Product designation			Power contactor
Product type designation			BG06
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	16
Operational current Ie			
	AC-1 (≤40°C)	A	16
	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 Ie 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 Ie 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 Ie 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 Ie 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)		mΩ	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	Ibft	0.74
Max number of wires simultaneously connectable		nr.	2

Conductor section

Flexible w/o lug conductor section

	min	mm²	0.75
	max	mm²	2.5

Flexible c/w lug conductor section

	min	mm²	1.5
	max	mm²	2.5

Flexible with insulated spade lug conductor section

	min	mm²	1.5
	max	mm²	2.5

Power terminal protection according to IEC/EN 60529			IP20 when wired

Mechanical features

Operating position

	normal		Vertical plan
	allowable		±30°

Fixing			Screw / DIN rail 35mm
Weight		g	180

Auxiliary contact characteristics

Type of contact			1 NO
Thermal current Ith		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 contats according to IEC/EN 609474-4-1			yes
EMC compatibility			Yes
Rated AC voltage at 60Hz		V	48

AC coil operating

AC operating voltage

of 60Hz coil powered at 60Hz

pick-up

	min	%Us	75
	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

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	m	3000

Resistance & Protection

Pollution degree	3

Dimensions
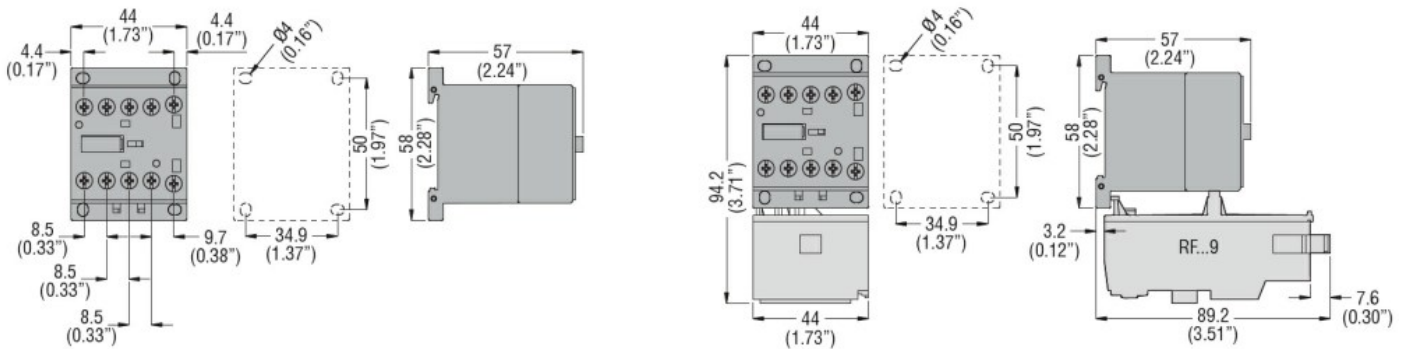
Wiring diagrams
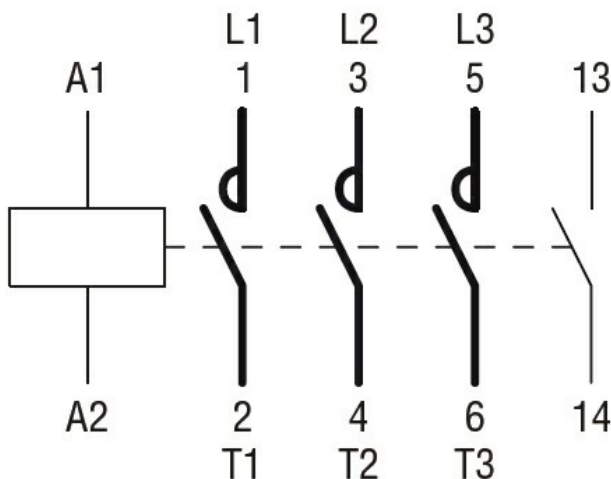
Certifications and compliance

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

ETIM classification

ETIM 8.0	EC000066 - Power contactor, AC switching