



Product designation Auxiliary contactor BG09

Product type designation

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 ($\leq 40^\circ C$)	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

IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series

$\leq 24V$	A	12
48V	A	10
75V	A	4
110V	A	3
220V	A	—

IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series

$\leq 24V$	A	15
48V	A	14
75V	A	9
110V	A	8
220V	A	—

IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series

$\leq 24V$	A	16
48V	A	16
75V	A	10
110V	A	10
220V	A	2

IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series

$\leq 24V$	A	16
48V	A	16
75V	A	10
110V	A	10
220V	A	2

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

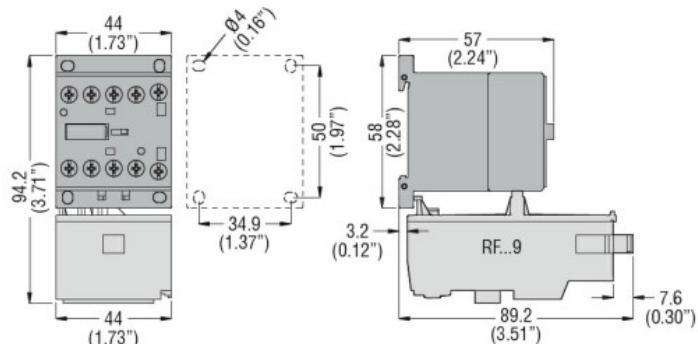
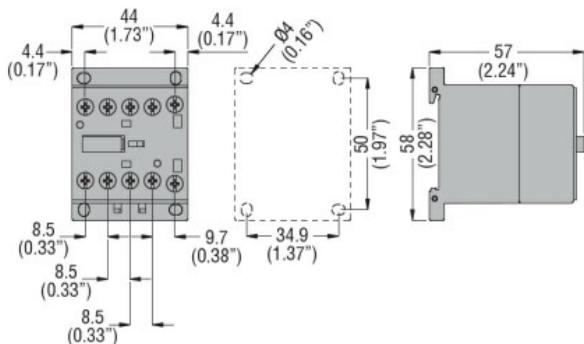
Nr. 2

Conductor section

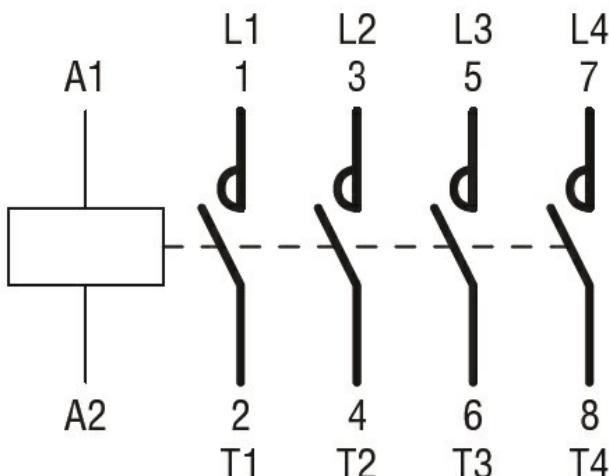
AWG/Kcmil	max	12
Flexible w/o lug conductor section	min	mm ² 0.8

Flexible c/w lug conductor section	max	mm ²	2.5
	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		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail
			35mm
Weight	g		200
Auxiliary contact characteristics			
Thermal current I _{th}	A		10
IEC/EN 60947-5-1 designation			Q600
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
DC coil operating			
DC rated control voltage	V		48
DC operating voltage	pick-up	min	%Us
		max	%Us
	drop-out	min	%Us
		max	%Us
Average coil consumption ≤20°C	in-rush	W	3.2
	holding	W	3.2
Max cycles frequency			
Mechanical operation	cycles/h		3600
Operating times			
Average time for Us control	in AC	Closing NO	min
			ms
			12
		Opening NO	max
			ms
			21
		min	ms
		max	ms
			9
		Closing NC	ms
			18
		min	ms
		max	ms
			17
		Opening NC	ms
			26
		min	ms
			7

in DC		max	ms	17
	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	
	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