



Product designation Power contactor
Product type designation BF80

Product type designation			BF80
Contact characteristics			
Number of poles		Nr.	4
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 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
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)			
	Ith	W	7.9
	AC-3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5



		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	0.8
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section	<u> </u>			
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	2	min	mm²	1.5
		max	mm²	35
Power terminal protect	ction according to IEC/EN 60529	Шах		IP20 front
Mechanical features				20 110111
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			g	1360
Conductor section			9	1000
Conductor Section	AWG/kcmil conductor section			
	AVVG/Remiii conductor section	max		2
		Παλ		2
Operations				
•			cycles	15000000
Mechanical life			cycles	15000000
Mechanical life Electrical life			cycles cycles	15000000 1300000
Mechanical life Electrical life Safety related data	Ind according to EN/ISO 12480 1			
Mechanical life Electrical life Safety related data	l 0d according to EN/ISO 13489-1	roted load	cycles	1300000
Mechanical life Electrical life Safety related data	l 0d according to EN/ISO 13489-1	rated load	cycles	1300000
Mechanical life Electrical life Safety related data Performance level B1		rated load mechanical load	cycles	1300000 1300000 15000000
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord	10d according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1		cycles	1300000 1300000 15000000 YES
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility			cycles	1300000 1300000 15000000
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1		cycles cycles cycles	1300000 1300000 15000000 YES yes
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1		cycles	1300000 1300000 15000000 YES
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz		cycles cycles cycles	1300000 1300000 15000000 YES yes
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz		cycles cycles cycles	1300000 1300000 15000000 YES yes
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz	mechanical load	cycles cycles cycles	1300000 1300000 15000000 YES yes
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz		cycles cycles cycles	1300000 1300000 15000000 YES yes 230
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	cycles cycles cycles	1300000 1300000 15000000 YES yes
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz	mechanical load min max	cycles cycles cycles	1300000 1300000 15000000 YES yes 230
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	cycles cycles cycles V %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	mechanical load min max	cycles cycles cycles	1300000 1300000 15000000 YES yes 230
Performance level B1	ing to IEC/EN 609474-4-1 50/60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load min max min	cycles cycles cycles V %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	mechanical load min max min	cycles cycles cycles V %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load min max min	cycles cycles cycles V %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load min max min max	cycles cycles cycles V %Us %Us %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20 55
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up of 50/60Hz coil powered at 60Hz pick-up	mechanical load min max min max min	cycles cycles cycles V %Us %Us %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20 55
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	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	cycles cycles cycles V %Us %Us %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20 55
Mechanical life Electrical life Safety related data Performance level B1 Mirror contats accord EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up of 50/60Hz coil powered at 60Hz pick-up	mechanical load min max min max min max	cycles cycles cycles V %Us %Us %Us %Us %Us %Us	1300000 1300000 15000000 YES yes 230 80 110 20 55

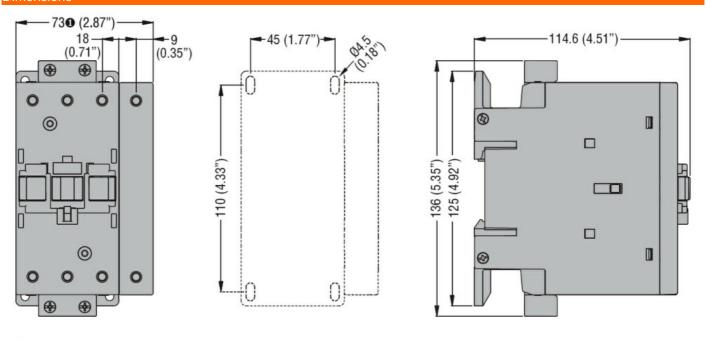


A C				
AC average coil co	nsumption at 20°C	7		
	of 50/60Hz coil powered at 50H	z in-rush	VA	210
		holding	VA	15
	of 50/60Hz coil powered at 60H		VA	13
	01 30/00112 0011 powered at 0011	in-rush	VA	195
		holding	VA	13
	of 60Hz coil powered at 60Hz			
		in-rush	VA	210
		holding	VA	15
Dissipation at holdi	ng ≤20°C 50Hz		W	5
lax cycles frequer	-			
dechanical operati	on		cycles/h	3600
Operating times				
verage time for U				
	in AC			
	Closing			
		min	ms	12
	•	max	ms	28
	Openin	-		0
		min	ms	8
	Closing	max	ms	22
	Closing	min	ms	11
		max	ms	29
	Openin		1113	25
	G F6	min	ms	6
		max	ms	14
	in DC			
	Closing	NO		
		min	ms	40
		max	ms	85
	Openin	_		
		min	ms	20
II. day of a basic basic		max	ms	55
JL technical data	I A) for the control of the control			
-ull-load current (F	LA) for three-phase AC motor	-+ 400\/	۸	77
		at 480V at 600V	A	77 77
/ielded mechanica	Lnorformanco	ai 600 v	Α	11
nolueu mediailiba	for three-phase AC motor			
	ioi tilloo-pilase Ao Illotoi	200/208V	HP	25
		220/230V	HP	30
		460/480V	HP	60
		575/600V	HP	75
General USE		2. 2. 2. 2 3		
-	Contactor			
		AC current	Α	115
Ambient conditions				
Temperature				
-	Operating temperature			
	. 5 .	min	°C	-50
		max	°C	70
	Storage temperature			



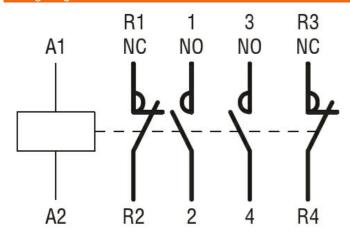
	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3

Dimensions



BF80T2 82mm/3.23"

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

CCC

cULus

ETIM classification



BF80T2A230

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 230VAC, 2NO AND 2NC

ETIM 8.0

EC000066 -Power contactor, AC switching