



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	
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	
	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	–
	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
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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 185

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
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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
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Max cycles frequency

Mechanical operation

cycles/h	3600
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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
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		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
<b>General USE</b>				
	Contactor			
		AC current	A	16
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
<b>Ambient conditions</b>				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	+70
	Storage temperature			
		min	°C	-60
		max	°C	+80
Max altitude			m	3000
<b>Resistance &amp; Protection</b>				
Pollution degree				3