



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 ($=40^{\circ}\text{C}$) A 20 AC-1 ($=55^{\circ}\text{C}$) A 18 AC-1 ($=70^{\circ}\text{C}$) A 15 AC-3 ($=440\text{V} = 55^{\circ}\text{C}$) A 9 AC-4 (400V) A 4		
Rated operational power AC-1 ($T=40^{\circ}\text{C}$)	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 50/60Hz V 110

AC operating voltage

of 50/60Hz coil powered at 50Hz	min	%Us	75
pick-up	max	%Us	115
drop-out	min	%Us	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

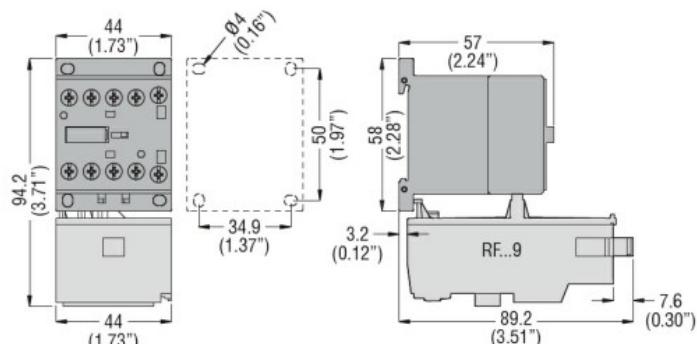
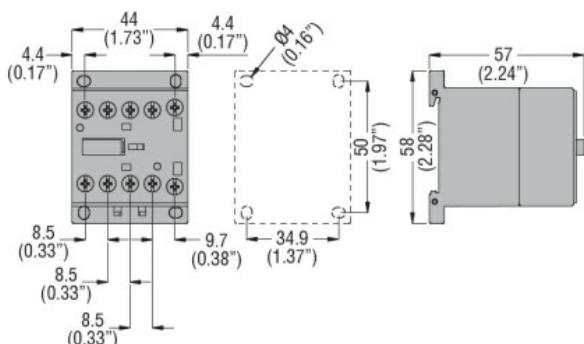
m 3000

Resistance & Protection

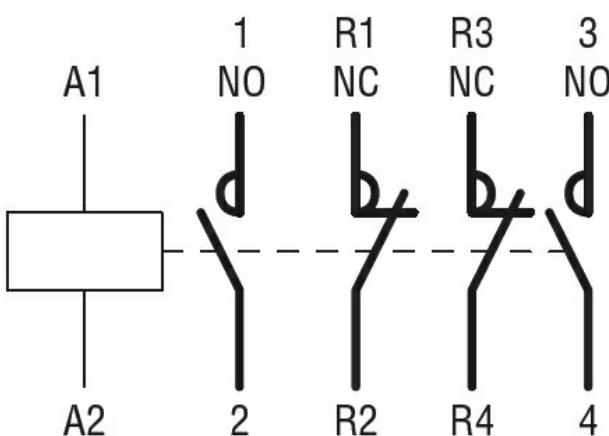
Pollution degree

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