



Product designation	Power contactor		
Product type designation	BG06		
<b>Contact characteristics</b>			
Number of poles	Nr.	3	
Rated insulation voltage $Ui$ IEC/EN	V	690	
Rated impulse withstand voltage $Uimp$	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current $Ith$	A	16	
Operational current $le$	AC-1 ( $\leq 40^{\circ}\text{C}$ )	A	16
	AC-1 ( $\leq 55^{\circ}\text{C}$ )	A	14
	AC-1 ( $\leq 70^{\circ}\text{C}$ )	A	12
	AC-3 ( $\leq 440\text{V} \leq 55^{\circ}\text{C}$ )	A	6
	AC-4 (400V)	A	3.3
Rated operational power AC-3 ( $T \leq 55^{\circ}\text{C}$ )	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 ( $T \leq 40^{\circ}\text{C}$ )	230V	kW	6
	400V	kW	10
	500V	kW	13
	690V	kW	18
IEC max current $le$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	9
	48V	A	8
	75V	A	4
	110V	A	3
	220V	A	—
IEC max current $le$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	12
	48V	A	11
	75V	A	7
	110V	A	6
	220V	A	—
IEC max current $le$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series	$\leq 24\text{V}$	A	14
	48V	A	14
	75V	A	8
	110V	A	8

	220V	A	1
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series			
	≤24V	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	≤24V	A	6
	48V	A	5
	75V	A	2
	110V	A	1
	220V	A	—
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	≤24V	A	7
	48V	A	7
	75V	A	4
	110V	A	3
	220V	A	—
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	≤24V	A	9
	48V	A	9
	75V	A	5
	110V	A	4
	220V	A	0,5
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series			
	≤24V	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
Short-time allowable current for 10s (IEC/EN60947-1)		A	96
Protection fuse			
	gG (IEC)	A	16
	aM (IEC)	A	6
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 <sub>th</sub>	W	2.6
	AC-3	W	0.36
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	9
	max	I <sub>bin</sub>	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	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 <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 properly wired
<b>Mechanical features</b>			
Operating position	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight	g	230	
<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 609474-4-1			Yes
EMC compatibility			yes
<b>DC coil operating</b>			
DC rated control voltage	V	48	
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
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	3600
<b>Operating times</b>			
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	
<b>UL technical data</b>			
Rated operational voltage AC (UL)		V	600
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
<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

#### Ambient conditions

##### Temperature

Operating temperature	min	°C	-50
	max	°C	+70

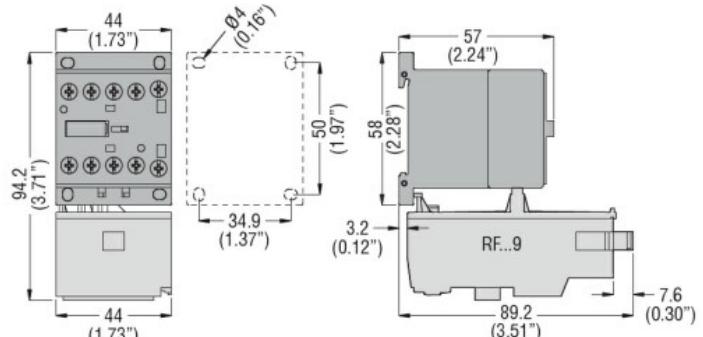
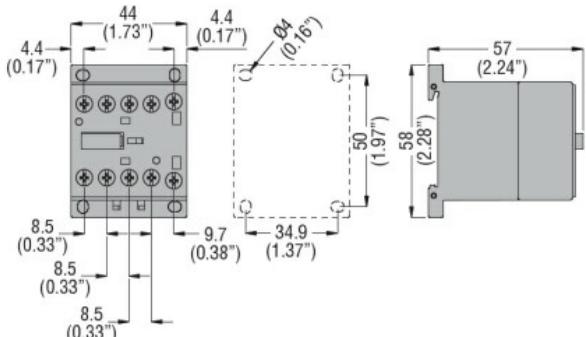
Storage temperature	min	°C	-60
	max	°C	+80

Max altitude m 3000

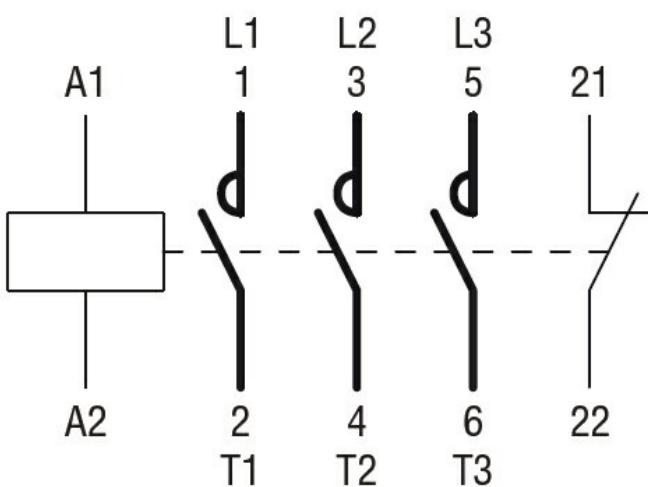
Resistance & Protection

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

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UL 60947-1

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UL 60947-4-1

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**Certificates**

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CCC

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EAC

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**ETIM classification**

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching