# THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 50/60HZ, 48VAC



Product designation			Power contactor
Product type designation			BF80
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 (≤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 current AC-3 (T≤55°C)			
	230V	Α	80
	400V	Α	80
	415V	Α	80
	440V	Α	80
	500V	Α	78
	690V	Α	57
	1000V	Α	28
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 poles in series			
	≤24V	Α	70
	48V	Α	60
	75V	Α	60
	110V	Α	8
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	100



## THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 50/60HZ, 48VAC

	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			
·	≤24V	Α	100
	48V	Α	100
	75V	Α	100
	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			
120 max carrent to in 200 200 mar 2/10 - 10me mar 1 period in contes	≤24V	Α	40
	48V	A	30
	75V	Α	30
	110V	A	3
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
TEO THAN GUITOR TO HIS DOO BOO WILL EAR = TOTAL WILL 2 POICS III SCHOO	≤24V	Α	60
	48V	A	50
	75V	A	50
	110V	A	40
	220V	A	5
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V		
TEC max current le in DC3-DC3 with E/N = 13ms with 3 poles in series	≤24V	۸	90
	≥24 V 48 V	A	80
	46 V 75 V	A	70
		A	70
	110V 220V	A	60
IFC may current to in DC2 DC5 with L/D < 15 mg with 4 notes in series	2201	A	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	<0.4V	۸	0.0
	≤24V	A	90
	48V	A	90
	75V	A	90
	110V	A	75
Object ("consultant language for AO (15 O (5 NO O AZ A))	220V	A	80
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640
Protection fuse	0 ((50)		405
	gG (IEC)	A	125
	aM (IEC)	Α .	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage			
	440V	Α	640
	500V	Α	625
	690V	A	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	lth	W	7.9
	AC-3	W	3.8
Tightening torque for terminals			



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

		min	Nm	4
		max	Nm	5
		min	Ibin	2.95
		max	Ibin	3.69
Fightening torque for c	coil terminal			
.9		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires s	simultaneously connectable	Παλ	Nr.	2
Conductor section	simultaneously connectable		INI.	
conductor section	A1A1C/I/careil			
	AWG/Kcmil			0
		max		2
	Flexible w/o lug conductor section		•	
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	35
Power terminal protect	tion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
<b></b> .				Screw / DIN rai
Fixing				35mm
Veight			g	1020
Operations			J	
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data			Cycles	1000000
	0d according to EN/ISO 13489-1			
enomiance level bit	od according to E17/13O 13469-1	rated load	cycles	1200000
		Taleo loao	CVCIES	1300000
			•	45000000
-140	_	mechanical load	cycles	15000000
			•	15000000 yes
AC coil operating	0/0011		cycles	yes
AC coil operating Rated AC voltage at 50	0/60Hz		•	
AC coil operating Rated AC voltage at 50			cycles	yes
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz		cycles	yes
AC coil operating Rated AC voltage at 50			cycles	yes
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz		cycles	yes
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz	mechanical load	v	yes 48
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz	mechanical load	v V	yes 48 80
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up	mechanical load	v V	yes 48 80
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up	mechanical load  min max min	v V %Us %Us %Us	yes 48 80 110 20
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load  min max	v V %Us %Us	yes 48 80 110
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz	mechanical load  min max min	v V %Us %Us %Us	yes 48 80 110 20
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load  min max  min max	v V %Us %Us %Us %Us	yes 48 80 110 20 55
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz	mechanical load  min max  min max  min	v V Wus Wus Wus Wus Wus Wus	yes 48 80 110 20 55
AC coil operating 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	mechanical load  min max  min max	v V %Us %Us %Us %Us	yes 48 80 110 20 55
AC coil operating Rated AC voltage at 50	of 50/60Hz coil powered at 50Hz pick-up  drop-out  of 50/60Hz coil powered at 60Hz	mechanical load  min max  min max  min max	v V %Us %Us %Us %Us %Us %Us	yes  48  80 110  20 55  85 110
EMC compatibility AC coil operating 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	mechanical load  min max  min max  min	v V Wus Wus Wus Wus Wus Wus	yes 48 80 110 20 55

