



Product designation			Power contactor
Product type designation			BF160
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	Пах	A	250
Operational current le		~	200
	AC-1 (≤40°C)	А	250
	AC-1 (≤40 C) AC-1 (≤55°C)		
	. ,	A	210
	AC-1 (≤70°C)	A	180
	AC-3 (≤440V ≤55°C)	A	160
	AC-4 (400V)	A	75
Rated operational power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	90
	440V	kW	90
	500V	kW	110
	690V	kW	132
	1000V	kW	75
Rated operational current AC-3 (T≤55°C)			
	230V	А	160
	400V	А	160
	415V	А	160
	440V	А	160
	500V	А	150
	690V	А	135
	1000V	А	60
Rated operational power AC-1 (T≤40°C)			
· · · · · · · · · · · · · · · · · · ·	230V	kW	95
	400V	kW	165
	500V	kW	181
	690V	kW	284
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	0001		207
	≤24V	А	250
	48V	A	250
	48V 75V	A	250
	75V 110V		
		A	110
IEC may autropt to in DC1 with $1/D < 1$ may with 2 palas in action	220V	A	
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series	-0.1.1	۸	250

≤24V

250

А



BF16000E230 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 160A, AC/DC COIL, 100...250VAC/DC

	48V	А	250
	75V	А	250
	110V	А	150
	220V	А	130
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	А	250
	48V	А	250
	75V	А	250
	110V	А	160
	220V	А	150
	330V	А	130
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	А	250
	48V	А	250
	75V	А	250
	110V	А	250
	220V	А	250
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 1 poles in series			
· ·	≤24V	А	250
	48V	A	250
	75V	A	160
	110V	A	80
	220V	A	_
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series			
	≤24V	А	250
	48V	A	250
	75V	A	160
	110V	A	120
	220V	A	90
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series			
	≤24V	А	250
	48V	A	250
	75V	A	160
	110V	A	140
	220V	A	120
	330V	A	90
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series	550 V	Λ	50
	≤24V	А	250
	48V	A	250
	40V 75V	A	160
	110V	A	140
	220V	A	140
	220V 330V	A	140
	460V	A	90
Short-time allowable current for 10s (IEC/EN60947-1)	400 V	A	1280
Protection fuse		~	1200
FIGECHOILINSE		۸	245
	gG (IEC)	A A	315 200
Making capacity (RMS value)	aM (IEC)	A A	1360
		A	1300
Breaking capacity at voltage	44014	^	1260
	440V	A	1360
	500V	A	1326
	690V	A	1139
Resistance per pole (average value)		mΩ	0.18

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Power dissipation per per	ole (average value)			
		Ith	W	11
		AC-3	W	4.5
Tightening torque for ter	minals			
5 5 1		min	Nm	18
		max	Nm	18
		min	Ibin	159
		max	Ibin	159
Tightening torque for co	il terminal	Пах	10111	100
		min	Nim	0.8
		min	Nm	
Device to main all a sets ati-		max	Nm	1
-	on according to IEC/EN 60529			IP00
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw
Neight			g	3000
Operations				
Mechanical life			cycles	10000000
Electrical life			cycles	1000000
Safety related data			,	
	d according to EN/ISO 13489-1			
		rated load	cycles	1000000
EMC compatibility		14104 1044	0yoloo	yes
AC coil operating				yes
no con operating				
Rated AC voltage at 50	(60Hz 60Hz			
Rated AC voltage at 50/	/60Hz, 60Hz	min	V	100
Rated AC voltage at 50/	/60Hz, 60Hz	min	V	100
	/60Hz, 60Hz	min max	V V	100 250
	of 50/60Hz coil powered at 50Hz			
		max	V	250
	of 50/60Hz coil powered at 50Hz		V %Us	250 80 Us min
	of 50/60Hz coil powered at 50Hz pick-up	max	V	250
	of 50/60Hz coil powered at 50Hz	maxmin	V %Us %Us	250 80 Us min 110 Us max
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out	maxmin	V %Us	250 80 Us min
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up	max min max	V %Us %Us	250 80 Us min 110 Us max
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out	max min max	V %Us %Us	250 80 Us min 110 Us max
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	max min max	V %Us %Us	250 80 Us min 110 Us max
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	max min max max	V %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up	max min max max min	V %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 80 Us min
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	max min max max min max	V %Us %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 10 Us max
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max min	V %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 80 Us min
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max min max	V %Us %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 10 Us max
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max min max max	V %Us %Us %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max min max max max	V %Us %Us %Us %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max min max max	V %Us %Us %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max min max max max	V %Us %Us %Us %Us %Us %Us VA VA	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max max max max max max max	V %Us %Us %Us %Us %Us %Us VA VA	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out nption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz	max min max max min max max max	V %Us %Us %Us %Us %Us %Us VA VA	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max max max max max max max	V %Us %Us %Us %Us %Us %Us VA VA	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out nption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz	max min max max max max max max max max	V %Us %Us %Us %Us %Us %Us VA VA	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 160230 1.53.0
AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out nption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz	max min max max max max max max in-rush holding	V %Us %Us %Us %Us %Us %Us %Us %Us %Us %Us	250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 10 Us max ≤70 Us min 160230 1.53.0



