# THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 50/60HZ, 230VAC



Product designation Product type designation			Power contactor BF80
Contact characteristics			2. 00
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		Α	115
Operational current le			
	AC-1 (≤40°C)	Α	115
	AC-1 (≤55°C)	Α	95
	AC-1 (≤70°C)	Α	80
	AC-3 (≤440V ≤55°C)	Α	80
	AC-4 (400V)	Α	38
Rated operational power AC-3 (T≤55°C)			
	230V	kW	22
	400V	kW	45
	415V	kW	45
	440V	kW	45
	500V	kW	55 
	690V	kW	55
D-1-1	1000V	kW	37
Rated operational power AC-1 (T≤40°C)	0001/	1.347	40
	230V	kW	43
	400V	kW	76 05
	500V	kW	95
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	690V	kW	120
TEC max current le in DCT with L/R \( \) this with 1 poles in series	≤24V	Α	70
	≤24V 48V	A	70 60
	75V	A	60
	110V	A	8
	220V	A	-
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	220 V	- ' '	
max canonic to m 2 or mar are = mile with 2 police in selles	≤24V	Α	100
	48V	Α	100
	75V	Α	100
	110V	Α	80
	220V	Α	9
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
1			
	≤24V	Α	100
	≤24V 48V	A A	100 100



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	110V	Α	85
	220V	Α	95
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	100
	48V	Α	100
	75V	Α	100
	110V	Α	100
	220V	Α	115
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	
	≤24V	Α	40
	48V	Α	30
	75V	A	30
	110V	A	3
150 H. I. DOO DOE 191 I D. A. I	220V	Α	<del>-</del>
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	-041/		00
	≤24V	A	60
	48V	A	50
	75V	A	50
	110V	A	40
IFO was a support to in DO2 DO5 with 1/D < 45 and with 2 males in parish	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	<24)/	۸	0.0
	≤24V	A	80
	48V 75V	A	70 70
	75V 110V	A	70
	220V	A A	60 64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V	A	04
TEO Max current le in Boo-Boo with E/N 3 Toms with 4 poles in series	≤24V	Α	90
	48V	A	90
	75V	A	90
	110V	A	75
	220V	Α	80
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse			
	gG (IEC)	Α	125
	aM (IEC)	Α	80
Making capacity (RMS value)	()	Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	Α	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
,	lth	W	7.9
	AC3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			_
	min	Nm	0.8
	max	Nm	1

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				2.2
		min	lbft	0.8
Man and other at other	See alkana a saab a saab la	max	lbft	0.74
	imultaneously connectable		nr.	2
Conductor section				
	Flexible w/o lug conductor section	min	mm²	1 E
		min	mm²	1.5 35
	Flexible c/w lug conductor section	max	111111	33
	Flexible C/W lug Colluctor Section	min	mm²	1.5
		max	mm²	35
Power terminal protect	tion according to IEC/EN 60529	IIIdx	111111	IP20 front
Mechanical features	tion according to IEC/EN 60329			IF20 HOHL
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
-		allowabic		Screw / DIN rail
Fixing				35mm
Weight			g	1020
Operations			9	
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data			0,0.00	
•	Od according to EN/ISO 13489-1			
	3	rated load	cycles	1300000
		mechanical load	cycles	15000000
Mirror contats according	ng to IEC/EN 609474-4-1		- <b>,</b>	yes
EMC compatibility	<u> </u>			yes
AC coil operating				
AC coil operating Rated AC voltage at 50	0/60Hz		V	230
	0/60Hz		V	230
Rated AC voltage at 50	0/60Hz of 50/60Hz coil powered at 50Hz		V	230
Rated AC voltage at 50			V	230
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz	max	V %Us	230
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz	max		
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up	max min		
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up		%Us	110
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up	min	%Us %Us	110 20
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out	min	%Us %Us %Us	110 20 55
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out	min	%Us %Us %Us	110 20 55
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out  of 50/60Hz coil powered at 60Hz pick-up	min max	%Us %Us %Us	110 20 55
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out	min max min max	%Us %Us %Us %Us %Us	110 20 55 85 110
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out  of 50/60Hz coil powered at 60Hz pick-up	min max min max min	%Us %Us %Us %Us %Us	110 20 55 85 110 40
Rated AC voltage at 50 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	min max min max	%Us %Us %Us %Us %Us	110 20 55 85 110
Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out  of 50/60Hz coil powered at 60Hz pick-up drop-out	min max min max min	%Us %Us %Us %Us %Us	110 20 55 85 110 40
Rated AC voltage at 50 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	min max min max min max	%Us %Us %Us %Us %Us %Us %Us	110 20 55 85 110 40 55
Rated AC voltage at 50 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	min max min max min max in-rush	%Us %Us %Us %Us %Us %Us %Us	110 20 55 85 110 40 55
Rated AC voltage at 50 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  at 20°C of 50/60Hz coil powered at 50Hz	min max min max min max	%Us %Us %Us %Us %Us %Us %Us	110 20 55 85 110 40 55
Rated AC voltage at 50 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	min max min max min max in-rush holding	%Us %Us %Us %Us %Us %Us VA	110 20 55 85 110 40 55
Rated AC voltage at 50 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  at 20°C of 50/60Hz coil powered at 50Hz	min max min max min max in-rush holding in-rush	%Us	110 20 55 85 110 40 55 210 15 195
Rated AC voltage at 50 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  at 20°C of 50/60Hz coil powered at 50Hz  of 50/60Hz coil powered at 60Hz	min max min max min max in-rush holding	%Us %Us %Us %Us %Us %Us VA	110 20 55 85 110 40 55
Rated AC voltage at 50 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  at 20°C of 50/60Hz coil powered at 50Hz	min max min max min max in-rush holding in-rush holding	%Us %Us %Us %Us %Us %Us VA VA VA	110 20 55 85 110 40 55 210 15 195 13
Rated AC voltage at 50 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  at 20°C of 50/60Hz coil powered at 50Hz  of 50/60Hz coil powered at 60Hz	min max  min max  min max  in-rush holding  in-rush holding  in-rush	%Us	110 20 55 85 110 40 55 210 15 195 13
Rated AC voltage at 50 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  at 20°C of 50/60Hz coil powered at 50Hz  of 50/60Hz coil powered at 60Hz  of 60Hz coil powered at 60Hz	min max min max min max in-rush holding in-rush holding	%Us %Us %Us %Us %Us %Us VA VA VA	110 20 55 85 110 40 55 210 15 195 13

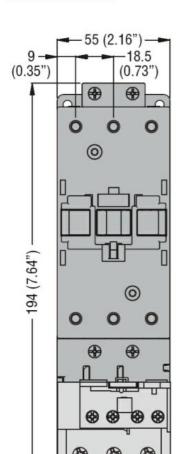
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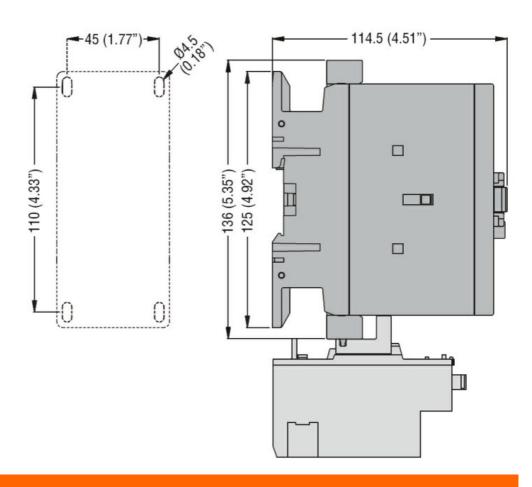
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Max cycles frequency			
Mechanical operation		cycles/h	3600
Operating times			
Average time for Us control			
in AC			
Closing NO			
	min	ms	12
	max	ms	28
Opening NO			
	min	ms	8
	max	ms	22
UL technical data			
Full-load current (FLA) for three-phase AC motor			
	at 480V	Α	77
	at 600V	Α	77
Yielded mechanical performance			
for three-phase AC motor			
	200/208V	HP	25
	220/230V	HP	30
	460/480V	HP	60
	575/600V	HP	75
General USE			
Contactor			
	AC current	Α	115
Ambient conditions			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimensions			

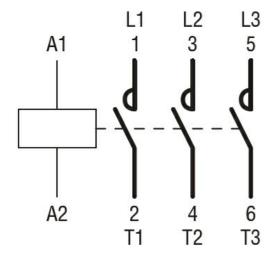


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#### Wiring diagrams



### 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

CCC



#### BF8000A230

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cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching