



Product designation				Power contactor
Product type designation				BG06
<b>Contact characteristics</b>				
Number of poles	Nr.			3
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			16
Operational current $I_e$	AC-1 (=40°C)	A	16	
	AC-3 (=440V =55°C)	A	6	
	AC-4 (400V)	A	3.3	
Rated operational power AC-3 (T=55°C)	230V	kW	1.5	
	400V	kW	2.2	
	415V	kW	2.4	
	440V	kW	2.5	
	500V	kW	3	
	690V	kW	3	
Rated operational power AC-1 (T=40°C)	230V	kW	6	
	400V	kW	10	
	500V	kW	13	
	690V	kW	18	
IEC max current $I_e$ in DC1 with L/R = 1ms with 1 poles in series	=24V	A	9	
	48V	A	8	
	75V	A	4	
	110V	A	3	
	220V	A	-	
	IEC max current $I_e$ in DC1 with L/R = 1ms with 2 poles in series	=24V	A	12
48V		A	11	
75V		A	7	
110V		A	6	
220V		A	-	
IEC max current $I_e$ in DC1 with L/R = 1ms with 3 poles in series		=24V	A	14
	48V	A	14	
	75V	A	8	
	110V	A	8	
	220V	A	1	
	IEC max current $I_e$ in DC1 with L/R = 1ms with 4 poles in series	=24V	A	14
48V		A	14	
75V		A	8	
110V		A	8	

	=24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
<hr/>			
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 1 poles in series	=24V	A	6
	48V	A	5
	75V	A	2
	110V	A	1
	220V	A	–
<hr/>			
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 2 poles in series	=24V	A	7
	48V	A	7
	75V	A	4
	110V	A	3
	220V	A	–
<hr/>			
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 3 poles in series	=24V	A	9
	48V	A	9
	75V	A	5
	110V	A	4
	220V	A	0,5
<hr/>			
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 4 poles in series	=24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
<hr/>			
Short-time allowable current for 10s (IEC/EN60947-1)		A	96
<hr/>			
Protection fuse	gG (IEC)	A	16
	aM (IEC)	A	6
<hr/>			
Making capacity (RMS value)		A	92
<hr/>			
Breaking capacity at voltage	440V	A	72
	500V	A	72
	690V	A	72
<hr/>			
Resistance per pole (average value)		m?	10
<hr/>			
Power dissipation per pole (average value)	I <sub>th</sub>	W	2.6
	AC3	W	0.36
<hr/>			
Tightening torque for terminals	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	9
	max	I <sub>bin</sub>	9
<hr/>			
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	9
	max	I <sub>bin</sub>	9
<hr/>			
Max number of wires simultaneously connectable		Nr.	2

Conductor section

AWG/Kcmil			max	12
Flexible w/o lug conductor section			min	mm <sup>2</sup> 0.75
			max	mm <sup>2</sup> 2.5
Flexible c/w lug conductor section			min	mm <sup>2</sup> 1.5
			max	mm <sup>2</sup> 2.5
Flexible with insulated spade lug conductor section			min	mm <sup>2</sup> 1.5
			max	mm <sup>2</sup> 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 180

Conductor section

AWG/kcmil conductor section			max	12
-----------------------------	--	--	-----	----

**Auxiliary contact characteristics**

Thermal current I<sub>th</sub>

A 10

IEC/EN 60947-5-1 designation

A600 - Q600

Operating current AC15

230V	A	3
400V	A	1.9
500V	A	1.4

Operating current DC12

110V	A	2.9
------	---	-----

Operating current DC13

24V	A	2.9
48V	A	1.4
60V	A	1.2
110V	A	0.6
125V	A	0.55
220V	A	0.3
600V	A	0.1

**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 460

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	0.95
---	------

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	4.8
at 600V	A	3.9

Yielded mechanical performance

for single-phase AC motor

110/120V	HP	0.3
----------	----	-----

	230V	HP	1
for three-phase AC motor			
	200/208V	HP	1.5
	220/230V	HP	2
	460/480V	HP	3
	575/600V	HP	3

**General USE**

Contactor	AC current	A	16
Short-circuit protection fuse, 600V	Short circuit current	kA	100
High fault	Fuse rating	A	30
	Fuse class		J

Standard fault	Short circuit current	kA	5
	Fuse rating	A	30

Contact rating of auxiliary contacts according to UL A600 - Q600

**Ambient conditions**

**Temperature**

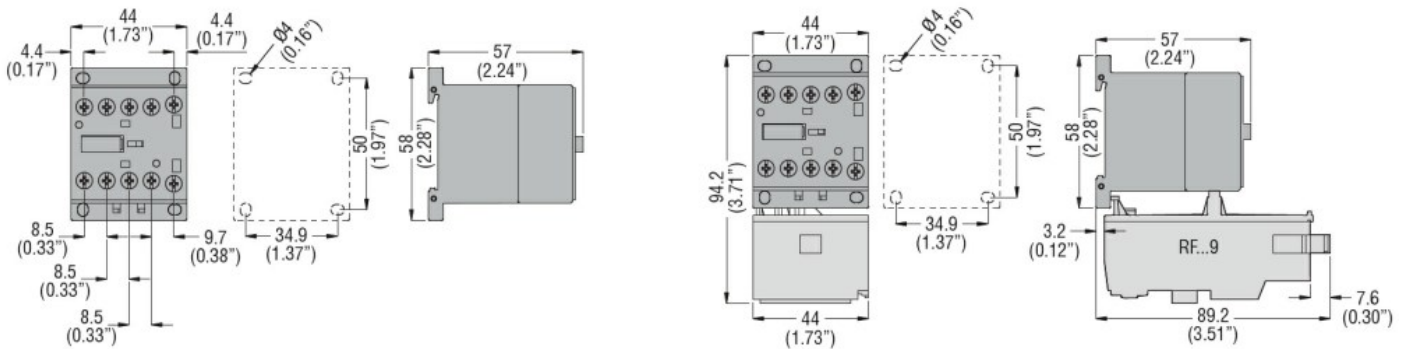
Operating temperature	min	°C	-50
	max	°C	+70
Storage temperature	min	°C	-60
	max	°C	+80

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