



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			187
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 60Hz	V			230
AC operating voltage	of 60Hz coil powered at 60Hz			
	pick-up			
	min	%U _s	75	
	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	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

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

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	+70

Storage temperature

min	°C	-60
max	°C	+80

Max altitude

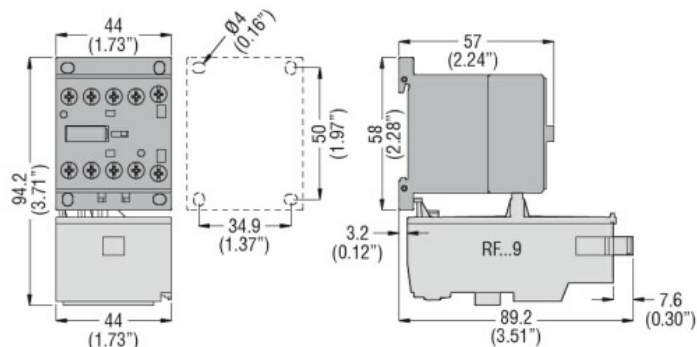
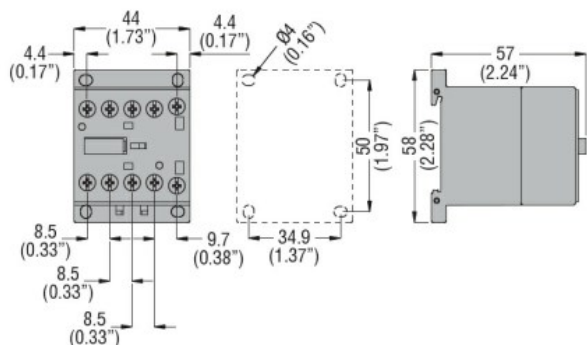
m 3000

Resistance & Protection

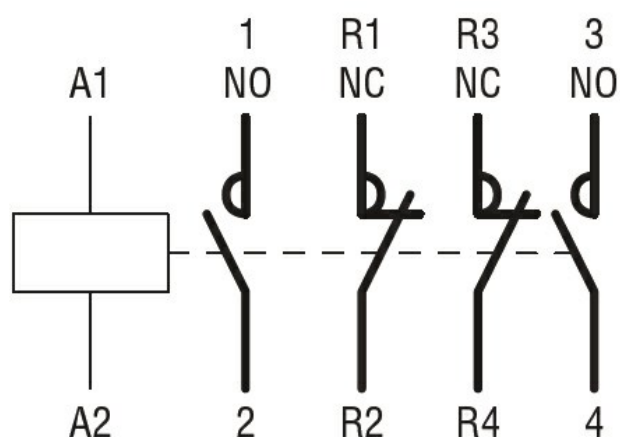
Pollution degree

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