



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 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	$\leq 24\text{V}$
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			
	$\leq 24\text{V}$	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			
	$\leq 24\text{V}$	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			
	$\leq 24\text{V}$	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			
	$\leq 24\text{V}$	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			
	$\leq 24\text{V}$	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)		m $\Omega$	10
Power dissipation per pole (average value)			
	Ith	W	2.6
	AC3	W	0.36
Tightening torque for terminals			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibft	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
<b>Mechanical features</b>			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	179
<b>Auxiliary contact characteristics</b>			
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
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>AC coil operating</b>			
Rated AC voltage at 50/60Hz		V	24
AC operating voltage			
of 50/60Hz coil powered at 50Hz pick-up	min	%Us	75

		max	%Us	115
drop-out		min	%Us	20
		max	%Us	55
of 50/60Hz coil powered at 60Hz				
pick-up		min	%Us	80
		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
<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

**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

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		
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**Ambient conditions**

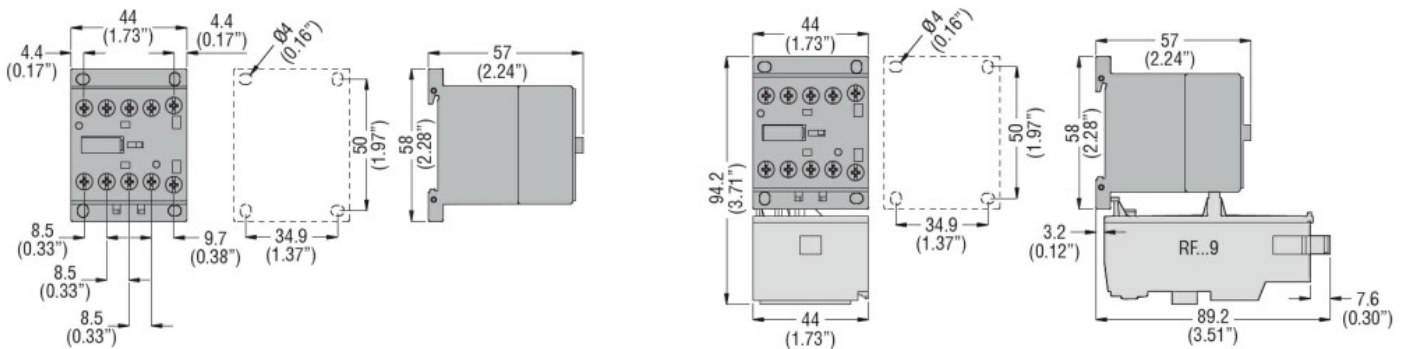
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	+70
Storage temperature			
	min	°C	-60
	max	°C	+80

Max altitude	m	3000
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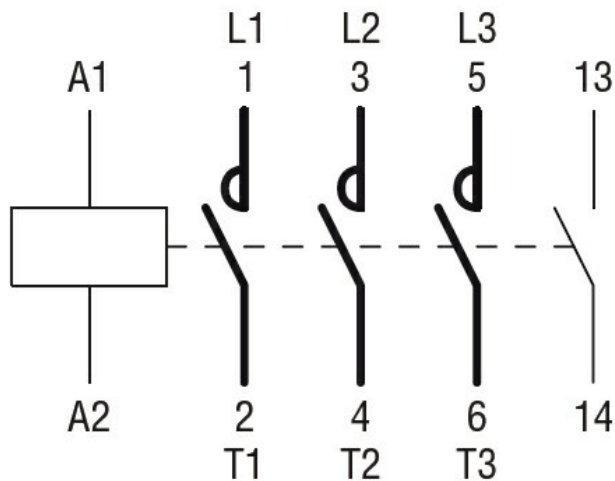
**Resistance & Protection**

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

EAC

### ETIM classification

ETIM 8.0

EC000066 -  
 Power contactor,  
 AC switching