

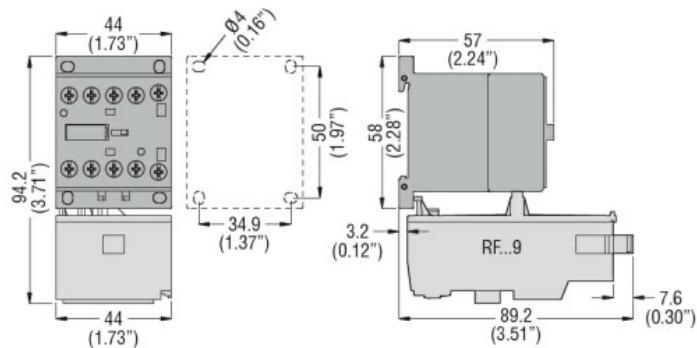
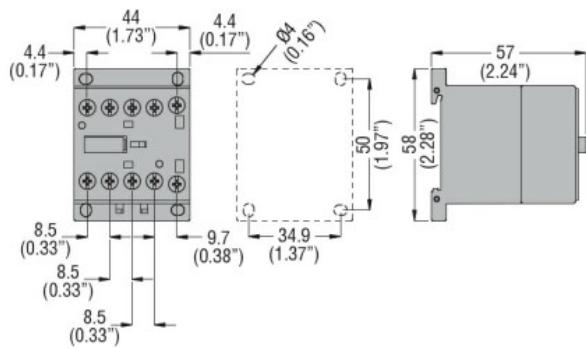


Product designation	Power contactor		
Product type designation	BG09		
<b>Contact characteristics</b>			
Number of poles	Nr.	4	
Rated insulation voltage $U_i$ IEC/EN	V	690	
Rated impulse withstand voltage $U_{imp}$	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
Operational current $I_e$			
AC-1 ( $\leq 40^\circ C$ )	A	20	
AC-1 ( $\leq 55^\circ C$ )	A	18	
AC-1 ( $\leq 70^\circ C$ )	A	15	
AC-3 ( $\leq 440V \leq 55^\circ C$ )	A	9	
AC-4 (400V)	A	4	
Rated operational power AC-1 ( $T \leq 40^\circ C$ )	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 <sub>th</sub>	W	4
	AC-3	W	0.81
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	9
	max	I <sub>bin</sub>	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	9
	max	I <sub>bin</sub>	9
Max number of wires simultaneously connectable		Nr.	2
Conductor section			

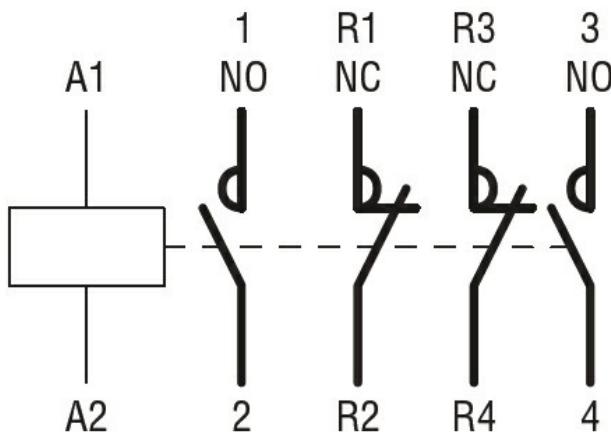
AWG/Kcmil	max	12
Flexible w/o lug conductor section		
min	mm <sup>2</sup>	0.75
max	mm <sup>2</sup>	2.5
Flexible c/w lug conductor section		
min	mm <sup>2</sup>	1.5
max	mm <sup>2</sup>	2.5
Flexible with insulated spade lug conductor section		
min	mm <sup>2</sup>	1.5
max	mm <sup>2</sup>	2.5
Power terminal protection according to IEC/EN 60529		IP20 when properly wired
<b>Mechanical features</b>		
Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight	g	178
<b>Auxiliary contact characteristics</b>		
Thermal current Ith	A	10
<b>Operations</b>		
Mechanical life	cycles	20000000
Electrical life	cycles	500000
<b>Safety related data</b>		
Performance level B10d according to EN/ISO 13489-1		
	rated load	cycles 500000
	mechanical load	cycles 20000000
EMC compatibility		yes
<b>AC coil operating</b>		
Rated AC voltage at 50/60Hz	V	400
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	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 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
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			
Max altitude			
Resistance & Protection			
Pollution degree			
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