

		•	
Product designation			Power contactor
Product type designation			BF12
Contact characteristics			DI 12
		N.I.	
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	28
Operational current le			
Operational current to	AC-1 (≤40°C)	Α	28
	AC-1 (≤55°C)	A	23
	AC-1 (≤70°C)	Α	20
	AC-3 (≤440V ≤55°C)	Α	12
	AC-4 (400V)	Α	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)	000 V	1000	
Rated operational power AC-1 (1340 C)	2201/	1.1.1.7	4.0
	230V	kW	10
	400V	kW	18
	500V	kW	23
	690V	kW	32
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	17
	48V	Α	15
	75V	Α	13
	110V	Α	6
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
TEO THAN GUITCHE IN DOT WITH EATY = THIS WITH 2 POICS IN GOINGS	≤24V	Α	20
	48V	A	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
			. •

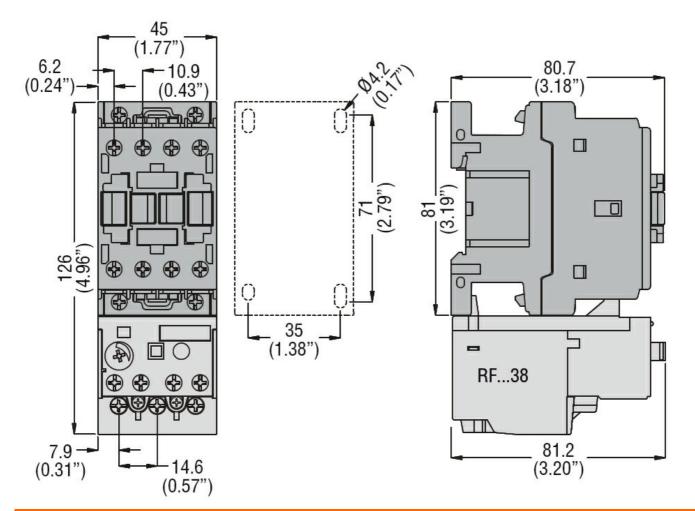
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	220V ≤24V 48V	A A A	11 20 20
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	48V		
	48V		
		Α	20
	751		20
	75V	Α	20
	110V	Α	16
	220V	Α	12
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	Α	12
	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			
·	≤24V	Α	15
	48V	Α	13
	75V	Α	12
	110V	Α	8
	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
index carrent to in 200 200 man 2/1/2 forms what o police in control	≤24V	Α	18
	48V	A	18
	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		
TEO max current le in 200-2003 with E/N 2 10m3 with 4 poles in series	≤24V	Α	15
	48V	A	15
	75V	A	15
	110V	A	16
	220V	A	7
Short time allowable current for 10c (IEC/ENG0047.1)	220 V	A	150
Short-time allowable current for 10s (IEC/EN60947-1) Protection fuse			130
Flotection luse	aC (IEC)	Α	32
	gG (IEC) aM (IEC)		12
Making capacity (RMS value)	aivi (IEC)	A A	120
Breaking capacity (Kivis value)			120
broaking capacity at voltage	440V	۸	96
	500V	A A	96 96
	690V		96 94
Posistance per pole (average value)	090 v	A mO	2.5
Resistance per pole (average value)		mΩ	۷.ن
Power dissipation per pole (average value)	141	147	2
	Ith	W	2
Tightoning town to fautoweight	AC3	W	0.4
Tightening torque for terminals		N I.a.	4.5
	min	Nm	1.5
	max ·	Nm	1.8
	min	lbin	1.1
	max	lbin	1.5
<del>-</del>			
Tightening torque for coil terminal			
Tightening torque for coil terminal	min	Nm	0.8
Tightening torque for coil terminal	min max min	Nm Nm Ibin	0.8 1 0.8

		max	lbin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section			
		min	mm²	1
	Clavible also beginning	max	mm²	6
	Flexible c/w lug conductor section	min	mm²	1
		min max	mm²	4
	Flexible with insulated spade lug conductor section		111111	7
	Tiexible with insulated space rag conductor section	, min	mm²	1
		max	mm²	4
Power terminal protect	ction according to IEC/EN 60529			IP20 when wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
				35mm
Weight			g	360
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact chara	acteristics		•	4.0
Thermal current Ith	elementing		Α	10
IEC/EN 60947-5-1 de				A600 - P600
Operating current AC	15	2201/	۸	2
		230V 400V	A A	3 1.9
		500V	A	1.4
Operating current DC	12	300 V		1.7
operating durient Bo	12	110V	Α	5.7
Operating current DC	13	1101		0.1
operaning carrent 2 c	. •	24V	Α	5.7
		48V	Α	2.9
		60V	Α	2.3
		110V	Α	1.25
		125V	Α	1.1
		220V	Α	0.55
		600V	Α	0.2
Operations				222222
Mechanical life			cycles	20000000
Electrical life			cycles	2000000
Safety related data	Od according to EN/ISO 12490 4			
renormance level B1	0d according to EN/ISO 13489-1	rated load	ovoloo	2000000
	r	rated load mechanical load	cycles cycles	2000000
Mirror contate accordi	ng to IEC/EN 609474-4-1	nochanical idau	Cycles	
EMC compatibility	119 to 120/214 003-7 4-4-1			yes yes
AC coil operating				y 0.3
Rated AC voltage at 5	50/60Hz		V	24
			•	<b>-</b> ·

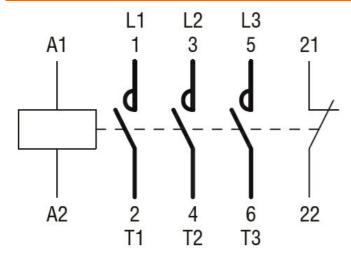
AC operating voltage				
7.0 operating vertage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	рюк-ар	min	%Us	80
		max	%Us	110
	drop out	IIIax	/ <sub>0</sub> US	110
	drop-out	and the	0/11-	00
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
AC average coil consu	ımption at 20°C			
	of 50/60Hz coil powered at 50Hz			
	•	in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz	Holding	٧,١	
	or our iz con powered at our iz	in-rush	VA	75
		holding	VA	9
Discipation at halding	<20°C FOLI-	Holding	W	2.5
Dissipation at holding	S20 C 50H2		VV	2.5
Max cycles frequency Mechanical operation				2000
- Mechanical oberation				
			cycles/h	3600
Operating times			cycles/n	3600
			cycles/n	3600
Operating times	in AC		cycles/n	3600
Operating times				
Operating times	in AC	min	ms	8
Operating times	in AC Closing NO	min max		
Operating times	in AC		ms	8 24
Operating times	in AC Closing NO		ms	8
Operating times	in AC Closing NO	max	ms ms	8 24
Operating times	in AC Closing NO	max min	ms ms	8 24 10
Operating times	in AC Closing NO Opening NO	max min	ms ms	8 24 10
Operating times	in AC Closing NO Opening NO	max min max	ms ms ms	8 24 10 20
Operating times	in AC Closing NO Opening NO Closing NC	max min max min	ms ms ms ms	8 24 10 20
Operating times	in AC Closing NO Opening NO	max min max min max	ms ms ms ms	8 24 10 20 14 28
Operating times	in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us of	in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us of	in AC  Closing NO  Opening NO  Closing NC  Opening NC	max min max min max min	ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us of	in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us of	in AC  Closing NO  Opening NO  Closing NC  Opening 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 of the control	in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us of	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening 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 of the control	in AC Closing NO Opening NO Closing NC Opening NC Opening NC	min max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us of the control	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us of the control	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  of for three-phase AC motor  erformance for single-phase AC motor	min max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us of the control	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC	max min max min max min max  at 480V at 600V  110/120V 230V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us of the control	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  of for three-phase AC motor  erformance for single-phase AC motor	max min max min max min max  at 480V at 600V  110/120V 230V	ms ms ms ms ms ms HP HP	8 24 10 20 14 28 7 18
Operating times Average time for Us of the control	in AC  Closing NO  Opening NO  Closing NC  Opening NC  Opening NC  of for three-phase AC motor  erformance for single-phase AC motor	max min max min max min max  at 480V at 600V  110/120V 230V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18

		460/480V	HP	7.5
		575/600V	HP	10
General USE				
C	Contactor			
		AC current	Α	28
Ā	Auxiliary contacts			
	,	AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protection fu	se, 600V			
·	ligh fault			
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
<del>-</del>	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	70
Contact rating of auxiliary	contacts according to UL			A600 - P600
Ambient conditions	,			
Temperature				
•	Operating temperature			
		min	°C	-50
		max	°C	70
<del>-</del>	Storage temperature			
_	3	min	°C	-60
		max	°C	80
Max altitude		-	m	3000
Resistance & Protection				
Pollution degree				3
Dimensions				

Three-pole contactor, IEC operating current le (AC3) = 12A, AC coil 50/60Hz, 24VAC, 1NC auxiliary



### 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

BF1201A024



## BF1201A024

electric

Three-pole contactor, IEC operating current le (AC3) = 12A, AC coil 50/60Hz, 24VAC, 1NC auxiliary contact

CCC			
cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching