



Power contactor  
BG06

Product designation

Product type designation

**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 160
	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	$\leq 24\text{V}$
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		$\leq 24\text{V}$
	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	–
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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	–
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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	–
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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
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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	–
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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)		mΩ	10
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Power dissipation per pole (average value)	$I_{th}$	W	2.6
	AC3	W	0.36
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Tightening torque for terminals	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	0.74
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Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8
	max	lbft	0.74
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Max number of wires simultaneously connectable		nr.	2

Conductor section

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°
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Fixing

Screw / DIN rail 35mm

Weight

g 220

**Auxiliary contact characteristics**

Type of contact

1 NO

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

**DC coil operating**

DC rated control voltage

V 48

DC operating voltage

pick-up

min	%Us	75
max	%Us	115

drop-out

min	%Us	10
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Average coil consumption $\leq 20^{\circ}\text{C}$	max	%Us	25
	in-rush	W	3.2
	holding	W	3.2

**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
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**

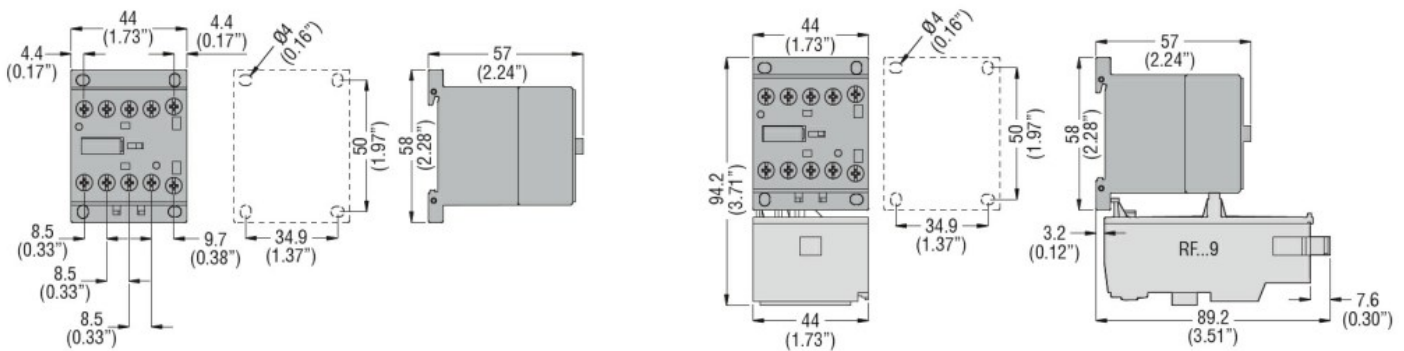
Temperature	Operating temperature	min °C -50
		max °C +70
	Storage temperature	min °C -60
		max °C +80

Max altitude	m	3000
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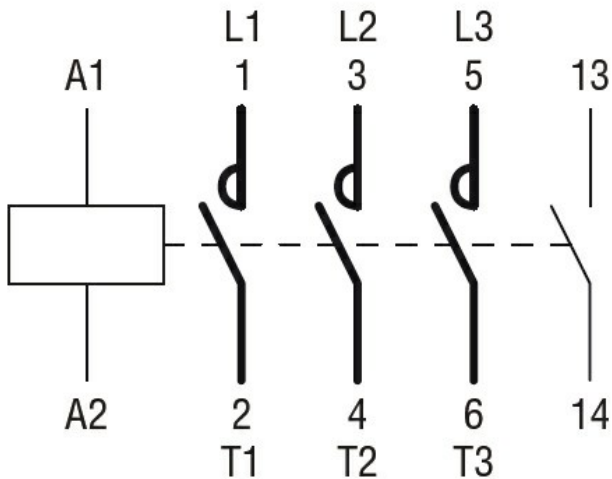
**Resistance & Protection**

Pollution degree	3
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**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

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching