



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 ($\leq 40^\circ\text{C}$) 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)	m?	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	Vertical plan
allowable	±30°

Fixing

 Screw / DIN rail
 35mm

Weight

g 180

Conductor section

AWG/kcmil conductor section	max	12
Auxiliary contact characteristics		
Thermal current Ith	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 60Hz V 48

AC operating voltage

of 60Hz coil powered at 60Hz	min	%Us	75
pick-up	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 holding	VA VA	30 4
of 50/60Hz coil powered at 60Hz	in-rush holding	VA VA	25 3
of 60Hz coil powered at 60Hz	in-rush holding	VA VA	30 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 max	ms ms
Opening NO		min max	ms ms
Closing NC		min max	ms ms
Opening NC		min max	ms ms
in DC			
Closing NO		min max	ms ms
Opening NO		min max	ms ms
Closing NC		min max	ms ms
Opening NC		min max	ms ms
UL technical data			
Full-load current (FLA) for three-phase AC motor		at 480V at 600V	A A
Yielded mechanical performance			
for single-phase AC motor	110/120V 230V	HP HP	0.5 1.5
for three-phase AC motor	200/208V 220/230V 460/480V	HP HP HP	2 3 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

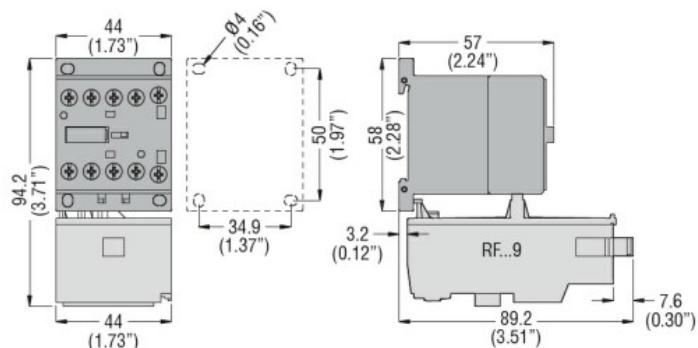
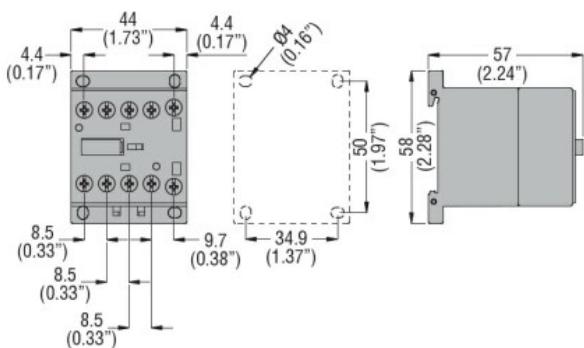
m 3000

Resistance & Protection

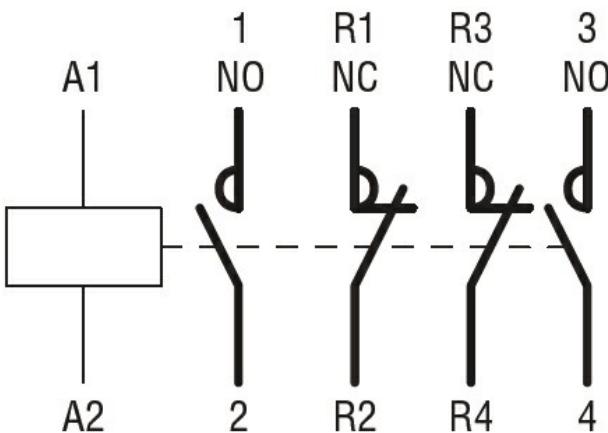
Pollution degree

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