



Product designation	Power contactor
Product type designation	BF80

Product type designation			БГОО
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		Α	115
Operational current le			
	AC-1 (≤40°C)	Α	115
	AC-1 (≤55°C)	Α	95
AC-1	(≤55°C) with 16mm² wire and fork end	lugA	80
	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
	1000V	kW	37
Rated operational power AC-1 (T≤40°C)			
	230V	kW	43
	400V	kW	76
	500V	kW	95
	690V	kW	120
IEC max current le in DC1 with L/R ≤ 1ms with 1 pole		_	
	≤24V	Α	70
	48V	A	60
	75V	A	60
	110V	A	8
IFC many automorphic in DO4 with L/D < 4 are with 0 and	220V	A	
IEC max current le in DC1 with L/R ≤ 1ms with 2 pole		Α.	400
	≤24V	A	100
	48V	A	100
	75V	A	100
	110V	A	80
IEC may autront to in DC1 with 1/D < 1mg with 2 male	220V	A	9
IEC max current le in DC1 with L/R ≤ 1ms with 3 pole		۸	100
	≤24V	A	100
	48V	Α	100



			400
	75V	Α	100
	110V	Α	85
	220V	Α	95
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
120 max current le in 201 with 2/1 = mis with 4 poles in series	<0.4) /	٨	400
	≤24V	Α	100
	48V	Α	100
	75V	Α	100
	110V	Α	100
	220V	Α	115
IFC may augreent to in DC2 DC5 with L/D < 45 mg with 4 malog in parise	220 V		110
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	
	≤24V	Α	40
	48V	Α	30
	75V	Α	30
	110V	Α	3
	220V	A	_
150 H. I. DOO DOE III LID 445 III O. L. I.	220 V	A	
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	60
	48V	Α	50
	75V	Α	50
	110V	Α	40
	220V	Α	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	Α	80
	48V	Α	70
	75V	Α	70
	110V	A	60
	220V	A	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	90
	48V	Α	90
	75V	Α	90
	110V	Α	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
Maling and ait (DMC calca)	aivi (ILO)		
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	Α	456
Resistance per pole (average value)	0001	mΩ	0.6
		11122	0.0
Power dissipation per pole (average value)			
	Ith	W	7.9
	AC3	W	3.8
Tightening torque for terminals			
5 5 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	min	Nm	4
	max	Nm	5
	min	lbin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	111111	1 4111	5.0



