



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	Hz 25
	max	Hz 400
IEC Conventional free air thermal current I_{th}	A	20
Operational current I_e	AC-1 (=40°C)	A 20
	AC-1 (=55°C)	A 18
	AC-1 (=70°C)	A 15
	AC-3 (=440V =55°C)	A 9
	AC-4 (400V)	A 4
Rated operational power AC-1 (T=40°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)	mΩ	10
Power dissipation per pole (average value)	I_{th}	W 4
	AC3	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 ²	0.75	
		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					IP20 when wired
Mechanical features					
Operating position					
				normal allowable	Vertical plan ±30°
Fixing					Screw / DIN rail 35mm
Weight				g	179
Conductor section					
AWG/kcmil conductor section				max	12
Auxiliary contact characteristics					
Thermal current I _{th}			A	10	
IEC/EN 60947-5-1 designation			A600		
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
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 _s	75
			max	%U _s	115
drop-out					
			min	%U _s	20

		max	%Us	55
of 50/60Hz coil powered at 60Hz				
pick-up		min	%Us	80
		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
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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

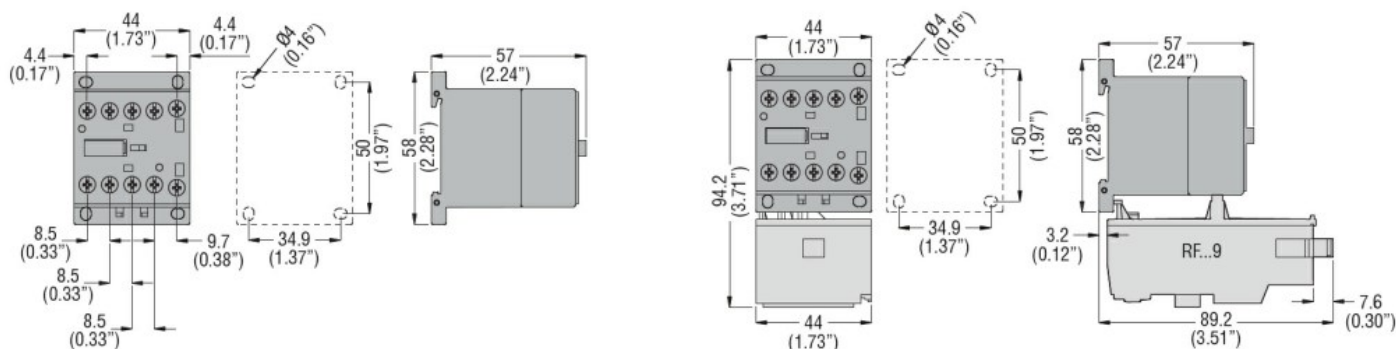
m	3000
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Resistance & Protection

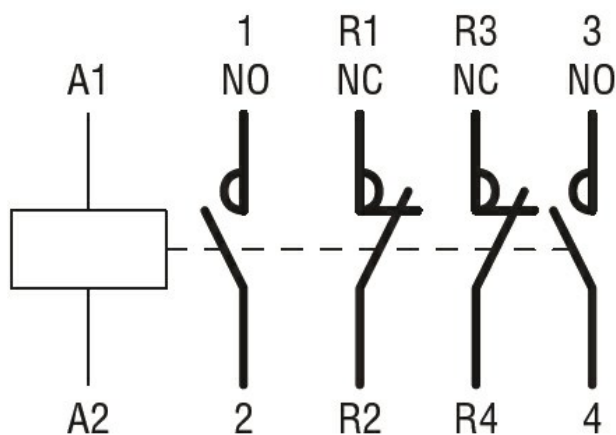
Pollution degree

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