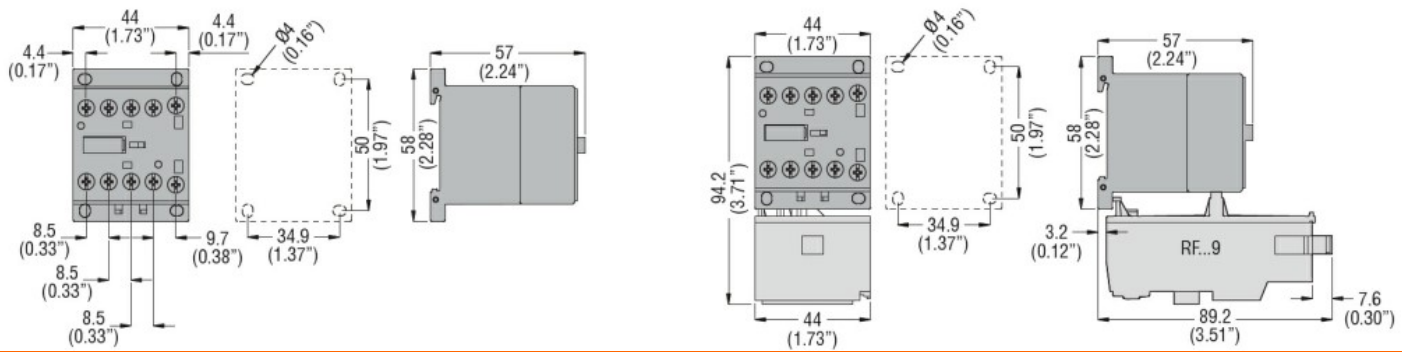
m	3000
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**Resistance & Protection**

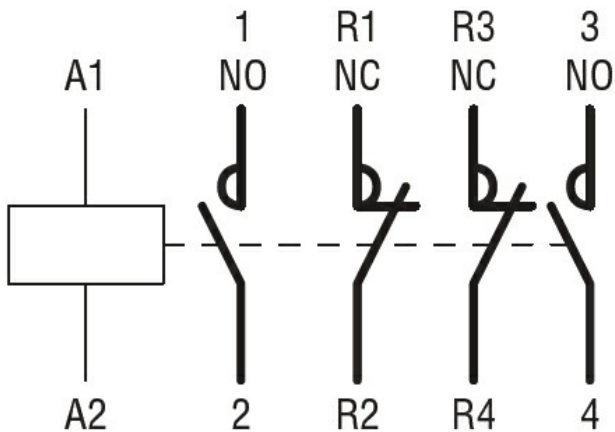
Pollution degree

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