



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 (=40°C)	A 160
	AC-3 (=440V =55°C)	A 6
	AC-4 (400V)	A 3.3
Rated operational power AC-3 (T=55°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=40°C)	230V	kW 6
	400V	kW 10
	500V	kW 13
	690V	kW 18
IEC max current I_e in DC1 with L/R = 1ms with 1 poles in series	=24V	A 9
	48V	A 8
	75V	A 4
	110V	A 3
	220V	A –
IEC max current I_e in DC1 with L/R = 1ms with 2 poles in series	=24V	A 12
	48V	A 11
	75V	A 7
	110V	A 6
	220V	A –
IEC max current I_e in DC1 with L/R = 1ms with 3 poles in series	=24V	A 14
	48V	A 14
	75V	A 8
	110V	A 8
	220V	A 1
IEC max current I_e in DC1 with L/R = 1ms with 4 poles in series		

	=24V	A	—
	48V	A	—
	75V	A	—
	110V	A	—
	220V	A	—
IEC max current Ie 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 Ie 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 Ie 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 Ie 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)		m?	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	9
	max	Ibin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	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 ² 0.75
		max	mm ² 2.5
Flexible c/w lug conductor section			
		min	mm ² 1.5
		max	mm ² 2.5
Flexible with insulated spade lug conductor section			
		min	mm ² 1.5
		max	mm ² 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	230
Conductor section			
AWG/kcmil conductor section		max	12
Auxiliary contact characteristics			
Thermal current I _{th}		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	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	24
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				
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

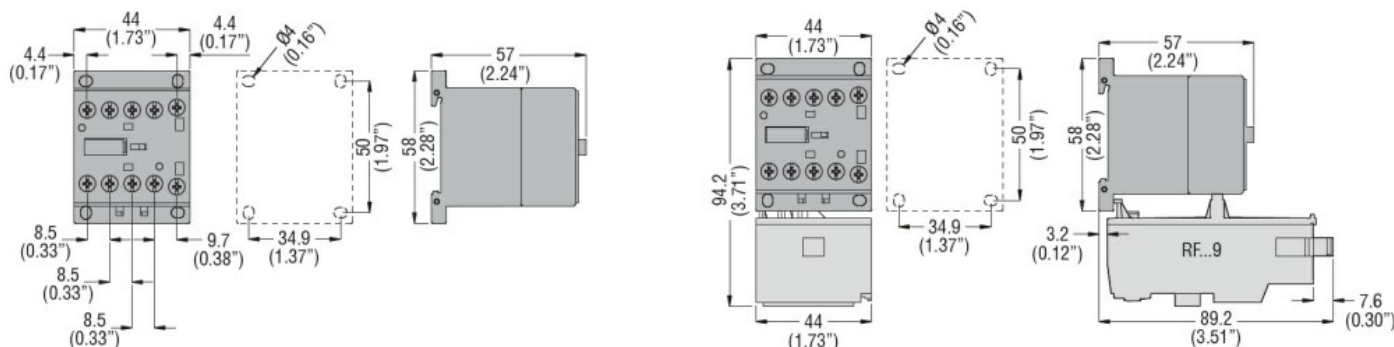
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Resistance & Protection

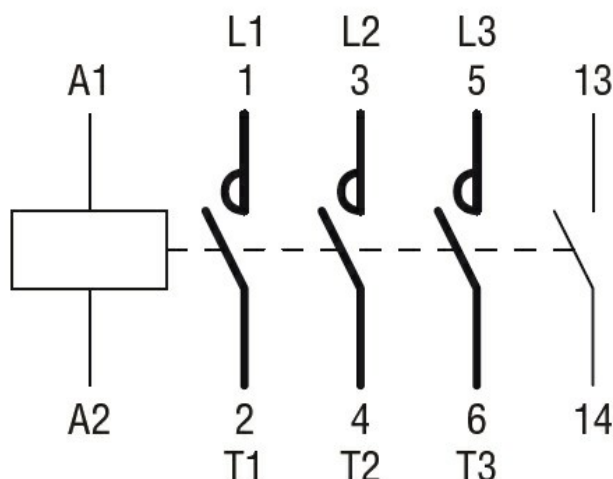
Pollution degree

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