



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
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 $\Omega$	10
Power dissipation per pole (average value)	$I_{th}$ W	4
	AC-3 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 <sup>2</sup>	0.75
		max	mm <sup>2</sup>	2.5
Flexible c/w lug conductor section		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	2.5
Flexible with insulated spade lug conductor section		min	mm <sup>2</sup>	1.5
		max	mm <sup>2</sup>	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	182	
Auxiliary contact characteristics				
Thermal current I <sub>th</sub>		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 50/60Hz		V	230	
AC operating voltage				
of 50/60Hz coil powered at 50Hz				
pick-up		min	%Us	75
		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 holding	VA	30
			VA	4
of 50/60Hz coil powered at 60Hz		in-rush holding	VA	25
			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
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#### 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
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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

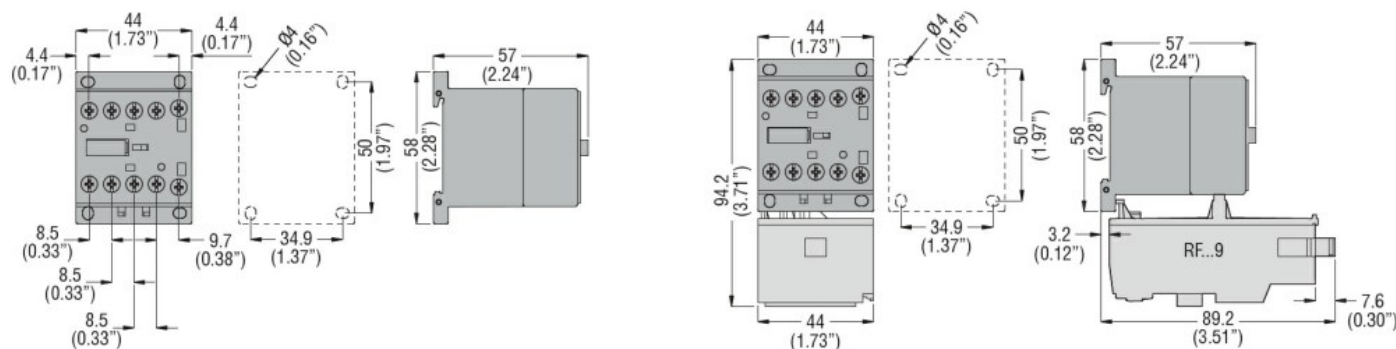
	min	°C	-50
	max	°C	+70
Storage temperature			
	min	°C	-60
	max	°C	+80
Max altitude	m		3000

#### Resistance & Protection

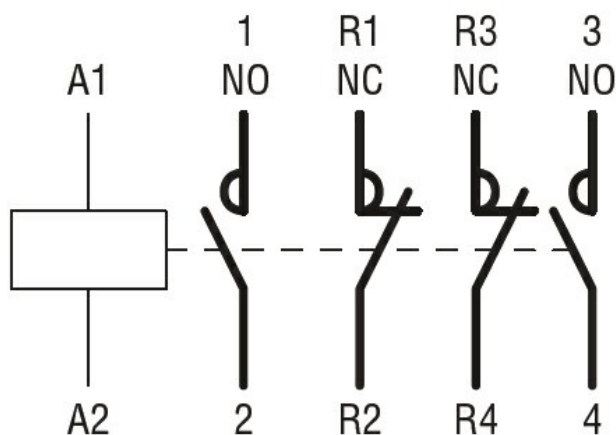
Pollution degree

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