



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 ($\leq 40^\circ C$)	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 _{th}	W	4
	AC-3	W	0.81
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	9
	max	I _{bin}	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	9
	max	I _{bin}	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	180
Auxiliary contact characteristics		
Thermal current Ith	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 60Hz	V	48
AC operating voltage		
of 60Hz coil powered at 60Hz		
pick-up	min	%Us 75
	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 ≤20°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
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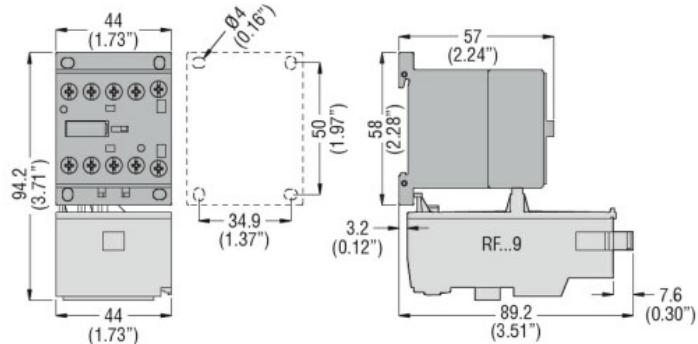
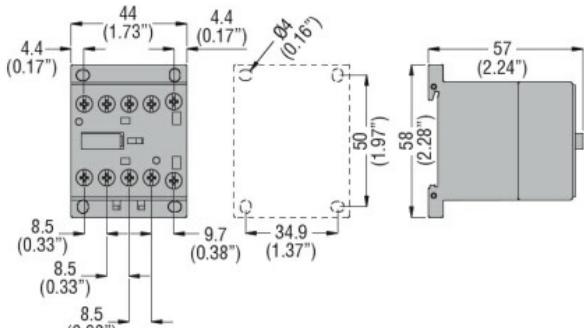
Ambient conditions

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

Resistance & Protection

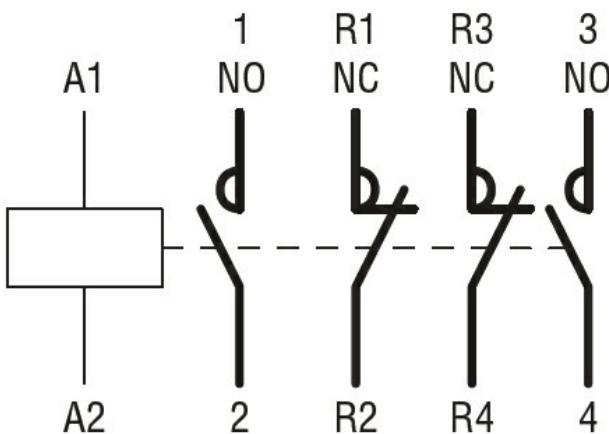
Pollution degree

Dimensions



3

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UJ 60947-1

UI 60947-4-1

Certificates

GGG

300

FAC

ETIM classification

FTIM 8.0

EC000066 -
Power contactor,
AC switching