



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			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		А	28
Operational current le			
	AC-1 (≤40°C)	А	28
	AC-1 (≤55°C)	А	23
	AC-1 (≤70°C)	А	20
	AC-3 (≤440V ≤55°C)	А	12
	AC-4 (400V)	А	7.9
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	10
	400V	kW	18
	500V	kW	23
	690V	kW	32
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	≤24V	A	17
	48V	А	15
	75V	A	13
	110V	A	6
	220V	A	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	A	20
	48V	A	20
	75V	A	18
	110V	A	13
IFO many automatic in DO4 with 1/D < 4ma with 0 males in the	220V	A	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series	20 A I	۸	22
	≤24V	A	22
	48V	A	22
	75V	A	20
	110V	А	16



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT

	220V	А	11	
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series				
	≤24V	А	20	
	48V	А	20	
	75V	А	20	
	110V	А	16	
	220V	А	12	
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 1 poles in series				
	≤24V	Α	12	
	48V	А	11	
	75V	А	10	
	110V	А	2	
	220V	А	_	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series				
	≤24V	А	15	
	48V	А	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	2201		-	
	≤24V	А	18	
	48V	A	18	
	48V 75V	A	15	
	110V	A	12	
	220V	A	6	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V	~	0	
The max current le in DC3-DC3 with Err 3 15ms with 4 poles in series	≤24V	А	15	
	≤24V 48V	A	15	
	48V 75V			
	110V	A	15	
	220V	A	16 7	
Object times allowed by surrout for 40s (IEO/ENICO047.4)	2200	A		
Short-time allowable current for 10s (IEC/EN60947-1)		A	150	
Protection fuse				
	gG (IEC)	A	32	
	aM (IEC)	A	12	
Making capacity (RMS value)		Α	120	
Breaking capacity at voltage				
	440V	А	96	
	500V	А	96	
	690V	A	94	
Resistance per pole (average value)		mΩ	2.5	
Power dissipation per pole (average value)				
	lth	W	2	
	AC-3	W	0.4	
Tightening torque for terminals				
	min	Nm	1.5	
	max	Nm	1.8	
	min	lbin	1.1	
	max	lbin	1.5	
Tightening torque for coil terminal				
	min	Nm	0.8	
	max	Nm	1	
	min	Ibin	0.8	



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT

BF1201A230

	the large of the second state	max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil	201		10
	Flowible w/o lug conductor costion	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	max	111111	0
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section	max		7
	The side with insulated space hag conductor section	min	mm²	1
		max	mm²	4
		max		IP20 when
Power terminal prote	ction according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN ra
Fixing				35mm
Weight			g	354
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact char	acteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de				A600 - P600
Operating current AC	15			
		230V	Α	3
		400V	А	1.9
		500V	Α	1.4
Operating current DC	12			
		110V	Α	5.7
Operating current DC	13			
Operating current DC	13	24V	А	5.7
Operating current DC	13	48V	А	2.9
Operating current DC	13	48V 60V	A A	2.9 2.3
Operating current DC	13	48V 60V 110V	А	2.9 2.3 1.25
Operating current DC	13	48V 60V 110V 125V	A A A A	2.9 2.3 1.25 1.1
Operating current DC	13	48V 60V 110V 125V 220V	A A A A	2.9 2.3 1.25 1.1 0.55
	13	48V 60V 110V 125V	A A A A	2.9 2.3 1.25 1.1
Operations	13	48V 60V 110V 125V 220V	A A A A A	2.9 2.3 1.25 1.1 0.55 0.2
Operations Mechanical life	13	48V 60V 110V 125V 220V	A A A A A Cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operations Mechanical life Electrical life	13	48V 60V 110V 125V 220V	A A A A A	2.9 2.3 1.25 1.1 0.55 0.2
Operations Mechanical life Electrical life Safety related data		48V 60V 110V 125V 220V	A A A A A Cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operations Mechanical life Electrical life Safety related data	10d according to EN/ISO 13489-1	48V 60V 110V 125V 220V 600V	A A A A A Cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000 2000000
Operations Mechanical life Electrical life Safety related data		48V 60V 110V 125V 220V	A A A A A Cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000
Operations Mechanical life Electrical life Safety related data Performance level B <sup>2</sup>	10d according to EN/ISO 13489-1	48V 60V 110V 125V 220V 600V	A A A A A cycles cycles	2.9 2.3 1.25 1.1 0.55 0.2 20000000 2000000
Operations Mechanical life Electrical life Safety related data Performance level B <sup>2</sup>	10d according to EN/ISO 13489-1	48V 60V 110V 125V 220V 600V	A A A A A cycles cycles	2.9 2.3 1.25 1.1 0.55 0.2 2000000 2000000



