

Product designation				Auxiliary contactor
Product type designation				BG12
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	20	
Operational current I _e	AC-1 (≤40°C)	A	20	
	AC-1 (≤55°C)	A	18	
	AC-1 (≤70°C)	A	15	
	AC-3 (≤440V ≤55°C)	A	12	
	AC-4 (400V)	A	4.8	
Rated operational power AC-3 (T≤55°C)	230V	kW	3.2	
	400V	kW	5.7	
	415V	kW	6.2	
	440V	kW	5.5	
	500V	kW	5	
	690V	kW	5	
Rated operational power AC-1 (T≤40°C)	230V	kW	8	
	400V	kW	14	
	500V	kW	16	
	690V	kW	22	
IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A	12	
	48V	A	10	
	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	15	
	48V	A	14	
	75V	A	9	
	110V	A	8	
	220V	A	–	
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A	16	
	48V	A	16	
	75V	A	10	
	110V	A	10	
	220V	A	2	
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 I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	7	
	48V	A	6	
	75V	A	2	
	110V	A	1	
	220V	A	–	
	IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	8
48V		A	8	
75V		A	5	
110V		A	4	
220V		A	–	
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series		≤24V	A	10
	48V	A	10	
	75V	A	6	
	110V	A	5	
	220V	A	0,8	
	IEC max current I _e 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	20	
	aM (IEC)	A	16	
Making capacity (RMS value)		A	120	
Breaking capacity at voltage	440V	A	96	
	500V	A	72	
	690V	A	72	
Resistance per pole (average value)		mΩ	10	
Power dissipation per pole (average value)	I _{th}	W	4	
	AC3	W	1.4	
Tightening torque for terminals	min	Nm	0.8	
	max	Nm	1	
	min	I _{bin}	0.6	
	max	I _{bin}	0.7	
Tightening torque for coil terminal	min	Nm	0.8	
	max	Nm	1	
	min	I _{bin}	Prodotti finiti	
	max	I _{bin}	Prodotti finiti	
Max number of wires simultaneously connectable		Nr.	2	
Conductor section	Flexible w/o lug conductor section			
	min	mm ²	0.8	
	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
Mechanical features			
Operating position			
	normal allowable	Vertical plan ±30°	
Fixing			Screw / DIN rail 35mm
Weight		g	200
Auxiliary contact characteristics			
Type of contact			1 NO
Thermal current I _{th}		A	10
IEC/EN 60947-5-1 designation			A600
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
Rated AC voltage at 60Hz		V	460
AC coil operating			
AC operating voltage			
of 60Hz coil powered at 60Hz			
	pick-up		
	min	%U _s	75
	max	%U _s	115
	drop-out		
	min	%U _s	20
	max	%U _s	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 $\leq 20^{\circ}\text{C}$ 50Hz		W	0.9
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	11
	at 600V	A	11
Yielded mechanical performance			
for single-phase AC motor			
	110/120V	HP	0.5
	230V	HP	1.5
for three-phase AC motor			
	200/208V	HP	3
	220/230V	HP	3
	460/480V	HP	7.5
	575/600V	HP	10
General USE			
Contactor			
	AC current	A	20

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