



Product designation

Power contactor

Product type designation

BG06

**Contact characteristics**

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 ( $\leq 40^\circ\text{C}$ )	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 $I_e$ 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 $I_e$ 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 $I_e$ 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 <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
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	—
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	—
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
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	—
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)		mΩ	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	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 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 60947-4-1			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
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				
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
General USE				
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

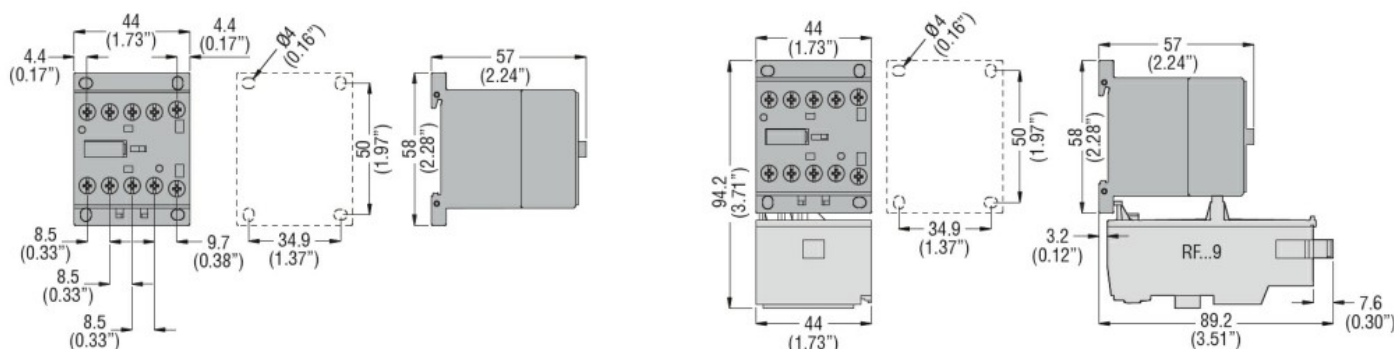
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#### Resistance & Protection

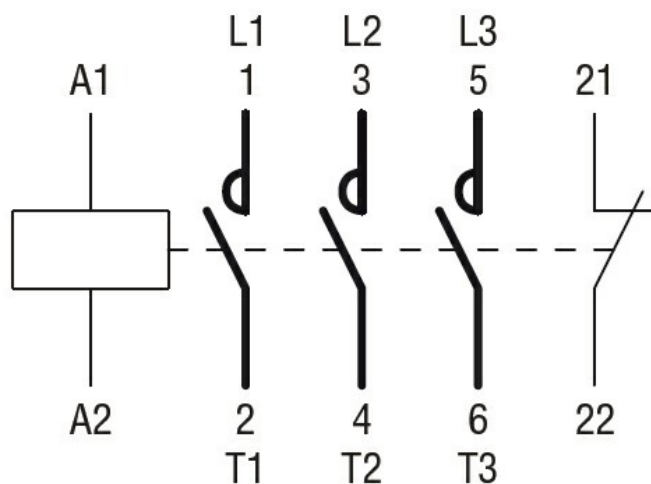
##### Pollution degree

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