



Product designation			Power contactor
Product type designation			BF12
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
operational nequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	max	A	28
Operational current le			
Operational darrent le	AC-1 (≤40°C)	Α	28
	AC-1 (≤55°C)	A	23
	AC-1 (≤70°C)	A	20
	AC-3 (≤440V ≤55°C)	A	12
	AC-3 (<u>\$440</u> V <u>\$55</u> C) AC-4 (400V)	A	7.9
Rated operational power AC-3 (T≤55°C)	AC-4 (400V)		1.5
Nated operational power AC-3 (1300 C)	230V	kW	3.2
	400V	kW	5.7
	400 V 415 V	kW	6.2
	440V	kW	5.5
	500V		
	690V	kW kW	5 5
Poted operational power AC 1 (T<10°C)	090 V	KVV	
Rated operational power AC-1 (T≤40°C)	2201/	LAAA	10
	230V	kW	10
	400V	kW	18
	500V	kW	23
IFO summer the important Life post with Life and the district the control of the control o	690V	kW	32
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	40 AV /		47
	≤24V	A	17
	48V	A	15
	75V	A	13
	110V	A	6
150 11 1 504 11 1 15 14 11 10 1 1 1	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	.0.43.4		
	≤24V	A	20
	48V	Α	20
	75V	A	18
	110V	Α	13
	220V	Α	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		_	
	≤24V	Α	22
	48V	Α	22
	75V	Α	20
	110V	Α	16





	220V	Α	11
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	20
	48V	Α	20
	75V	Α	20
	110V	Α	16
	220V	Α	12
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
·	≤24V	Α	12
	48V	Α	11
	75V	Α	10
	110V	Α	2
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
120 max carrent to in 200 200 mar 2/11 = 10 ma mar 2 poise in conse	≤24V	Α	15
	48V	A	13
	75V	A	12
	110V	A	8
	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	ZZU V		
TEO MAX current le in 200-2003 with E/K > 13ms with 3 poles in series	≤24V	۸	18
		A	
	48V	A	18
	75V	A	15
	110V	A	12
	220V	Α	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series		_	
	≤24V	Α	15
	48V	Α	15
	75V	Α	15
	110V	Α	16
	220V	Α	7
Short-time allowable current for 10s (IEC/EN60947-1)		Α	150
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	12
Making capacity (RMS value)		Α	120
Breaking capacity at voltage			
	440V	Α	96
	500V	Α	96
	690V	Α	94
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
1 1 1 1 1 1	lth	W	2
	AC-3	W	0.4
Tightening torque for terminals	, 10 0	• •	U. 1
rightening torque for terminale	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
Tightoning targue for call terminal	max	lbin	1.5
Tightening torque for coil terminal		N I .	0.0
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8



		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			40
	Florible w/s has populated a potion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		min	mm² mm²	1 6
	Flexible c/w lug conductor section	max	111111	0
	r lexible c/w lug corructor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	max		•
	Tionale marmoulated space lag conductor section	min	mm²	1
		max	mm²	4
D (IP20 when
Power terminal protec	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	365
Conductor section				
	AWG/kcmil conductor section			
A 111		max		10
Auxiliary contact chara	acteristics			
The amount of the			٨	4.0
	oignation		Α	10 A600 B600
IEC/EN 60947-5-1 de	•		A	10 A600 - P600
IEC/EN 60947-5-1 de	•	2201/		A600 - P600
IEC/EN 60947-5-1 de	•	230V	A	A600 - P600 3
IEC/EN 60947-5-1 de	•	400V	A A	A600 - P600 3 1.9
Thermal current Ith IEC/EN 60947-5-1 de Operating current AC	15		A	A600 - P600 3
IEC/EN 60947-5-1 de Operating current AC	15	400V 500V	A A A	3 1.9 1.4
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V	A A	A600 - P600 3 1.9
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V	A A A	3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V	A A A	A600 - P600 3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V	A A A	3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V	A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V 60V	A A A A A	3 1.9 1.4 5.7 5.7 2.9 2.3
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V 60V 110V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25
IEC/EN 60947-5-1 de Operating current AC Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operations Mechanical life Electrical life	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	12	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	15 12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accordi	15 12 13 0d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000 yes
Operating current DC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B1	12 13 Od according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 20000000 20000000



