



Product designation			Power contactor
Product type designation			BG09
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage Uimp	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
Operational current Ie	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)	Ith	W	4
	AC-3	W	0.81
Tightening torque for terminals	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	9
	max	Ibin	9
Max number of wires simultaneously connectable	Nr.	2	
Conductor section			

AWG/Kcmil

max 12

Flexible w/o lug conductor section

 min mm² 0.75
max mm² 2.5

Flexible c/w lug conductor section

 min mm² 1.5
max mm² 2.5

Flexible with insulated spade lug conductor section

 min mm² 1.5
max mm² 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 221

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 cycles 500000
mechanical load cycles 20000000

EMC compatibility

yes

DC coil operating

DC rated control voltage

V 12

DC operating voltage

pick-up

 min %U_s 75
max %U_s 115

drop-out

 min %U_s 10
max %U_s 25

Average coil consumption ≤20°C

 in-rush W 3.2
holding W 3.2

Max cycles frequency

Mechanical operation

cycles/h 3600

Operating times

 Average time for U_s control

in AC

Closing NO

 min ms 12
max ms 21

Opening NO

 min ms 9
max ms 18

Closing NC

in DC	Opening NC	min	ms	17
		max	ms	26
		min	ms	7
		max	ms	17
	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
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Ambient conditions

Temperature

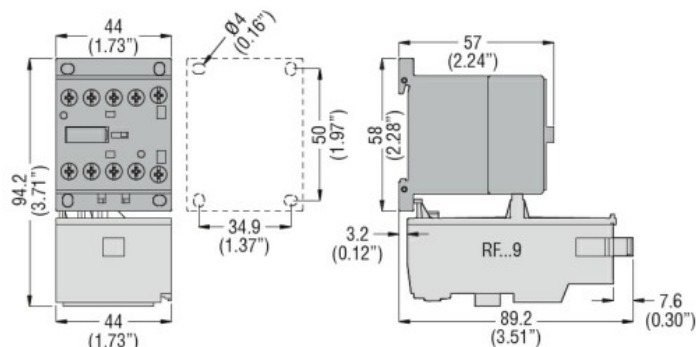
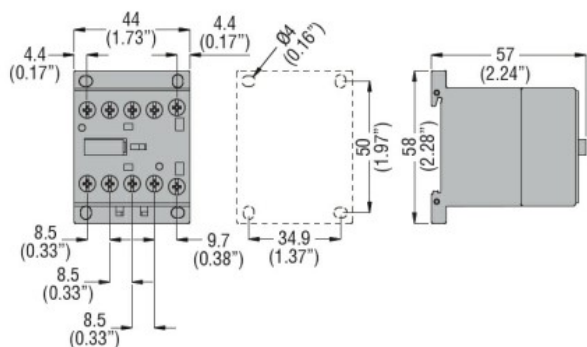
Operating temperature	min	°C	-50
	max	°C	+70
Storage temperature	min	°C	-60
	max	°C	+80

Max altitude m 3000

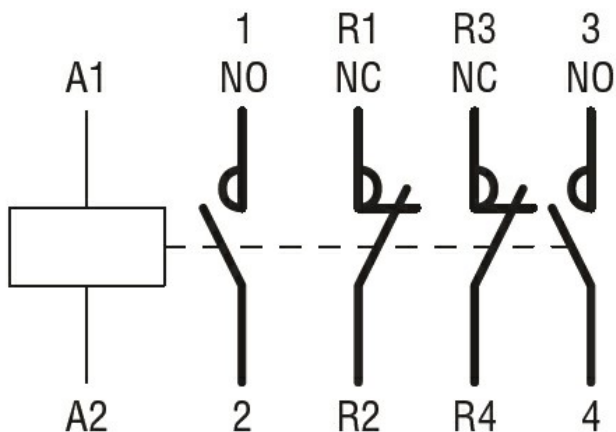
Resistance & Protection

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