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT

Rated AC voltage at 5	0/60Hz			V	230
AC operating voltage					
	of 50/60Hz coil powered a	t 50Hz			
	pie	ck-up			
			min	%Us	80
			max	%Us	110
	dr	op-out		0/11	<b></b>
			min	%Us	20
	of EQ/COLIZ acil powered a		max	%Us	55
	of 50/60Hz coil powered a				
	ри	ck-up	min	%Us	85
			max	%Us	110
	dr	op-out	Пах	/000	110
	ŭ	op out	min	%Us	20
			max	%Us	55
AC average coil consu	Imption at 20°C				
<u> </u>	of 50/60Hz coil powered a	t 50Hz			
	·		in-rush	VA	75
			holding	VA	9
	of 50/60Hz coil powered a	t 60Hz			
			in-rush	VA	70
			holding	VA	6.5
	of 60Hz coil powered at 60	)Hz			
			in-rush	VA	75
<u></u>	-0000 5011		holding	VA	9
Dissipation at holding	≤20°C 50Hz			W	2.5
Max cycles frequency					
Machanical aparation				oveloc/b	2600
Mechanical operation				cycles/h	3600
Operating times	ontrol			cycles/h	3600
				cycles/h	3600
Operating times	in AC	osing NO		cycles/h	3600
Operating times	in AC	osing NO	min		
Operating times	in AC	osing NO	min max	cycles/h ms ms	3600 8 24
Operating times	in AC Cl	osing NO pening NO		ms	8
Operating times	in AC Cl	-		ms	8 24 10
Operating times	in AC CI Ol	pening NO	max	ms ms	8 24
Operating times	in AC CI Ol	-	max min max	ms ms ms ms	8 24 10 20
Operating times	in AC CI Ol	pening NO	max min max min	ms ms ms ms ms	8 24 10 20 14
Operating times	in AC CI OJ CI	oening NO osing NC	max min max	ms ms ms ms	8 24 10 20
Operating times	in AC CI OJ CI	pening NO	max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Operating times	in AC CI OJ CI	oening NO osing NC	max min max min max min	ms ms ms ms ms ms	8 24 10 20 14 28 7
Operating times Average time for Us of	in AC CI OJ CI	oening NO osing NC	max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us co UL technical data	in AC CI OI CI	oening NO osing NC	max min max min max min	ms ms ms ms ms ms	8 24 10 20 14 28 7
Operating times Average time for Us co UL technical data	in AC CI OJ CI	oening NO osing NC	max min max min max min max	ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us co UL technical data	in AC CI OI CI	oening NO osing NC	max min max min max min max at 480V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us co UL technical data	in AC CI OI CI OI Tor three-phase AC motor	oening NO osing NC	max min max min max min max	ms ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC CI OI CI OI Tor three-phase AC motor	bening NO osing NC bening NC	max min max min max min max at 480V	ms ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Cl Ol Cl Ol of for three-phase AC motor	bening NO osing NC bening NC	max min max min max min max at 480V	ms ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Cl Ol Cl Ol of for three-phase AC motor	bening NO osing NC bening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms A A	8 24 10 20 14 28 7 18 11 11
Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Cl Ol Cl Ol of for three-phase AC motor	bening NO osing NC bening NC	max min max min max min max at 480V at 600V 110/120V 230V	ms ms ms ms ms ms ms A A A HP HP	8 24 10 20 14 28 7 18 11 11 11 11
Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC CI	bening NO osing NC bening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms Ms HP	8 24 10 20 14 28 7 18 11 11 11

BF1201A230

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

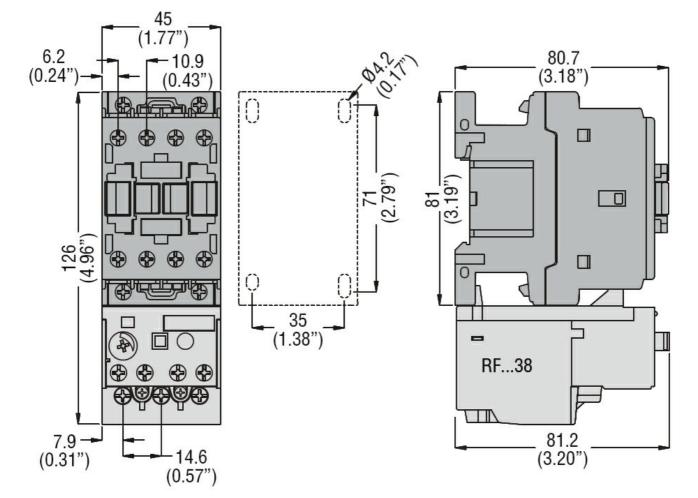


**BF1201A230** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT

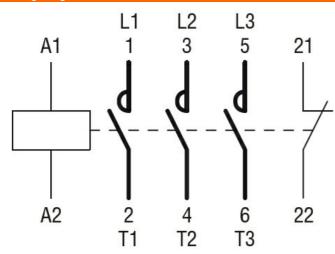
	220/230V	HP	5
	460/480V	HP	7.5
	575/600V	HP	10
eneral USE			
Contactor			
	AC current	А	28
Auxiliary contacts			
	AC voltage	V	600
	AC current	А	10
	DC voltage	V	250
	DC current	А	1
nort-circuit protection fuse, 600V			
High fault			
	Short circuit current	kA	100
	Fuse rating	А	30
	Fuse class		J
Standard fault			
	Short circuit current	kA	5
	Fuse rating	А	70
ontact rating of auxiliary contacts according to UL			A600 - P600
nbient conditions			
emperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
ax altitude		m	3000
esistance & Protection			
ollution degree			3



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 230VAC, 1NC 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	



## **BF1201A230** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 50/60HZ, 230VAC, 1NC AUXILIARY CONTACT

	CCC
	cULus
	EAC
classification	

ETIM 8.0

ETIN

EC000066 -Power contactor, AC switching