

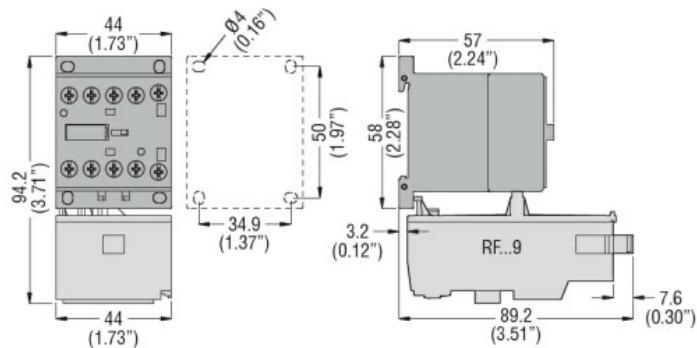
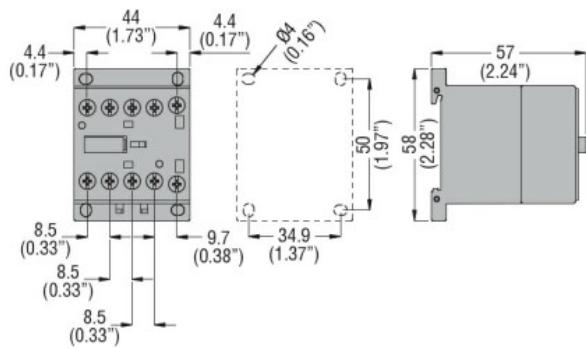


Product designation	Power contactor		
Product type designation	BG09		
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage Ui IEC/EN	V	690	
Rated impulse withstand voltage $Uimp$	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
Operational current Ie			
AC-1 ($\leq 40^{\circ}\text{C}$)	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)		$\text{m}\Omega$	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	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			

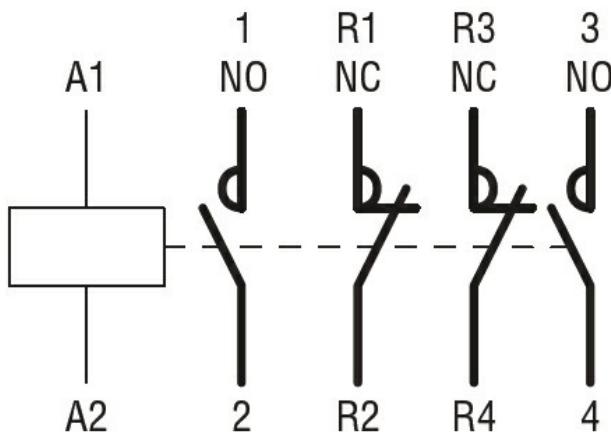
AWG/Kcmil	max	12
Flexible w/o lug conductor section	min	mm ² 0.75
	max	mm ² 2.5
Flexible c/w lug conductor section	min	mm ² 1.5
	max	mm ² 2.5
Flexible with insulated spade lug conductor section	min	mm ² 1.5
	max	mm ² 2.5
Power terminal protection according to IEC/EN 60529		IP20 when properly wired
Mechanical features		
Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight	g	182
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	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	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