AC operating voltage	at 50/60Hz		V	400
to operating rollas	-			
	of 50/60Hz coil powered at 50Hz			
	pick-up		0/116	0.0
		min	%Us %Us	80 110
	drop-out	max	/ ₀ US	110
	drop out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz		,,,,,	
	, pick-up			
	, ,	min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil co	nsumption at 20°C			
	of 50/60Hz coil powered at 50Hz		,	
		in-rush	VA	75
	-f F0/0011 1 1 0011	holding	VA	9
	of 50/60Hz coil powered at 60Hz	المناسية.	١/٨	70
		in-rush holding	VA VA	70 6.5
	of 60Hz coil powered at 60Hz	Holding	VA	0.5
	of our iz con powered at our iz	in-rush	VA	75
		holding	VA	9
Dissipation at holdi			W	2.5
Max cycles frequen	-			
Mechanical operation			cycles/h	3600
Operating times				
Average time for U	s control			
	in AC			
	Closing NO			
		min	ms	8
	0 : 110	min max	ms ms	8 24
	Opening NO	max	ms	24
	Opening NO	max min	ms ms	10
	, -	max	ms	24
	Opening NO Closing NC	max min max	ms ms ms	241020
	, -	max min max min	ms ms ms	24102014
	Closing NC	max min max	ms ms ms	241020
	, -	max min max min	ms ms ms	24102014
	Closing NC	max min max min max	ms ms ms ms	2410201428
JL technical data	Closing NC	max min max min max min	ms ms ms ms ms	24 10 20 14 28 7
	Closing NC	max min max min max min max	ms ms ms ms ms	24 10 20 14 28 7 18
	Closing NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (F	Closing NC Opening NC (LA) for three-phase AC motor	max min max min max min max	ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (F	Closing NC Opening NC (LA) for three-phase AC motor	max min max min max min max at 480V	ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (F	Closing NC Opening NC (LA) for three-phase AC motor	min max min max min max at 480V at 600V	ms ms ms ms ms A A	24 10 20 14 28 7 18
Full-load current (F	Closing NC Opening NC (LA) for three-phase AC motor	min max min max min max min max at 480V at 600V	ms ms ms ms ms A A	24 10 20 14 28 7 18
JL technical data Full-load current (F Yielded mechanica	Closing NC Opening NC LA) for three-phase AC motor I performance for single-phase AC motor	min max min max min max at 480V at 600V	ms ms ms ms ms A A	24 10 20 14 28 7 18
Full-load current (F	Closing NC Opening NC (LA) for three-phase AC motor	min max min max min max min max at 480V at 600V	ms ms ms ms ms A A	24 10 20 14 28 7 18

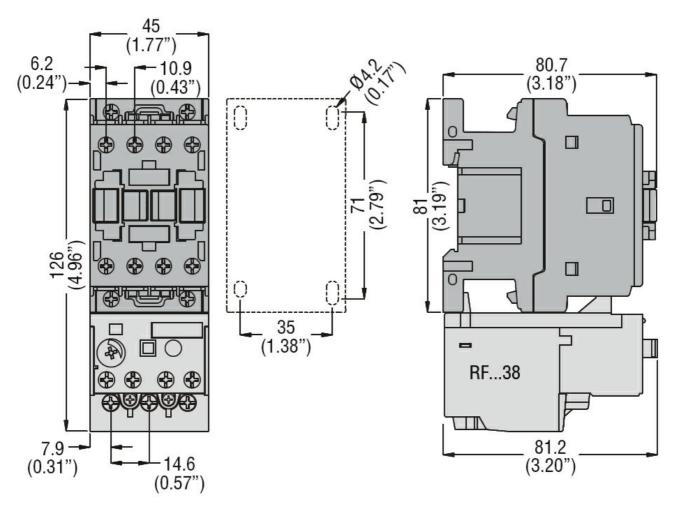




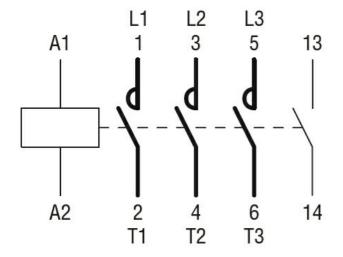
		220/230V	HP	5
		460/480V	HP	7.5
		575/600V	HP	10
General USE				
	Contactor			
		AC current	Α	28
	Auxiliary contacts			
	•	AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protect	tion fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	70
Contact rating of au	ixiliary contacts according to UL			A600 - P600
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ection			
Pollution degree				3
Dimensions				

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 400VAC, 1NO AUXILIARY CONTACT



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC



BF1210A400

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 400VAC, 1NO AUXILIARY CONTACT

cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching