



Product designation Power contactor **BF80** Product type designation Contact characteristics 4 Number of poles Nr. Rated insulation voltage Ui IEC/EN ٧ 1000 k√ Rated impulse withstand voltage Uimp 8 Operational frequency min Η 25 max Hz 400 IEC Conventional free air thermal current Ith 115 Α 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) 38 Rated operational current AC-3 (T≤55°C) 230V Α 80 400V 80 Α 415V Α 80 440V Α 80 500V Α 78 690V Α 57 1000V 28 Α 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 60 Α 110V Α 8 220V Α IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V Α 100 48V 100 Α 100 75V Α 110V Α 80 220V 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V Α 100 48V Α 100 75V 100 Α



	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	Α	30	
	110V	Α	3	
	220V	Α	_	
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	Α	60	
-	220V	Α	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	
01 (1) (10 (15 0)(15 0 (15 0 (15 0 (15 0 (15 0 (15 0 (15 0 (15 0 (15 0 (15 0 (1	220V	Α	80	
Short-time allowable current for 10s (IEC/EN60947-1)		Α	640	
Protection fuse	0 (150)		405	
	gG (IEC)	A	125	
Making ang site (DMC calca)	aM (IEC)	A	80	
Making capacity (RMS value)		Α	800	
Breaking capacity at voltage	4.40\/		0.40	
	440V	A	640	
	500V	A	625	
Decistance nor nele (everene value)	690V	Α	456	
Resistance per pole (average value)		mΩ	0.6	
Power dissipation per pole (average value)	141	14/	7.0	
	Ith	W	7.9	
Tightoning torque for torminals	AC-3	W	3.8	
Tightening torque for terminals		N I	4	
	min	Nm	4	
	max	Nm	5	
	min	Ibin	2.95	
Tightoning torque for soil torresing!	max	Ibin	3.69	
Tightening torque for coil terminal	!	N.J	0.0	
	min	Nm	0.8	
	max	Nm	1	



		min	Ibin	0.59
		max	Ibin	0.74
Max number of wires:	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	Trombie of Wriag demadeler deciden	min	mm²	1.5
		max	mm²	35
Power terminal protect	ction according to IEC/EN 60529	max		IP20 front
Mechanical features	Allon decording to 12-0/214 00020			II ZO IIOIR
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			α	1280
Operations			g	1200
Mechanical life			cycles	15000000
Electrical life				13000000
Safety related data			cycles	1300000
	Od according to FN/ISO 12490 1			
Periormance level bi	0d according to EN/ISO 13489-1	لممما لمملمة	aalaa	4200000
		rated load	cycles	1300000
FMO(1.33)		mechanical load	cycles	15000000
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	3U/6UHZ, 6UHZ		\ /	400
		min	V	100
A O		max	V	250
AC operating voltage	(50/0011 "			
	of 50/60Hz coil powered at 50Hz			
	pick-up			
	· · ·		0/11	00.115
		min	%Us	80 Us min
		min max	%Us %Us	80 Us min 110 Us max
	drop-out	max	%Us	110 Us max
	of 50/60Hz coil powered at 60Hz	max	%Us	110 Us max
		max max	%Us %Us	110 Us max ≤70 Us min
	of 50/60Hz coil powered at 60Hz	max max min	%Us %Us %Us	110 Us max ≤70 Us min 80 Us min
	of 50/60Hz coil powered at 60Hz pick-up	max max	%Us %Us	110 Us max ≤70 Us min
	of 50/60Hz coil powered at 60Hz	max max min max	%Us %Us %Us %Us	110 Us max ≤70 Us min 80 Us min 110 Us max
	of 50/60Hz coil powered at 60Hz pick-up drop-out	max max min	%Us %Us %Us	110 Us max ≤70 Us min 80 Us min
AC average coil consi	of 50/60Hz coil powered at 60Hz pick-up drop-out	max max min max	%Us %Us %Us %Us	110 Us max ≤70 Us min 80 Us min 110 Us max
AC average coil const	of 50/60Hz coil powered at 60Hz pick-up drop-out	max max min max max	%Us %Us %Us %Us %Us	110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min
AC average coil consi	of 50/60Hz coil powered at 60Hz pick-up drop-out	max max min max max in-rush	%Us %Us %Us %Us %Us %Us	110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min 35120
AC average coil consi	of 50/60Hz coil powered at 60Hz pick-up drop-out umption at 20°C of 50/60Hz coil powered at 50Hz	max max min max max	%Us %Us %Us %Us %Us	110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min
AC average coil consi	of 50/60Hz coil powered at 60Hz pick-up drop-out	max min max max in-rush holding	%Us %Us %Us %Us %Us %Us VA VA	110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min 35120 1.53.7
AC average coil const	of 50/60Hz coil powered at 60Hz pick-up drop-out umption at 20°C of 50/60Hz coil powered at 50Hz	max max min max max in-rush holding in-rush	%Us %Us %Us %Us %Us VA VA	110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min 35120 1.53.7
AC average coil consi	of 50/60Hz coil powered at 60Hz pick-up drop-out umption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz	max min max max in-rush holding	%Us %Us %Us %Us %Us %Us VA VA	110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min 35120 1.53.7
AC average coil consi	of 50/60Hz coil powered at 60Hz pick-up drop-out umption at 20°C of 50/60Hz coil powered at 50Hz	max max min max max in-rush holding in-rush	%Us %Us %Us %Us %Us VA VA	110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min 35120 1.53.7

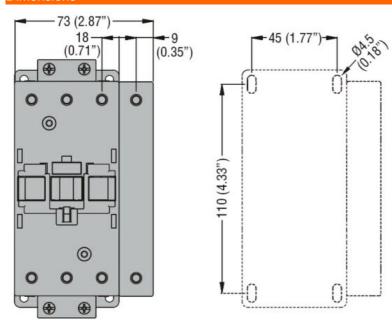


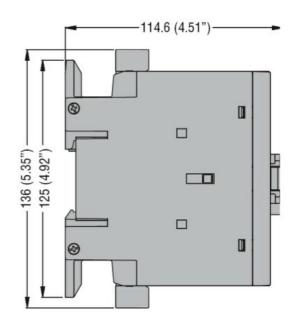
			holding	VA	15
Dissipation at holding :	≤20°C 50Hz		<u> </u>	W	12.5
DC coil operating					
DC rated control voltage	ge				
			min	V	100
-			max	V	250
DC operating voltage					
	pick-up			0/11	0011
			min	%Us	80 Us min
	dram acit		max	%Us	110 Us max
	drop-out		may	%Us	≤70 Us min
Average coil consump	tion <20°C		max	7005	≥10 08 IIIII
Average con consump	11011 =20 0		in-rush	W	2368
			holding	W	1.21.9
Max cycles frequency			Holding	.,	
Mechanical operation				cycles/h	1500
Operating times					
Average time for Us co	ontrol				
	in AC				
		Closing NO			
			min	ms	40
		_	max	ms	85
		Opening NO			
			min	ms	20
			max	ms	55
	in DC	0			
		Closing NO			40
			min	ms	40
		Opening NO	max	ms	85
		Opening NO	min	ms	20
			max	ms	55
UL technical data			тих	1110	
Rated operational volta	age AC (UL)			V	600
Full-load current (FLA)		otor			
,	,		at 480V	Α	77
			at 600V	Α	77
Yielded mechanical pe	erformance				
	for three-phase AC r	notor			
			200/208V	HP	25
			220/230V	HP	30
			460/480V	HP	60
0			575/600V	HP	75
General USE	0				
	Contactor		٨٥ ١	۸	115
Chart aircuit protection	v fuo 600\/		AC current	Α	115
Short-circuit protection					
	High fault		Short circuit current	kA	100
			Fuse rating	KA A	200
			Fuse class	^	J
	Standard fault		1 430 01433		<u> </u>
	Staridard radit		Short circuit current	kA	10
			Chart off out out off off	10.1	. •



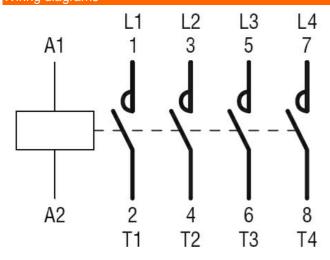
		Fuse rating Fuse class	Α	200 RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			_
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protect	ion			
Pollution degree				3
Resistance & Protect	ion		°C	80 3000

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



BF80T4E230

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC/DC COIL, 230VAC/DC

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

ETIM 8.0

EC000066 -Power contactor, AC switching