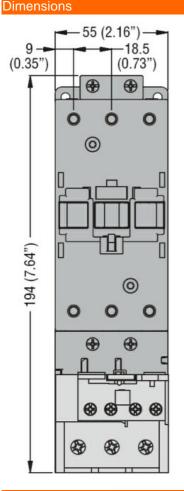
Max number of wires simultaneously connectable					
Max number of wires simultaneously connectable Nr. 2					
Max number of wires simultaneously connectable Nr. 2 Conductor section AWG/Kcmil max 2 Flexible w/o lug conductor section min mm 1.5 Flexible c/w lug conductor section min mm² 1.5 Power terminal protection according to IEC/EN 60529 mm² 35 Power terminal protection according to IEC/EN 60529 mormal allowable 1.920 front Mechanical features mormal allowable 20° Operating position mormal allowable 20° Fixing mormal allowable 20° Fixing screw / DIN rail 35 mm Weight g 1020 Conductor section max 2 AWG/kcmil conductor section max 2 Mechanical life cycles 15000000 Electrical life cycles 15000000 Safety related data rated load cycles 1800000 Performance level B10d according to ElC/EN 609474-4-1 yes yes EMC compatibility yes yes <td></td> <td></td> <td>min</td> <td></td> <td></td>			min		
AWG/Kcmil	·		max		
AWG/Kcmil Piexible w/o lug conductor section min min min mm² 1.5 mm²	Max number of wires s	simultaneously connectable		Nr.	2
Plexible w/o lug conductor section	Conductor section				
Flexible w/o lug conductor section		AWG/Kcmil			
Flexible c/w lug conductor section			max		2
Flexible c/w lug conductor section		Flexible w/o lug conductor section			
Flexible c/w lug conductor section min mm mm² 1.5 max mm² 35 mm²		ŭ	min	mm²	1.5
Flexible c/w lug conductor section					
Minitary		Flexible c/w lug conductor section			
Power terminal protection according to IEC/EN 60529 P20 front		Tiexible of Wing conductor decitors	min	mm²	1.5
Power terminal protection according to IEC/EN 60529 IP20 front Mechanical features Vertical plan					
Nechanical features Secret Particular plan	Dower terminal protect	tion according to IEC/EN 60530	max	111111	
Operating position Note that plan is allowable in the property of the property		tion according to IEC/EN 00329			IP20 HOHL
Normal allowable Normal allo					
Fixing Screw / DIN rail 35mm Weight g 1020 Conductor section AWG/kcmil conductor section AWG/kcmil conductor section Tax 2 Operations Mechanical life cycles 15000000 Electrical life cycles 1300000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 15000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz coil powered at 50Hz pick-up of 50/60Hz coil powered at 60Hz pick-up of 50/60Hz coil powered at 60Hz pick-up amax %us 55 of 50/60Hz coil powered at 60Hz pick-up amax %us 55 of 50/60Hz coil powered at 60Hz pick-up amax %us 55 of 50/60Hz coil powered at 60Hz pick-up amax %us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz coil powered at 60Hz coil powered coil consumption at 20°C coil powered at 50Hz coil	Operating position		1		
Screw / DIN rail 35mm Scre					•
Fixing 9 1020			allowable		
Weight	Fixing				
AWG/kcmil conductor section max 2					
AWG/kcmil conductor section max 2 Operations Mechanical life cycles 15000000 Electrical life cycles 1300000 Safety related data Performance level B10d according to EN/ISO 13489-1 Prated load cycles 1300000 Mirror contats according to IEC/EN 609474-4-1 EMC coil operating AC coil operating Pated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up AC operating voltage of 50/60Hz coil powered at 60Hz pick-up pick-up AC operating voltage of 50/60Hz coil powered at 60Hz pick-up AC operating voltage with a fine wi				g	1020
Operations Mechanical life cycles 15000000 Electrical life cycles 1300000 Safety related data rated load data cycles 1300000 Mirror contats according to IEC/EN 609474-4-1 rated load cycles 15000000 Mirror contats according to IEC/EN 609474-4-1 yes EMC compatibility yes AC coll operating AC collage at 50/60Hz y 110 AC operating voltage of 50/60Hz coil powered at 50Hz min %Us 80 pick-up min %Us 55 of 50/60Hz coil powered at 60Hz pick-up min %Us 55 of 50/60Hz coil powered at 60Hz min %Us 110 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210	Conductor section				
Mechanical life		AWG/kcmil conductor section			
Mechanical life			max		2
Electrical life cycles 130000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1300000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz coil powered at 50Hz pick-up of 50/60Hz coil powered at 60Hz pick-up of 50/60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out 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 85 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	Operations				
Electrical life cycles 1300000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 15000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz coil powered at 50Hz pick-up of 50/60Hz coil powered at 60Hz pick-up of 50/60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out 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 85 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz	Mechanical life			cycles	15000000
Performance level B10d according to EN/ISO 13489-1 rated load cycles 1300000 mechanical load cycles 150000000 mechanical load cycles 1500000000 mechanical load cycles 1500000000 mechanical load cycles 1500000000000000000000000000000000000	Electrical life				1300000
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load vocal cycles 1300000 mechanical load vocal cycles 15000000 mechanical load vocal cycles 15000000 mechanical load vocal cycles 15000000 mechanical load vocal cycles 15000000 mechanical load vocal cycles 15000000 mechanical load vocal cycles vocal cy					
Pate Image	•	0d according to EN/ISO 13489-1			
Mirror contats according to IEC/EN 609474-4-1 yes			rated load	cycles	1300000
Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 50/60Hz of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out 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 85 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210				-	
EMC compatibility yes AC coil operating Rated AC voltage at 50/60Hz AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out 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 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210	Mirror contate accordi	ng to IEC/EN 600474-4-1	mediamed load	Oyoloo	
AC coil operating Rated AC voltage at 50/60Hz V 110		ng to 120/214 0034/4-4-1			
Rated AC voltage at 50/60Hz V 110					yes
AC operating voltage of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out 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 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210		0/001 -		\/	440
of 50/60Hz coil powered at 50Hz pick-up min %Us 80 max %Us 110 drop-out 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 85 max %Us 110 drop-out min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210		U/60HZ		V	110
Pick-up min %Us 80 max %Us 110 Mus 110	AC operating voltage				
Min Mus 80 max Mus 110 Mus 110 Mus Mus 110 Mus Mus Mus 55 Mus Mus 55 Mus M					
Max %Us 110		pick-up			
drop-out min %Us 20 max %Us 55					
min %Us 20 max %Us 55			max	%Us	110
max %Us 55		drop-out			
of 50/60Hz coil powered at 60Hz pick-up min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210			min	%Us	20
pick-up min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210			max	<u>%U</u> s	55
pick-up min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210		of 50/60Hz coil powered at 60Hz			
min %Us 85 max %Us 110 drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210		•			
drop-out min %Us 40 min %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210			min	%Us	85
drop-out min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210					
min %Us 40 max %Us 55 AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210		drop-out		-	
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210		22F 22	min	%Us	40
AC average coil consumption at 20°C of 50/60Hz coil powered at 50Hz in-rush VA 210					
of 50/60Hz coil powered at 50Hz in-rush VA 210	AC average coil consu	imption at 20°C	max		-
in-rush VA 210	, to average con const	•			
		or 50/00112 coil powered at 50HZ	in much	١/٨	210
nolding vA 15					
			noluling	VA	ıJ

