



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, DC COIL, 24VDC, **1NC AUXILIARY CONTACT**



Product designation Power contactor Product type designation BG12

Froduct type designation			DG 12
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-1 (≤55°C)	Α	18
	AC-1 (≤70°C)	Α	15
	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





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	220V	Α	2
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
·	≤24V	Α	_
	48V	Α	_
	75V	Α	_
	110V	Α	_
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	2201		
120 max canoncio in 200 200 mai 2/10 = 10mb mai i poloci in conco	≤24V	Α	7
	48V	A	6
	75V	A	2
	110V	A	1
	220V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V	^	
TEC max current le in DC3-DC3 with L/R \(\) 13ms with 2 poles in series	~24) /	۸	0
	≤24V	A	8
	48V	A	8
	75V	A	5
	110V	A	4
	220V	Α	-
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series		_	
	≤24V	Α	10
	48V	Α	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	A	72
	690V	Α	72
Resistance per pole (average value)	0001	mΩ	10
Power dissipation per pole (average value)		11122	10
i owei dissipation per pole (average value)	Ith	W	4
Tightoning targue for terminals	AC-3	W	1.44
Tightening torque for terminals		N 1 .	0.0
	min	Nm	0.8
	max	Nm	1
	min	lbin 	9
	max	lbin	9
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	9





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		max	Ibin	9
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			4.0
	Fig. 21. Land Communication of the communication of	max		12
	Flexible w/o lug conductor section			0.75
		min	mm²	0.75 2.5
	Flexible c/w lug conductor section	max	mm²	2.3
	Flexible C/W lug colludctor section	min	mm²	1.5
		max	mm²	2.5
	Flexible with insulated spade lug conductor section		111111	2.0
	Tioxible with inculated opace tag conductor coolien	min	mm²	1.5
		max	mm²	2.5
				IP20 when
Power terminal protect	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	222
Conductor section				
	AWG/kcmil conductor section			
				4.0
		max		12
Auxiliary contact chara	acteristics	max		
Thermal current Ith		max	A	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation	max	A	
Thermal current Ith	esignation			10 A600 - Q600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V	A	10 A600 - Q600
Thermal current Ith IEC/EN 60947-5-1 de	esignation	230V 400V	A A	10 A600 - Q600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 15	230V	A	10 A600 - Q600
Thermal current Ith IEC/EN 60947-5-1 de	esignation 15	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V	A A	10 A600 - Q600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	esignation 15	230V 400V 500V	A A A	10 A600 - Q600 3 1.9 1.4
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V	A A A	10 A600 - Q600 3 1.9 1.4 2.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V	A A A A	10 A600 - Q600 3 1.9 1.4 2.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V	A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V	A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V	A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V	A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Mechanical life	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation 15	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation 15 12 13	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	esignation 12 13 Od according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operating current DC Electrical life Electrical life Safety related data Performance level B1	esignation 12 13 Od according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	esignation 12 13 Od according to EN/ISO 13489-1	230V 400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	10 A600 - Q600 3 1.9 1.4 2.9 2.9 1.4 1.2 0.6 0.55 0.3 0.1 20000000 500000 500000





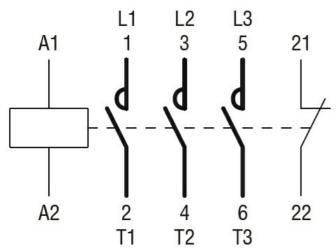
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DC rated control voltage	1 e			V	24
DC operating voltage	,				
	pick-up				
			min	%Us	75
			max	%Us	115
	drop-out			0/11	
			min	%Us	10 25
Average coil consumpt	tion <20°C		max	%Us	25
Average con consump	11011 =20 0		in-rush	W	3.2
			holding	W	3.2
Max cycles frequency			3 3		
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co					
	in AC				
		Closing NO			40
			min	ms	12
		Opening NO	max	ms	21
		Opening NO	min	ms	9
			max	ms	18
		Closing NC			. •
		J	min	ms	17
			max	ms	26
		Opening NC			
			min	ms	7
	. 50		max	ms	17
	in DC	Clasing NO			
		Closing NO	min	ms	18
			max	ms	25
		Opening NO			
		1 0	min	ms	2
			max	ms	3
		Closing NC			
			min	ms	3
		O. A. M.	max	ms	5
		Opening NC	·	 .	11
			min max	ms ms	11 17
UL technical data			ınax	1113	17
Full-load current (FLA)	for three-phase AC r	notor			
		- · - ·	at 480V	Α	11
			at 600V	Α	11
Yielded mechanical pe					
	for single-phase AC	motor			
			110/120V	HP	0.5
			230V	HP	1.5
	for three-phase AC	motor	000/0001/	LID	2
			200/208V	HP up	3
			220/230V 460/480V	HP HP	3 7.5
			575/600V	HP	10
			3. 5/ 50 5 V	• • • •	· •

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General USE				
	Contactor			
		AC current	Α	20
Short-circuit protect	ion fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	30
		Fuse class		RK5
	xiliary 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 & Protect	ction			
Pollution degree				3
Dimensions				
4.4— (1.73") (0.17") (0.17") (0.17") (0.33") (0.33") (0.33")	(2.24") (2.24") (2.24")	44 (1.73") (1.73") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37") (1.37")	(2.28")	8F9 7.6 (0.30")

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1



11BG1201D024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, DC COIL, 24VDC, 1NC AUXILIARY CONTACT

CSA C22.2 n° 60947-4-1
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-1
UL 60947-4-1

CCC
CULus
EAC

ETIM classification

ETIM 8.0

Certificates

EC000066 -Power contactor, AC switching