of 50/60Hz coil powered at 50Hz





## THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 50/60HZ, 48VAC.

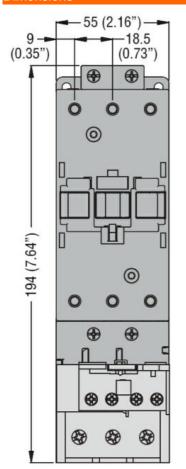
		in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60Hz			
	01 00/001 12 0011 poworod at 001 12	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz	Holding	٧٨	10
	or bornz con powered at bornz	in-rush	١/٨	210
			VA VA	
Dissipation at halding	<20°C FOLI-	holding	VA	<u>15</u> 5
Dissipation at holding	\$20 C 50H2		W	5
Max cycles frequency				2000
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			
	3	min	ms	40
		max	ms	85
	Opening NO	max		
	Sporting 143	min	ms	20
		max	ms	55
		IIIUA	1110	00
UL technical data				
UL technical data Rated operational volta	age AC (UL)		V	600
Rated operational volta			V	600
Rated operational volta	age AC (UL) for three-phase AC motor	at 480V		
Rated operational volta		at 480V	Α	77
Rated operational volta Full-load current (FLA)	for three-phase AC motor	at 480V at 600V		
Rated operational volta	for three-phase AC motor		Α	77
Rated operational volta Full-load current (FLA)	for three-phase AC motor	at 600V	A A	77 77
Rated operational volta Full-load current (FLA)	for three-phase AC motor	at 600V 200/208V	A A HP	77 77 25
Rated operational volta Full-load current (FLA)	for three-phase AC motor	200/208V 220/230V	A A HP HP	77 77 25 30
Rated operational volta Full-load current (FLA)	for three-phase AC motor	200/208V 220/230V 460/480V	A A HP HP	77 77 25 30 60
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor	200/208V 220/230V	A A HP HP	77 77 25 30
Rated operational volta Full-load current (FLA)	for three-phase AC motor  rformance for three-phase AC motor	200/208V 220/230V 460/480V	A A HP HP	77 77 25 30 60
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor	at 600V 200/208V 220/230V 460/480V 575/600V	A A HP HP HP	77 77 25 30 60 75
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor	200/208V 220/230V 460/480V	A A HP HP	77 77 25 30 60
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor	at 600V 200/208V 220/230V 460/480V 575/600V	A A HP HP HP	77 77 25 30 60 75
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor	at 600V 200/208V 220/230V 460/480V 575/600V	A A HP HP HP	77 77 25 30 60 75
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V	at 600V 200/208V 220/230V 460/480V 575/600V	A A HP HP HP	77 77 25 30 60 75
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V	at 600V 200/208V 220/230V 460/480V 575/600V AC current	A A HP HP HP HP	77 77 25 30 60 75
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V	at 600V  200/208V 220/230V 460/480V 575/600V  AC current	A A HP HP HP HP	77 77 25 30 60 75
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V	at 600V  200/208V 220/230V 460/480V 575/600V  AC current Fuse rating	A A HP HP HP HP	77 77 25 30 60 75 115
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V High fault	at 600V  200/208V 220/230V 460/480V 575/600V  AC current  Short circuit current Fuse rating Fuse class	A A HP HP HP A KA A	77 77 25 30 60 75 115
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V High fault	200/208V 220/230V 460/480V 575/600V  AC current Fuse rating Fuse class  Short circuit current	A A HP HP HP HP A kA A	77 77 25 30 60 75 115 100 200 J
Rated operational volta Full-load current (FLA)  Yielded mechanical pe	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V High fault	200/208V 220/230V 460/480V 575/600V  AC current Fuse rating Fuse class  Short circuit current Fuse rating Fuse rating Fuse rating	A A HP HP HP A KA A	77 77 25 30 60 75 115 100 200 J
Rated operational volta Full-load current (FLA)  Yielded mechanical pe  General USE  Short-circuit protection	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V High fault	200/208V 220/230V 460/480V 575/600V  AC current Fuse rating Fuse class  Short circuit current	A A HP HP HP HP A kA A	77 77 25 30 60 75 115 100 200 J
Rated operational volta Full-load current (FLA)  Yielded mechanical per  General USE  Short-circuit protection  Ambient conditions	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V High fault	200/208V 220/230V 460/480V 575/600V  AC current Fuse rating Fuse class  Short circuit current Fuse rating Fuse rating Fuse rating	A A HP HP HP HP A kA A	77 77 25 30 60 75 115 100 200 J
Rated operational volta Full-load current (FLA)  Yielded mechanical pe  General USE  Short-circuit protection	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V High fault  Standard fault	200/208V 220/230V 460/480V 575/600V  AC current Fuse rating Fuse class  Short circuit current Fuse rating Fuse rating Fuse rating	A A HP HP HP HP A kA A	77 77 25 30 60 75 115 100 200 J
Rated operational volta Full-load current (FLA)  Yielded mechanical per  General USE  Short-circuit protection  Ambient conditions	for three-phase AC motor  rformance for three-phase AC motor  Contactor  fuse, 600V High fault	200/208V 220/230V 460/480V 575/600V  AC current Fuse rating Fuse class  Short circuit current Fuse rating Fuse rating Fuse rating	A A HP HP HP HP A kA A	77 77 25 30 60 75 115 100 200 J

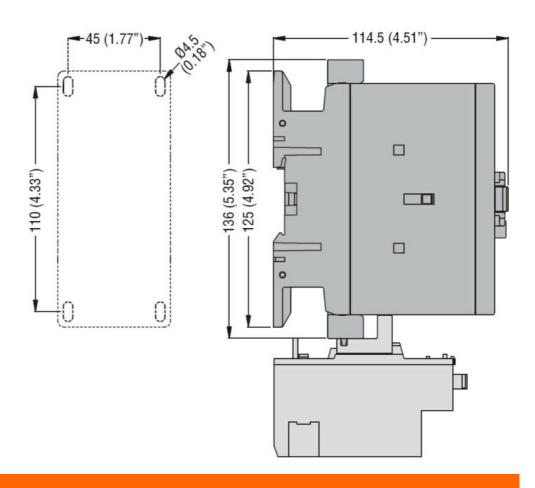


### THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 50/60HZ,

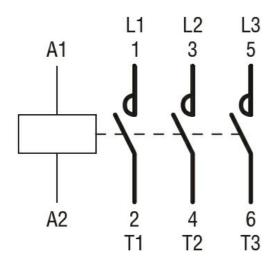
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3

### **Dimensions**





### Wiring diagrams



### Certifications and compliance

Compliance



### BF8000A048

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 80A, AC COIL 50/60HZ, 48VAC

	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	
	CCC
	cULus
ETIMA I SOLUTION	

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching