



Product type designation				
Product type designation	Product designation			Power contactor
Number of poles	•			BF80
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 lth A 115 Operational current le AC-1 (≤45°°C) A 95 AC-1 (≤70°C) A 80 AC-2 (≤440°C) A 80 AC-3 (≤440°S°C) A 80 AC-3 (≤440°C) A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 AC-3 (5440°C) 230°V A 80 AC-4 (400°V) A 80 A15°V A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 A15°V A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 A15°V A 80 AC-4 (400°V) A </td <td>· · · · ·</td> <td></td> <td></td> <td></td>	· · · · ·			
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 lth A 115 Operational current le AC-1 (≤45°°C) A 95 AC-1 (≤70°C) A 80 AC-2 (≤440°C) A 80 AC-3 (≤440°S°C) A 80 AC-3 (≤440°C) A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 AC-3 (5440°C) 230°V A 80 AC-4 (400°V) A 80 A15°V A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 A15°V A 80 AC-4 (400°V) A 80 AC-4 (400°V) A 80 A15°V A 80 AC-4 (400°V) A </td <td>Number of poles</td> <td></td> <td>Nr.</td> <td>4</td>	Number of poles		Nr.	4
Rated impulse withstand voltage Uimp	·		V	1000
Operational frequency min max by Hz max Hz max Hz hz hz 400 max IEC Conventional free air thermal current lth A 115 Operational current le AC-1 (≤40°C) A 115 AC-1 (≤55°C) A 95 AC-1 (≤70°C) A 80 AC-1 (≤70°C) A 80 AC-3 (≤4400 ≤55°C) A 80 AC-4 (4000V) A 38 AC-4 (4000V) A 38 AC-4 (400V) A 80 AC-4 (400V) A 78 AC-4 (400V) AC	<u> </u>		kV	8
Min				
EC Conventional free air thermal current Ith Operational current Ie AC-1 (≤40°C) A 115		min	Hz	25
Operational current le AC-1 (≤40°C) A 115 AC-1 (≤55°C) A 95 AC-1 (≤70°C) A 80 AC-3 (≤440V ≤55°C) A 80 AC-3 (≤440V ≤55°C) A 80 AC-3 (≤440V ≤55°C) A 80 AC-4 (400V) A 38 Rated operational current AC-3 (T≤55°C) 230V A 80 400V A 80 415V A 80 415V A 80 415V A 80 425V A 78 690V A 57 1000V A 28 Rated operational power AC-1 (T≤40°C) 230V A 78 690V A 57 1000V A 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 A 70 48 A 60 75 V A 60 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48 V A 100 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 100 110V A 8 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 100 110V A 8 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 100 48 V A 100		max	Hz	400
AC-1 (≤40°C)	IEC Conventional free air thermal current Ith		Α	115
AC-1 (≤55°C) A 95 AC-1 (≤70°C) A 80 AC-3 (≤440V ≤55°C) A 80 AC-4 (400V) A 38 Rated operational current AC-3 (T≤55°C) 230V A 80 400V A 80 415V A 80 440V A 80 440V A 80 500V A 57 1000V A 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 524V A 70 48V A 60 75V A 60 110V A 8 220V A − IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series 524V A 100 48V A 100 75V A 60 110V A 80 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 524V A 100 110V A 80 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 524V A 100 110V A 80 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 524V A 100 110V A 80 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 524V A 100 48V A 100 48V A 100	Operational current le			
AC-1 (≤70°C) A 80 AC-3 (≤440V ≤55°C) A 80 AC-4 (400V) A 38 Rated operational current AC-3 (T≤55°C) 230V A 80 400V A 80 415V A 80 440V A 80 440V A 80 500V A 78 690V A 57 1000V A 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 A 70 48V A 60 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48V A 100 75V A 100 110V A 8 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		AC-1 (≤40°C)	Α	115
AC-1 (≤70°C) A 80 AC-3 (≤440V ≤55°C) A 80 AC-4 (400V) A 38 Rated operational current AC-3 (T≤55°C) 230V A 80 400V A 80 415V A 80 440V A 80 440V A 80 500V A 78 690V A 57 1000V A 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 A 70 48V A 60 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48V A 100 75V A 100 110V A 8 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			Α	95
Rated operational current AC-3 (T≤55°C) 230V A 80 400V A 80 415V A 80 440V A 80 440V A 80 500V A 78 690V A 57 1000V A 28 Rated operational power AC-1 (T≤40°C) 230V kW 43 400V kW 76 500V kW 95 690V kW 95 690V kW 120 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 70 48V A 60 75V A 60 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48V A 100 48V A 100 110V A 80 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			Α	80
Rated operational current AC-3 (T≤55°C) 230V A 80 440V A 80 415V A 80 4440V A 80 500V A 78 690V A 57 1000V A 28 Rated operational power AC-1 (T≤40°C) 230V kW 43 440V kW 76 500V kW 95 690V kW 120 IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V A 70 48V A 60 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48V A 100 75V A 100 75V A 100 110V A 8 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			Α	80
230V		AC-4 (400V)	Α	38
400V	Rated operational current AC-3 (T≤55°C)	,		
415V A 80 440V A 80 500V A 78 690V A 57 1000V A 28		230V	Α	80
440V A 80 500V A 78 690V A 57 1000V A 28		400V	Α	80
Soov A 78 690V A 57 1000V A 28		415V	Α	80
Rated operational power AC-1 (T≤40°C) 230V kW 43 400V kW 76 500V kW 95 690V kW 120		440V	Α	80
Rated operational power AC-1 (T≤40°C) 230V kW 43 400V kW 76 500V kW 95 690V kW 120		500V	Α	78
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 A 70 48V A 60 75V A 60 110V A 8 220V A - IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48V A 100 75V A 100 110V A 80 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 100 48V A 100 48V A 100 48V A 100		690V	Α	57
		1000V	Α	28
A00V kW 76 500V kW 95 690V kW 120	Rated operational power AC-1 (T≤40°C)			
SOOV kW 95 690V kW 120		230V	kW	43
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series ≤24V		400V	kW	76
Section Sec		500V	kW	95
		690V	kW	120
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
T5V A 60 110V A 8 220V A -		≤24V	Α	70
110V A 8 220V A -		48V	Α	60
EC max current le in DC1 with L/R \leq 1ms with 2 poles in series \leq 24V A 100 48V A 100 75V A 100 110V A 80 220V A 9		75V	Α	60
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48V A 100 75V A 100 110V A 80 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 100 48V A 100			Α	8
		220V	Α	
	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
75V			Α	100
			Α	100
EC max current le in DC1 with L/R \leq 1ms with 3 poles in series \leq 24V A 100 48V A 100		75V	Α	100
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series ≤24V A 100 48V A 100		110V	Α	80
≤24V A 100 48V A 100		220V	Α	9
48V A 100	IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
		≤24V	Α	100
75V A 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	A	100
	48V	A	100
	75V	A	100
	110V	A	100
IFC many augment to in DC2 DC5 with 1/D < 45mm with 4 males in poving	220V	Α	115
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	<24)/	۸	40
	≤24V 48V	A A	40 30
	75V	A	30
	110V	A	3
	220V	A	-
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
ILO max current le in Doo-Doo with L/T = 15ms with 2 poles in series	≤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			
p p	≤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
	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	A	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	lbin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal	_		
	min	Nm	0.8
	max	Nm	1



				0.0
		min	lbin Ibin	0.8 0.74
May number of wires sir	multaneously connectable	max	Nr.	2
Conductor section	Tiditalieously connectable		INI.	
	AWG/Kcmil			
		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
Danna da marin al musta ati		max	mm²	35
Power terminal protection Mechanical features	on according to IEC/EN 60529			IP20 front
Operating position				
operating position		normal		Vertical plan
		allowable		±30°
Fiving				Screw / DIN rail
Fixing				35mm
Weight			g	1240
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations			a alaa	4500000
Mechanical life Electrical life			cycles	15000000
Safety related data			cycles	1300000
	d according to EN/ISO 13489-1			
	a according to 214.100 10100 1	rated load	cvcles	1300000
	a according to 21,000 to 100 t	rated load mechanical load	cycles cycles	1300000 15000000
	g to IEC/EN 609474-4-1		cycles cycles	
Mirror contats according			-	15000000
Mirror contats according			-	15000000 yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/	g to IEC/EN 609474-4-1		-	15000000 yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz		cycles	15000000 yes yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz		cycles	15000000 yes yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz	mechanical load	V	15000000 yes yes 48
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz	mechanical load	v V	15000000 yes yes 48
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load	V	15000000 yes yes 48
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz	mechanical load min max	v V %Us %Us	15000000 yes yes 48
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load min max min	v V %Us %Us %Us	15000000 yes yes 48 80 110
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	mechanical load min max	v V %Us %Us	15000000 yes yes 48
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up	mechanical load min max min	v V %Us %Us %Us	15000000 yes yes 48 80 110
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	mechanical load min max min	v %Us %Us %Us %Us	15000000 yes yes 48 80 110
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz 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 %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz 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 WUS %US %US %US %US	15000000 yes yes 48 80 110 20 55
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz 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 max min max	v %Us %Us %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55 85 110 40
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max min max	v WUS %US %US %US %US	15000000 yes yes 48 80 110 20 55
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage AC average coil consun	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max min max min max	v %Us %Us %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55 85 110 40
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage AC average coil consun	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max min max min max	v %Us %Us %Us %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55 85 110 40 55
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 50/ AC operating voltage AC average coil consun	g to IEC/EN 609474-4-1 /60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out	mechanical load min max min max min max min max	v %Us %Us %Us %Us %Us %Us	15000000 yes yes 48 80 110 20 55 85 110 40



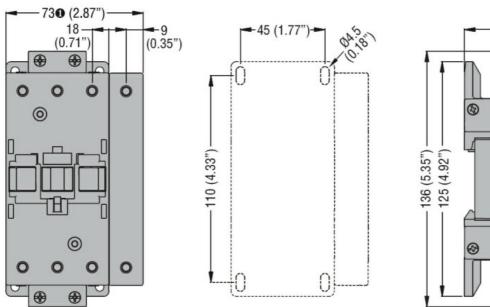


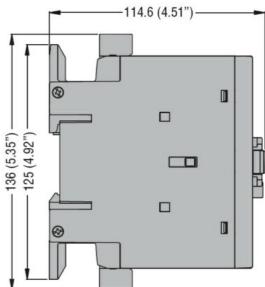
ENERGY AND ACTOMATION					
	of 50/60Hz coil po	wered at 60Hz			
	51 567 661 12 6611 po		in-rush	VA	195
			holding	VA	13
	of 60Hz coil powe	red at 60Hz	1101011119		-
	0. 00. 12 00 po0	100 at 001 12	in-rush	VA	210
			holding	VA	15
Dissipation at holding	≤20°C 50Hz		<u></u>	W	5
Max cycles frequency					
Mechanical operation				cycles/h	3600
Operating times					
Average time for Us of	ontrol				
	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	motor			
			at 480V	Α	77
			at 600V	Α	77
Yielded mechanical pe					
	for three-phase A	C motor			
			200/208V	HP	25
			220/230V		30
			460/480V	HP	60
			575/600V	HP	75
General USE	_				
	Contactor			_	
			AC current	Α	115
Short-circuit protection					
	High fault				400
			Short circuit current	kA	100
			Fuse rating	Α	200
	0		Fuse class		J
	Standard fault				4.0
			Short circuit current	kA	10
			Fuse rating	Α	200
A male is not as a selitive			Fuse class		RK5
Ambient conditions					
Temperature	0				
	Operating tempera	ature		۰.	50
			min	°C	-50 -70
	Otamaiiiii		max	°C	70
	Storage temperatu	ure		۰.	00
			min	°C	-60

ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ,

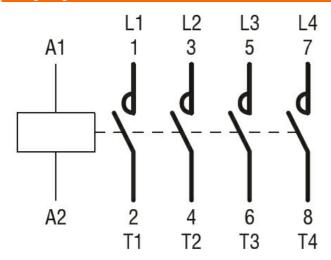
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
Pollution degree			3
Dimensions			





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

BF80T4A048

CCC

cULus

ETIM classification



BF80T4A048

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ,

ETIM 8.0

EC000066 -Power contactor, AC switching