



Product designation	Auxiliary 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
IEC Conventional free air thermal current Ith	A	20	
Operational current le			
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
IEC max current le in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	12
	48V	A	10
	75V	A	4
	110V	A	3
	220V	A	—
IEC max current le in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	15
	48V	A	14
	75V	A	9
	110V	A	8
	220V	A	—
IEC max current le in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2
IEC max current le in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$	A	16
	48V	A	16
	75V	A	10
	110V	A	10
	220V	A	2

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series

$\leq 24\text{V}$	A	7
48V	A	6
75V	A	2
110V	A	1
220V	A	—

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series

$\leq 24\text{V}$	A	8
48V	A	8
75V	A	5
110V	A	4
220V	A	—

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series

$\leq 24\text{V}$	A	10
48V	A	10
75V	A	6
110V	A	5
220V	A	0,8

IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series

$\leq 24\text{V}$	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)

$\text{m}\Omega$ 10

Power dissipation per pole (average value)

I _{th}	W	4
AC-3	W	0.8

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 0.8

	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
Mechanical features			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight	g	200	
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	cycles	500000
	mechanical load	cycles	20000000
EMC compatibility			YES
AC coil operating			
Rated AC voltage at 60Hz	V	24	
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 0.9
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
<hr/>				
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
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
	Fuse class		RK5

Ambient conditions

Temperature	Operating temperature	min	°C	-50
-------------	-----------------------	-----	----	-----

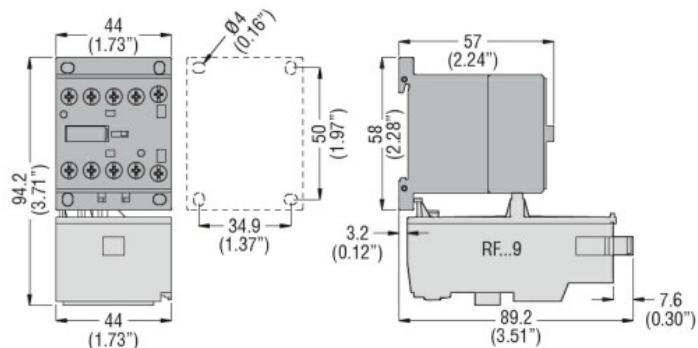
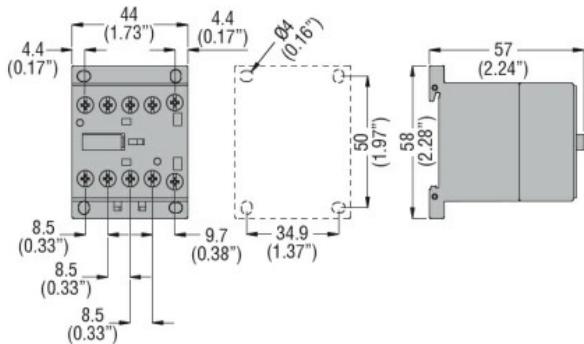
Storage temperature	max	°C	+70
	min	°C	-60
	max	°C	+80

Max altitude m 3000

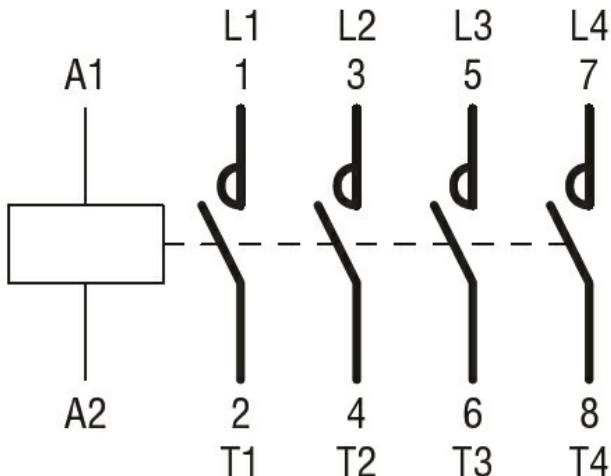
Resistance & Protection

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