



Product designation

Power contactor
with surge
suppressor
BG06

Product type designation

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 le		
	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 le 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 le 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 le 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			
	$\leq 24V$	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			
	$\leq 24V$	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			
	$\leq 24V$	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			
	$\leq 24V$	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			
	$\leq 24V$	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)			$\text{m}\Omega$ 10
Power dissipation per pole (average value)			
	I _{th}	W	2.6
	AC-3	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 properly wired		
Mechanical features			
Operating position	normal	Vertical plan	
	allowable	±30°	
Fixing	Screw / DIN rail 35mm		
Weight	g	212	
Auxiliary contact characteristics			
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 contacts according to IEC/EN 609474-4-1	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 $\leq 20^{\circ}\text{C}$			
	in-rush	W	3.2
	holding	W	3.2
Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for 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			
Rated operational voltage AC (UL)		V	600
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

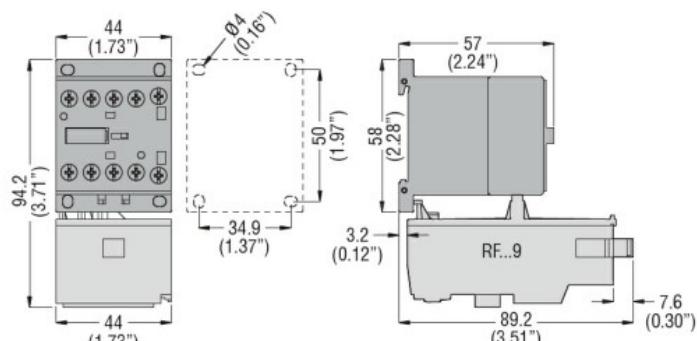
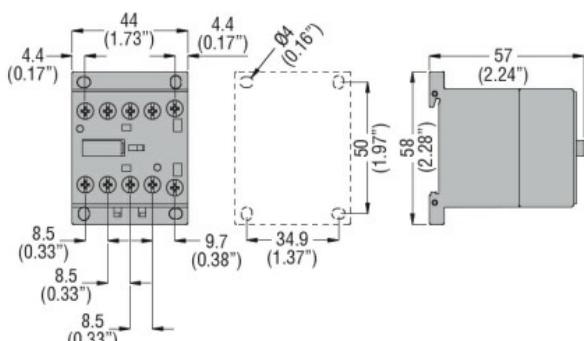
m 3000

Resistance & Protection

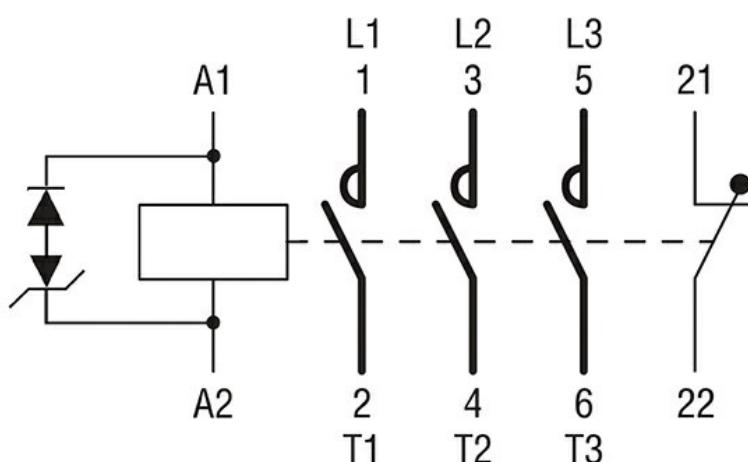
Pollution degree

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