



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	$\leq 24\text{V}$ 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 $I_e$ 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 <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
	AC3	W	0.36
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	0.74
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbft	0.8
	max	lbft	0.74
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°
Fixing			Screw / DIN rail 35mm
Weight		g	212
Auxiliary contact characteristics			
Type of contact			1 NC
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
Operations			
Mechanical life		cycles	20000000
Electrical life		cycles	500000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load mechanical load	cycles	500000
		cycles	20000000
Mirror contacts according to IEC/EN 60947-4-1			yes
EMC compatibility			Yes
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	12
	max	V	575
AC operating voltage at 20°C			
of 50/60Hz coil powered at 50Hz			
	in-rush holding	VA	30
		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  $\leq 20^{\circ}\text{C}$  50Hz

W	0.9
---	-----

#### DC coil operating

DC rated control voltage

min	V	6
max	V	250

DC operating voltage

pick-up

min	%Us	75
max	%Us	115

drop-out

min	%Us	10
max	%Us	25

Average coil consumption  $\leq 20^{\circ}\text{C}$

in-rush	W	3.2
holding	W	3.2

#### Max cycles frequency

Mechanical operation

cycles/h	3600
----------	------

#### Operating times

Average time for  $U_s$  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
Contact rating of auxiliary contacts according to UL			A600 - Q600

#### General USE

##### Contactor

AC current A 16

#### Ambient conditions

##### Temperature

##### Operating temperature

min °C -40  
max °C 60

##### Storage temperature

min °C -55  
max °C 70

##### Max altitude

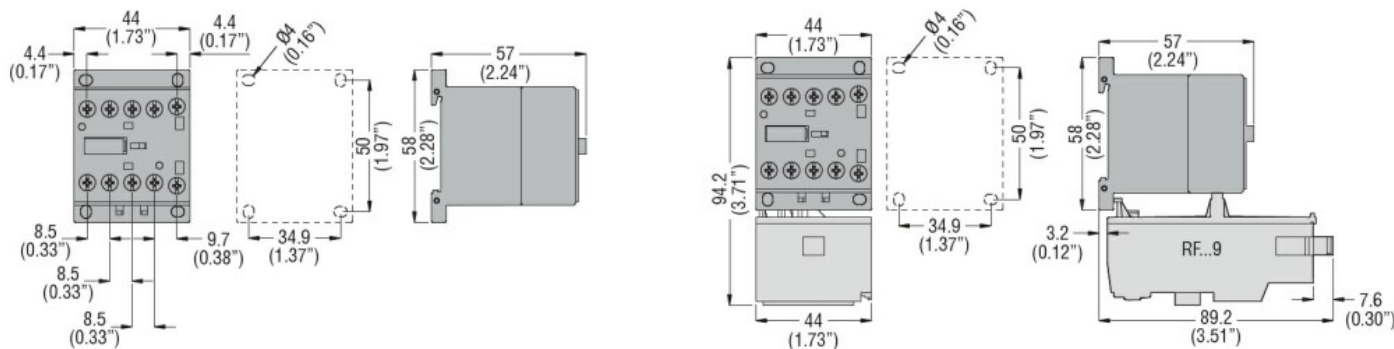
m 3000

#### Resistance & Protection

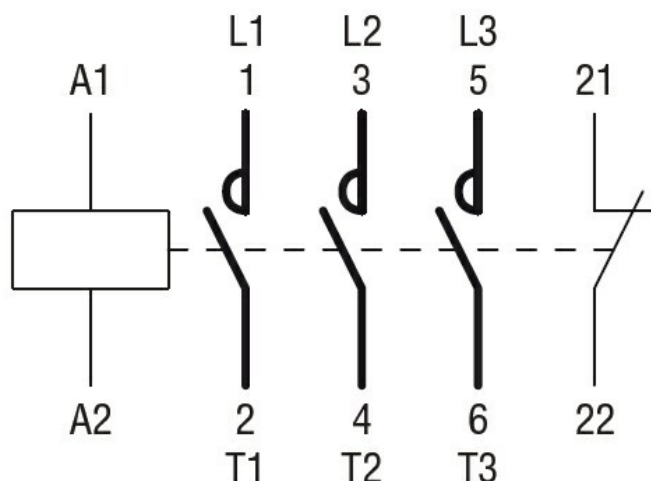
##### Pollution degree

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

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC