



			ale.
Product designation			Power contactor
Product type designation			BF230
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		А	350
Operational current le			
	AC-1 (≤40°C)	А	350
	AC-1 (≤55°C)	А	290
	AC-1 (≤70°C)	А	250
	AC-3 (≤440V ≤55°C)	А	230
	AC-4 (400V)	А	110
Rated operational power AC-3 (T≤55°C)			
	230V	kW	55
	400V	kW	110
	415V	kW	110
	440V	kW	132
	500V	kW	132
	690V	kW	160
	1000V	kW	110
Rated operational current AC-3 (T≤55°C)			
	230V	А	230
	400V	А	230
	415V	А	230
	440V	А	230
	500V	А	184
	690V	А	165
	1000V	A	100
Rated operational power AC-1 (T≤40°C)			
	230V	kW	132
	400V	kW	230
	500V	kW	253
	690V	kW	397
IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series			
	≤24V	А	350
	48V	А	350
	75V	А	350
	110V	А	145
	220V	Α	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
			050

≤24V

А

350



BF23000E110 CONTACTOR 3 POLI, IEC CURENT OPERARE IE (AC3) = 230A, AC/DC BOBINA, 60... 130VAC/DC

	48V	А	350
	75V	A	350
	110V	A	270
	220V	A	225
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	2201	7.	
	≤24V	А	350
	48V	A	350
	75V	A	350
	110V	A	270
	220V	A	270
	330V	A	225
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	0001	7.	
	≤24V	А	350
	48V	A	350
	40V 75V	A	350
	110V	A	350
	220V	A	350
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	220 V	Λ	330
TEC max current le in DC3-DC3 with L/R = 15ms with 1 poles in series	<2417	^	250
	≤24V	A	350
	48V 75V	A	350
		A	250
	110V	A	135
IEC may summat be in DC2 DC5 with $1/D < 45$ ms with 2 ms as in series	220V	A	
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 2 poles in series			
	≤24V	A	350
	48V	A	350
	75V	A	250
	110V	A	225
	220V	A	180
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 3 poles in series		_	
	≤24V	A	350
	48V	Α	350
	75V	A	250
	110V	A	250
	220V	A	225
	330V	A	180
IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 4 poles in series			
	≤24V	A	350
	48V	А	350
	75V	А	250
	110V	А	250
	220V	A	225
	330V	А	210
	460V	A	180
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1840
Protection fuse			
	gG (IEC)	А	400
	aM (IEC)	А	250
Making capacity (RMS value)		А	2300
Breaking capacity at voltage			
	440V	А	1840
	500V	А	1472
	690V	А	1296
Resistance per pole (average value)		mΩ	0.18

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Power dissipation per	pole (average value)			
	/	Ith	W	21
		AC-3	W	9.3
Tightening torque for t	erminals			
		min	Nm	18
		max	Nm	18
		min	Ibin	159
		max	Ibin	159
Tightening torque for a	coil terminal			
0 0 1		min	Nm	0.8
		max	Nm	1
Power terminal protect	tion according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
operating peetier		normal		Vertical plan
		allowable		±30°
Fixing		ailowable		Screw
Weight			~	3000
Operations			g	3000
•			ovolaa	1000000
Mechanical life			cycles	1000000
Electrical life			cycles	1000000
Safety related data				
Performance level B1	0d according to EN/ISO 13489-1			100000
		rated load	cycles	1000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	0/60Hz, 60Hz			
		min	V	60
		max	V	130
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤70 Us min
AC average coil consi	umption at 20°C			
Ŭ	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	160230
		holding	VA	1.53.0
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	160230
		holding	VA VA	1.53.0
	of 60Hz coil powered at 60Hz	noiuing	٧A	1.55.0
	of 60Hz coil powered at 60Hz	in ruch	VA	160 220
		in-rush		160230
		holding	VA	1.53.0
Dissipation at holding	≥20 C 50HZ		W	1.53.0



DC coil operating DC rated control voltage V 60 min 130 max V DC operating voltage pick-up %Us 85 Us min min %Us 110 Us max max drop-out %Us ≤70 Us min max Average coil consumption ≤20°C in-rush W 160...230 holding W 1.5...3.0 Max cycles frequency Mechanical operation cycles/h 1000 Operating times Average time for Us control

- in AC

Closing NO			
	min	ms	50
	max	ms	100
Opening NO			
	min	ms	30
	max	ms	75
UL technical data			
Yielded mechanical performance			
for three-phase AC motor			
	200/208V	HP	75
	220/230V	HP	75
	460/480V	HP	150
	575/600V	HP	200
General USE			
Contactor			
	AC current	А	350
Short-circuit protection fuse, 600V			

Sho High fault

		Short circuit current	kA	100
		Fuse rating	А	400
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	А	400
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protection	n			
Pollution degree				3

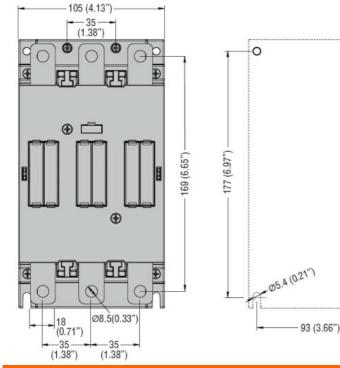
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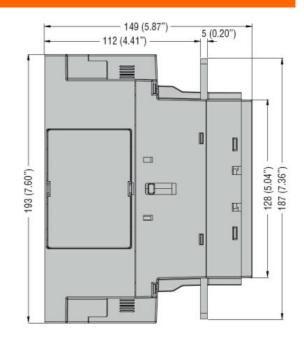


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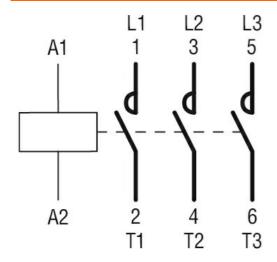
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## Dimensions





## 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		
	cULus	
ETIM classificatio	n	
ETIM 8.0		EC000066 - Power contactor, AC switching

## BF23000E110