



		4	271 412 013 14 110
Product designation			Power contactor
Product type designation			BG12
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		Α	20
Operational current le			
	AC-1 (≤40°C)	Α	20
	AC-3 (≤440V ≤55°C)	Α	12
	AC-4 (400V)	Α	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 le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	12
	48V	Α	10
	75V	Α	4
	110V	Α	3
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	15
	48V	Α	14
	75V	Α	9
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	16
	48V	Α	16
	75V	Α	10
	110V	Α	10
	220V	Α	2

Three-pole contactor, IEC operating current le (AC3) = 12A, AC coil 50/60Hz, 24VAC, 1NO auxiliary **ENERGY AND AUTOMATION**

	≤24V	Α	_
	48V	A	_
	75V	Α	_
	110V	Α	_
	220V	A	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	7
	48V	Α	6
	75V	Α	2
	110V	Α	1
	220V	A	<u>.</u>
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
in a max current to in 200 200 min 27t = 10mb min 2 poloc in conce	≤24V	Α	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V	A	
TEO MAX current le in DO3-DO3 with L/K > 131118 with 3 poles in selles	≤24V	٨	10
		A	10
	48V	A	10
	75V	Α	6
	110V	Α	5
	220V	Α	0,8
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
Short-time allowable current for 10s (IEC/EN60947-1)		Α	96
Protection fuse			
	gG (IEC)	Α	20
	aM (IEC)	Α	16
Making capacity (RMS value)		Α	120
Breaking capacity at voltage			
- · · · -	440V	Α	96
	500V	Α	72
	690V	Α	72
Resistance per pole (average value)		mΩ	10
Power dissipation per pole (average value)			
\	Ith	W	4
	AC3	W	1.44
Tightening torque for terminals	7.00		
gg to que los terminato	min	Nm	0.8
		Nm	
	max	lbin	1
	min		9
	max	lbin	9
Tightoning targue for call tarminal			
Tightening torque for coil terminal		A.1.	
Tightening torque for coil terminal	min	Nm	0.8
Tightening torque for coil terminal	max	Nm	1
Tightening torque for coil terminal	max min	Nm Ibin	1 9
Tightening torque for coil terminal Max number of wires simultaneously connectable	max	Nm	1

Three-pole contactor, IEC operating current le (AC3) = 12A, AC coil 50/60Hz, 24VAC, 1NO auxiliary

Conductor section			
	AWG/Kcmil		
	max		12
	Flexible w/o lug conductor section	•	
	min	mm²	0.75
	They in the second control of the second con	mm²	2.5
	Flexible c/w lug conductor section min	mm²	1.5
	max	mm²	2.5
	Flexible with insulated spade lug conductor section	111111	2.0
	min	mm²	1.5
	max	mm²	2.5
Power terminal protect	etion according to IEC/EN 60529		IP20 when wired
Mechanical features	3		
Operating position			
	normal		Vertical plan
<u></u>	allowable		±30°
Fixing			Screw / DIN rail 35mm
Weight		g	180
Conductor section		3	
	AWG/kcmil conductor section		
	max		12
Auxiliary contact chara	acteristics		
Thermal current Ith		Α	10
IEC/EN 60947-5-1 des	signation		A600 - Q600
Operating current AC1	15		
	230V	Α	3
	400V	Α	1.9
	500V	Α	1.4
Operating current DC1		_	
0 " (50	110V	Α	2.9
Operating current DC1		۸	0.0
	24V 48V	A	2.9
	48V 60V	A A	1.4 1.2
	110V	A	0.6
	110V 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 B1	0d according to EN/ISO 13489-1		
	rated load	cycles	500000
	mechanical load	cycles	20000000
	ng to IEC/EN 609474-4-1		yes
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 5	50/60Hz	V	24
AC operating voltage			
	of 50/60Hz coil powered at 50Hz		



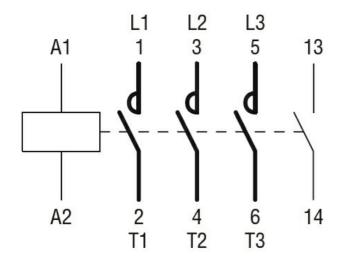
Three-pole contactor, IEC operating current le (AC3) = 12A, AC coil 50/60Hz, 24VAC, 1NO auxiliary contact

