



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	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 179

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

AC coil operating

Rated AC voltage at 50/60Hz V 24

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 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 $\leq 20^{\circ}\text{C}$ 50Hz		W	0.95

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

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

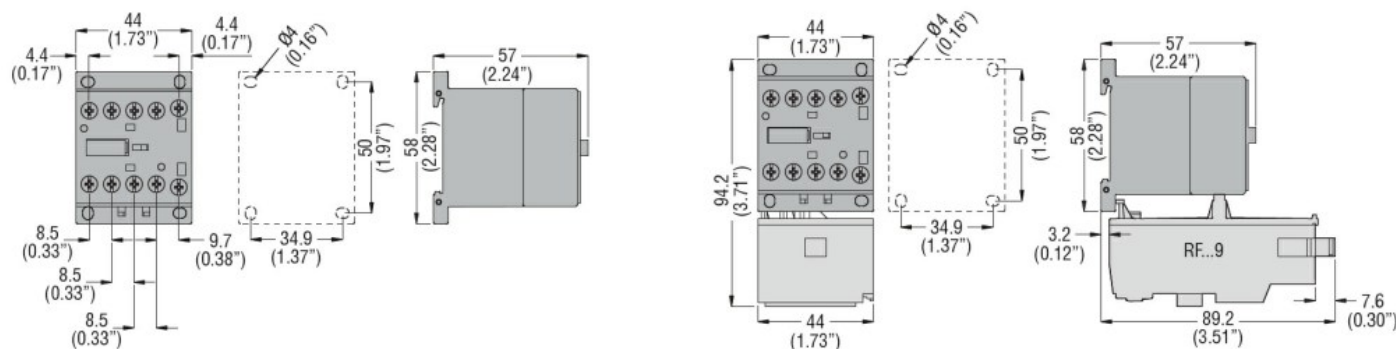
	min	°C	-50
	max	°C	+70
Storage temperature			
	min	°C	-60
	max	°C	+80
Max altitude	m		3000

Resistance & Protection

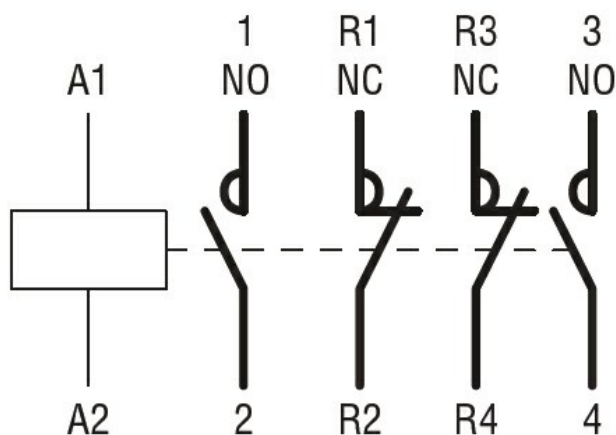
Pollution degree

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