DC coil operating					
DC rated control voltage	je				
	) -		min	V	100
			max	V	250
DC operating voltage					
-	pick-up				
			min	%Us	85 Us min
			max	%Us	110 Us max
	drop-out				
			max	%Us	≤70 Us min
Average coil consump	tion ≤20°C				400 000
			in-rush	W	160230 1.53.0
Max cycles frequency			holding	W	1.53.0
Max cycles nequency Mechanical operation				cycles/h	1000
Operating times				0,0100/11	1000
Average time for Us co	ontrol				
	in AC				
		Closing NO			
		-	min	ms	50
			max	ms	100
		Opening NO			
			min	ms	35
LIL CONTRACTOR			max	ms	75
UL technical data					
Yielded mechanical pe		ator			
	for three-phase AC mo	JIOI	200/208V	HP	50
			200/200V 220/230V	HP	60
			460/480V	HP	125
			575/600V	HP	150
General USE					
	Contactor				
			AC current	А	250
Short-circuit protection					
	High fault				
			Short circuit current	kA	100
			Fuse rating	A	400
	Standard fault		Fuse class		J
	Stanuaru lault		Short circuit current	kA	10
			Fuse rating	A	400
			Fuse class	<i>/</i> \	RK5
Ambient conditions					
Temperature					
	Operating temperature	)			
			min	°C	-40
			max	°C	70
	Storage temperature				
			min	°C	-50
<b>R</b> A 1/2 1			max	°C	80
Max altitude				m	3000
Resistance & Protection	n				2
Pollution degree					3

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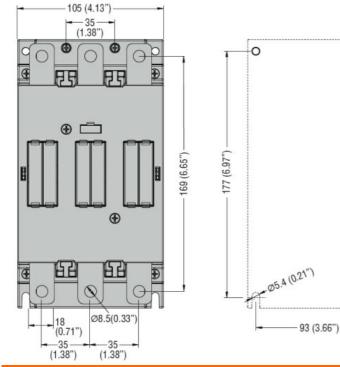
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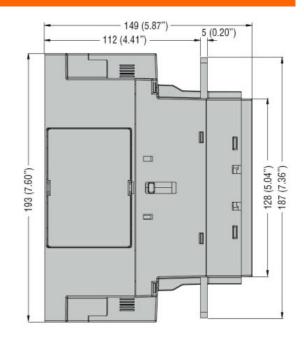


THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 160A, AC/DC COIL, 100...250VAC/DC

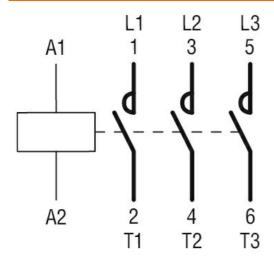
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## Dimensions





## 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 classification		
ETIM 8.0		EC000066 - Power contactor, AC switching