



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 Ω	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 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 properly wired
Mechanical features				
Operating position		normal allowable	Vertical plan ±30°	
Fixing		Screw / DIN rail 35mm		
Weight		g	180	
Auxiliary contact characteristics				
Thermal current I _{th}		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 mechanical load	cycles	500000
			cycles	20000000
EMC compatibility		yes		
AC coil operating				
Rated AC voltage at 50/60Hz		V	110	
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	%U _s	55
of 50/60Hz coil powered at 60Hz				
pick-up		min	%U _s	80
		max	%U _s	115
drop-out		min	%U _s	20
		max	%U _s	55
AC average coil consumption at 20°C				
of 50/60Hz coil powered at 50Hz		in-rush holding	VA	30
			VA	4
of 50/60Hz coil powered at 60Hz		in-rush holding	VA	25
			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
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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

Rated operational voltage AC (UL)	V	600
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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

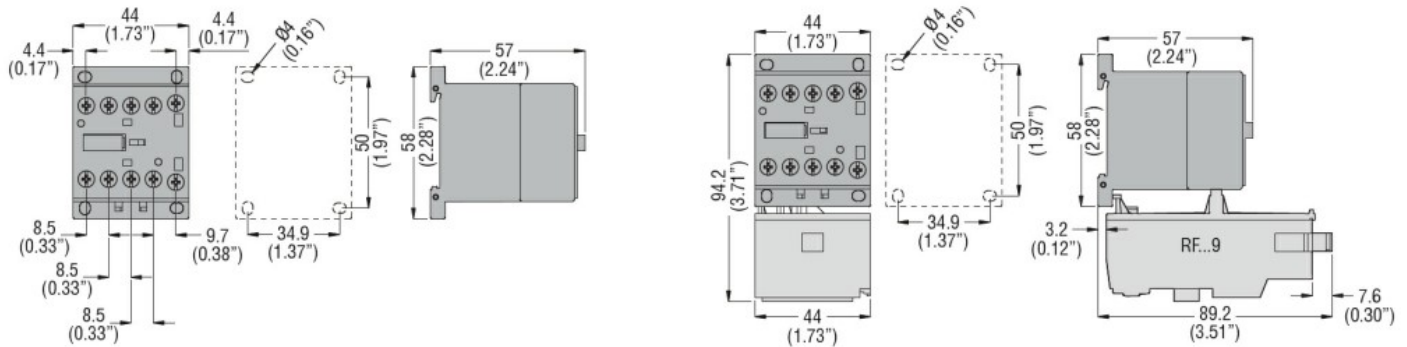
	min	°C	-50
	max	°C	+70
Storage temperature			
	min	°C	-60
	max	°C	+80
Max altitude	m		3000

Resistance & Protection

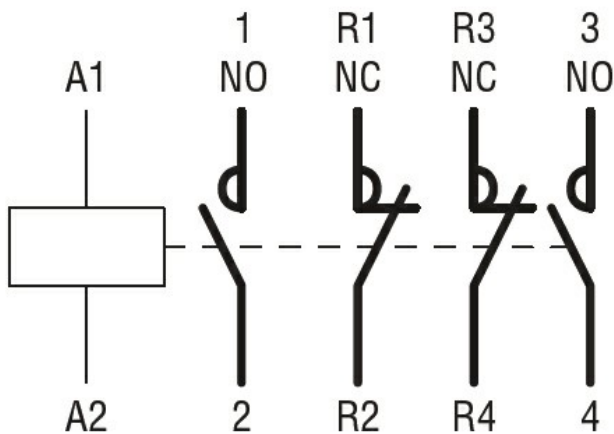
Pollution degree

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