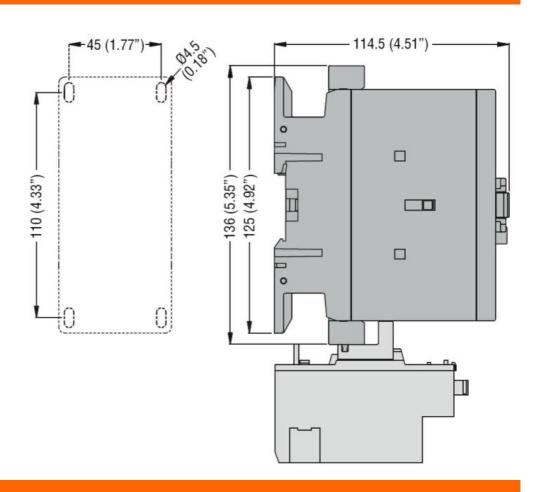


ENERGY AND AUTOMATION					
	-f F0/0011				
	of 50/60Hz coil power	ed at 60Hz	la mak	١/٨	405
			in-rush	VA	195
			holding	VA	13
	of 60Hz coil powered	at 60Hz		1.74	0.1.0
			in-rush	VA	210
	.0000 =011		holding	VA	15
Dissipation at holding	≤20°C 50Hz			W	5
Max cycles frequency					0000
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us co					
	in AC				
		Closing NO			
			min	ms	12
			max	ms	28
		Opening NO			
			min	ms	8
			max	ms	22
	in DC				
		Closing NO			
			min	ms	40
			max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
UL technical data					
Full-load current (FLA)) for three-phase AC mo	otor			
			at 480V	Α	77
			at 600V	Α	77
Yielded mechanical pe					
	for three-phase AC m	otor			
			200/208V	HP	25
			220/230V	HP	30
			460/480V	HP	60
			575/600V	HP	75
General USE					
	Contactor				
			AC current	A	115
Short-circuit protection					
	High fault				
			Short circuit current	kA	100
			Fuse rating	Α	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10
			Fuse rating	Α	200
			Fuse class		RK5
Ambient conditions					
Temperature					
	Operating temperature	е			
			min	°C	-50
			max	°C	70
	Storage temperature			· <u> </u>	
			min	°C	-60

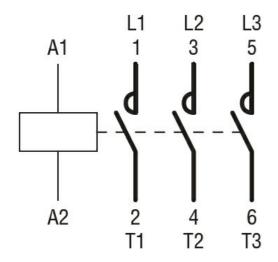


	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimensions			





Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1



BF8000A110

Three-pole contactor, IEC operating current le (AC3) = 80A, AC coil 50/60Hz, 110VAC

	IEC/EN 60947-4-1
	UL 60947-1
	UL 60947-4-1
Certificates	
	CCC
	cULus
FTIM classification	

ETIM 8.0

EC000066 -Power contactor, AC switching