



Product designation	Auxiliary contactor BG09		
Product type designation			
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	0.8
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 0.8
	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	Vertical plan
allowable	±30°

Fixing

 Screw / DIN rail
 35mm

Weight

g 200

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

DC coil operating

DC rated control voltage	V	24
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DC operating voltage

pick-up	min	%Us	75
	max	%Us	115

drop-out	min	%Us	10
	max	%Us	25

Average coil consumption ≤20°C

in-rush	W	3.2
holding	W	3.2

Max cycles frequency

Mechanical operation cycles/h 3600

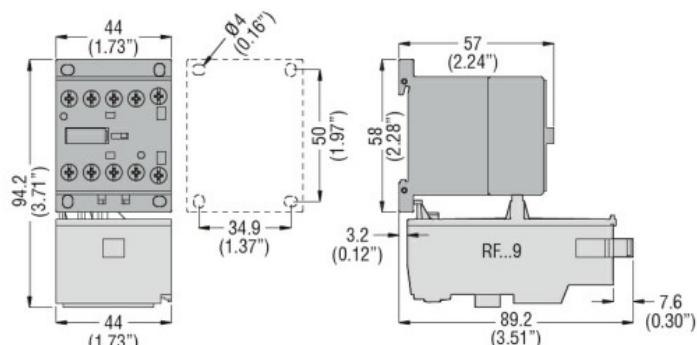
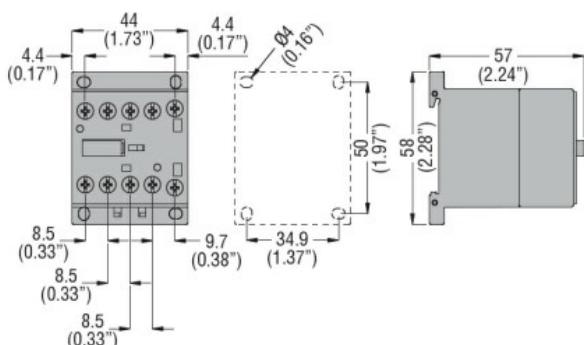
Operating times

Average time for Us control	cycles/h	3600
in AC		

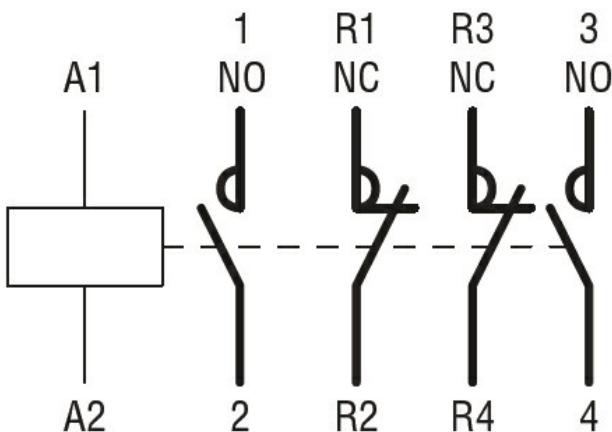
Closing NO	min	ms	12
	max	ms	21

Opening NO	min	ms	9
	max	ms	18

	Closing NC	min	ms	17
		max	ms	26
	Opening NC	min	ms	7
		max	ms	17
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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
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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
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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
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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
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Max altitude			m	3000
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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