



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
IEC Conventional free air thermal current I_{th}		A	20
Operational current I_e			
	AC-1 ($=40^\circ\text{C}$)	A	20
	AC-3 ($=440\text{V} =55^\circ\text{C}$)	A	9
	AC-4 (400V)	A	4
Rated operational power AC-1 ($T=40^\circ\text{C}$)	230V	kW	8
	400V	kW	14
	500V	kW	16
	690V	kW	22
IEC max current I_e in DC1 with $L/R = 1\text{ms}$ with 1 poles in series	=24V	A	12
	48V	A	10
	75V	A	4
	110V	A	3
	220V	A	—
IEC max current I_e in DC1 with $L/R = 1\text{ms}$ with 2 poles in series	=24V	A	15
	48V	A	14
	75V	A	9
	110V	A	8
	220V	A	—
IEC max current I_e in DC1 with $L/R = 1\text{ms}$ with 3 poles in series	=24V	A	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2
IEC max current I_e in DC1 with $L/R = 1\text{ms}$ with 4 poles in series	=24V	A	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2
IEC max current I_e in DC3-DC5 with $L/R = 15\text{ms}$ with 1 poles in series	=24V	A	7

	48V	A	6
	75V	A	2
	110V	A	1
	220V	A	—
IEC max current le in DC3-DC5 with L/R = 15ms with 2 poles in series	=24V	A	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	A	—
IEC max current le in DC3-DC5 with L/R = 15ms with 3 poles in series	=24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0,8
IEC max current le in DC3-DC5 with L/R = 15ms with 4 poles in series	=24V	A	10
	48V	A	10
	75V	A	6
	110V	A	5
	220V	A	0,8
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?	10
Power dissipation per pole (average value)	I _{th}	W	4
	AC3	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 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 wired
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight	g		183
Conductor section			
AWG/kcmil conductor section	max		12
Auxiliary contact characteristics			
Thermal current I _{th}	A		10
IEC/EN 60947-5-1 designation			A600
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 20000000
Mirror contacts according to IEC/EN 609474-4-1			yes
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 4
of 50/60Hz coil powered at 60Hz	in-rush holding	VA	25 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			
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
Short-circuit protection fuse, 600V High fault			
	Short circuit current	kA	100
	Fuse rating	A	30
	Fuse class	J	
Standard fault			

Short circuit current	kA	5
Fuse rating	A	30

Ambient conditions

Temperature

Operating temperature

min	°C	-50
max	°C	+70

Storage temperature

min	°C	-60
max	°C	+80

Max altitude

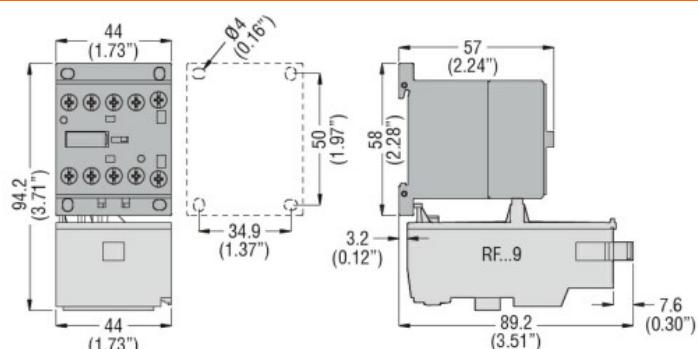
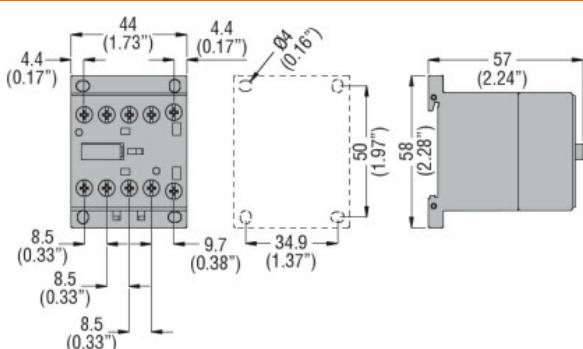
m 3000

Resistance & Protection

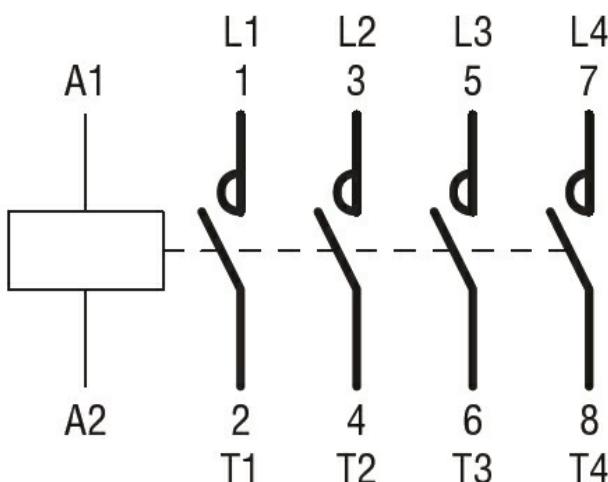
Pollution degree

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