



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-1 (=55°C)	A	14
	AC-1 (=70°C)	A	12
	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
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IEC max current I <sub>e</sub> in DC1 with L/R = 1ms with 4 poles in series			
	=24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
	220V	A	–
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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	–
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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	–
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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
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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	–
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Short-time allowable current for 10s (IEC/EN60947-1)		A	96
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Protection fuse			
	gG (IEC)	A	16
	aM (IEC)	A	6
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Making capacity (RMS value)		A	92
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Breaking capacity at voltage			
	440V	A	72
	500V	A	72
	690V	A	72
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Resistance per pole (average value)		m?	10
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Power dissipation per pole (average value)			
	I <sub>th</sub>	W	2.6
	AC3	W	0.36
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Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	9
	max	I <sub>bin</sub>	9
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Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	9

	max	I <sub>bin</sub>	9
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
<b>Mechanical features</b>			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	180
Conductor section			
AWG/kcmil conductor section	max		12
<b>Auxiliary contact characteristics</b>			
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
<b>Operations</b>			
Mechanical life		cycles	20000000
Electrical life		cycles	500000
<b>Safety related data</b>			
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
<b>AC coil operating</b>			
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 0.95

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
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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

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

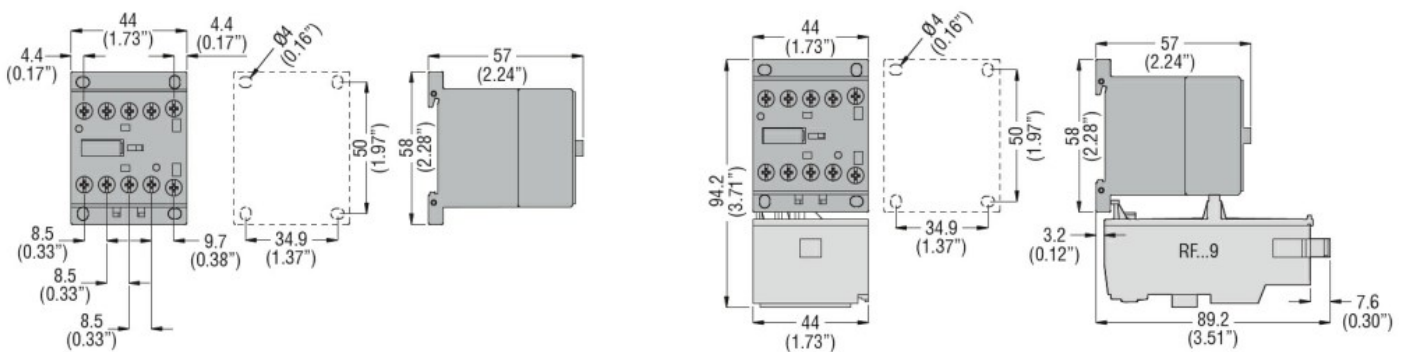
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Resistance & Protection

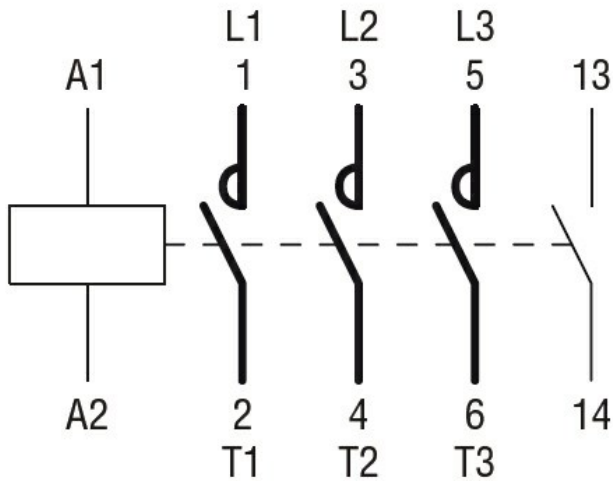
Pollution degree

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