



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 ($\leq 40^\circ\text{C}$)	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)	m Ω	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 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 mm² 0.75
max mm² 2.5

Flexible c/w lug conductor section

min mm² 1.5
max mm² 2.5

Flexible with insulated spade lug conductor section

min mm² 1.5
max mm² 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

Conductor section

AWG/kcmil conductor section

max 12

Auxiliary contact characteristics

Thermal current I_{th}

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

Mirror contacts according to IEC/EN 60947-4-1

YES

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 %U_s 75
max %U_s 115

drop-out

min %U_s 20
max %U_s 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

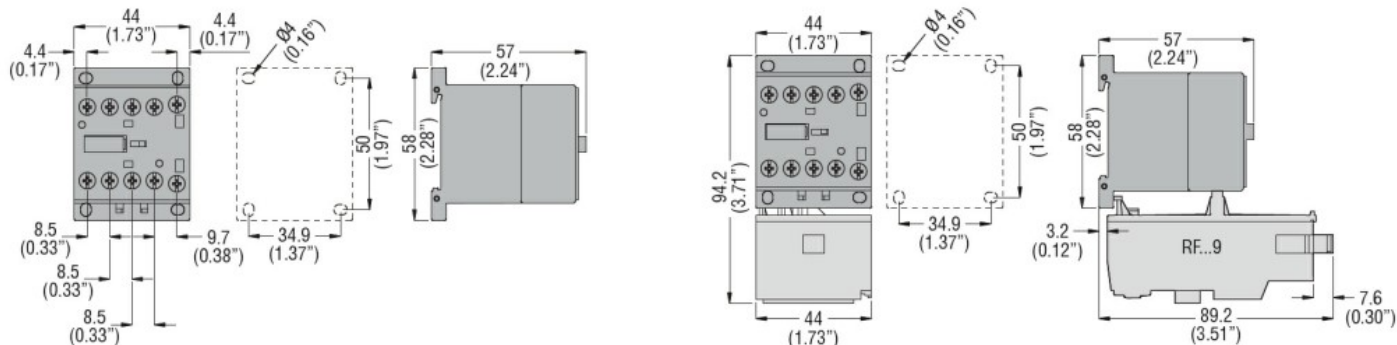
in-rush VA 25
holding VA 3

of 60Hz coil powered at 60Hz

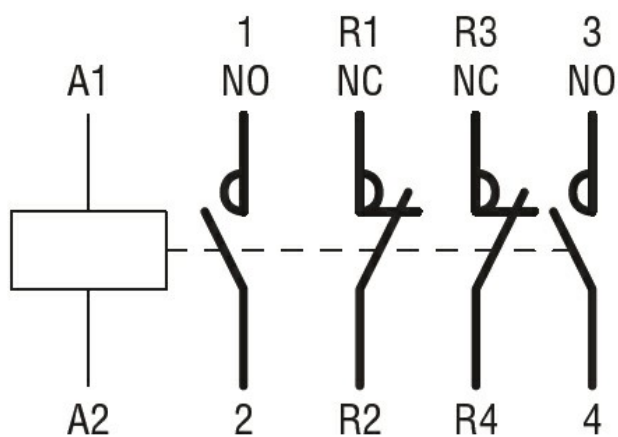
in-rush VA 30
holding VA 4

Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	0.95
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for U_s 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
Ambient conditions			
Temperature			
Operating temperature		min	$^{\circ}\text{C}$ -50
		max	$^{\circ}\text{C}$ +70
Storage temperature		min	$^{\circ}\text{C}$ -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