	pick	r-UD			
	pick	α-up	min	%Us	75
			max	%Us	115
	dror	o-out	IIIax	/003	113
	diop	5-out	min	%Us	20
			max	%Us	55
	of 50/60Hz coil powered at 6	£U∐-	IIIax	/003	
	pick				
	pick	х-ир	min	%Us	80
			max	%Us	115
	dror	o-out	IIIax	/003	113
	diop	J-0ut	min	%Us	20
				%Us	55
AC average sail cana	mation at 20°C		max	%US	33
AC average coil consu		- 011-			
	of 50/60Hz coil powered at	50HZ	2		0.0
			in-rush	VA	30
	(50/001)	•••	holding	VA	4
	of 50/60Hz coil powered at 6	60Hz	, -		0.5
			in-rush	VA	25
			holding	VA	3
	of 60Hz coil powered at 60H	łz			
			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 c					
	in AC				
	in AC	sing NO			
	in AC	sing NO	min	ms	12
	in AC	sing NO	min max	ms ms	12 21
	in AC Clos	sing NO ening NO			
	in AC Clos				9
	in AC Clos	ening NO	max	ms	21
	in AC Clos		max min	ms ms	9
	in AC Clos	ening NO	max min	ms ms	9
	in AC Clos	ening NO	max min max	ms ms ms	21 9 18
	in AC Clos Ope	ening NO	max min max min	ms ms ms	2191817
	in AC Clos Ope	ening NO sing NC	max min max min	ms ms ms	2191817
	in AC Clos Ope	ening NO sing NC	max min max min max	ms ms ms ms	21 9 18 17 26
	in AC Clos Ope	ening NO sing NC	max min max min max min	ms ms ms ms ms	2191817267
	in AC Clos Clos Clos	ening NO sing NC	max min max min max min	ms ms ms ms ms	2191817267
	in AC Clos Clos Clos	ening NO sing NC ening NC	max min max min max min	ms ms ms ms ms	2191817267
	in AC Clos Clos Clos	ening NO sing NC ening NC	max min max min max min max min max	ms ms ms ms ms	21 9 18 17 26 7 17
	in AC Clos Ope Clos Ope in DC Clos	ening NO sing NC ening NC sing NO	max min max min max min max min max	ms ms ms ms ms ms	21 9 18 17 26 7 17
	in AC Clos Ope Clos Ope in DC Clos	ening NO sing NC ening NC	max min max min max min max min max	ms ms ms ms ms ms ms ms ms	21 9 18 17 26 7 17
	in AC Clos Ope Clos Ope in DC Clos	ening NO sing NC ening NC sing NO	min max	ms	21 9 18 17 26 7 17 18 25
	in AC Clos Clos Clos Ope	ening NO sing NC ening NC sing NO ening NO	max min max min max min max min max	ms ms ms ms ms ms ms ms ms	21 9 18 17 26 7 17
	in AC Clos Clos Clos Ope	ening NO sing NC ening NC sing NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3
	in AC Clos Clos Clos Ope	ening NO sing NC ening NC sing NO ening NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3
	in AC Clos Clos Clos Ope in DC Clos Clos	ening NO sing NC ening NO ening NO ening NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3
	in AC Clos Clos Clos Ope in DC Clos Clos	ening NO sing NC ening NC sing NO ening NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3 3 5
	in AC Clos Clos Clos Ope in DC Clos Clos	ening NO sing NC ening NO ening NO ening NO	min max	ms	21 9 18 17 26 7 17 18 25 2 3

Three-pole contactor, IEC operating current le (AC3) = 12A, AC coil 50/60Hz, 24VAC, 1NO auxiliary

UL technical data				
	LA) for three-phase AC motor			
•	,	at 480V	Α	11
		at 600V	Α	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	Α	20
Short-circuit protect	tion fuse, 600V			-
	High fault			
	3	Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class	, ,	J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	30
Contact rating of au	xiliary contacts according to UL	3		A600 - Q600
Ambient conditions				
Temperature				
	Operating temperature			
	op ordaning ramp aranana	min	°C	-50
		max	°C	+70
	Storage temperature			
	Ctorago tomporataro	min	°C	-60
		max	°C	+80
Max altitude			m	3000
Resistance & Prote	ction			0000
Pollution degree				3
Dimensions				
	4	44 45.27		
4.4 (0.17") (0.1 (0.17") (0.1	47") \$ 6 (2.24")	44 (1.73") ○ ○ ○ ③ ③ ● ● ●	3	57
	50 (1.97") (1.97") (2.28")	2.6. (⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	(2.28	
8.5 (0.33") (0.38") (0.38") (0.38")	3") (1.37")	(1.37") (0.12"	")	RF9 7.6 (0.30
(0.33")		(1.73")		89.2 (3.51") (0.30
Niring 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