



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			
3 1 7 3	440V	Α	640
	500V	Α	625
	690V	Α	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
and a series for the forest fo	Ith	W	7.9
	AC-3	W	3.8
Tightening torque for terminals	,,,,,,		
gs.mg torquo for torrinidio	min	Nm	4
	max	Nm	5
	HUX	. 4111	-



		min	Ibin	2.95
		max	Ibin	3.69
Tightening torque for	coil terminal			
		min	Nm	0.8
		max	Nm	1
		min	Ibin	8.0
		max	Ibin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		2
	Flexible w/o lug conductor section			
	ŭ	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
	ŭ	min	mm²	1.5
		max	mm²	35
Power terminal prote	ction according to IEC/EN 60529	· · · · · · · · · · · · · · · · · · ·		IP20 front
Mechanical features	3			
Operating position				
. 01		normal		Vertical plan
		allowable		±30°
				Screw / DIN rail
Fixing				35mm
Weight			g	13421
Conductor section				
	AWG/kcmil conductor section			
		max		2
Operations				_
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data			0,0.00	100000
	10d according to EN/ISO 13489-1			
		rated load	cycles	1300000
		mechanical load	cycles	15000000
Mirror contats accord	ling to IEC/EN 609474-4-1	THEOHAITICAL IOAA	Oyoloo	YES
EMC compatibility	mig to 120/214 000474 4 1			
AC coil operating				yes
Rated AC voltage at	50/60Hz 60Hz			
raida no voltage at	00,001 12, 001 12	min	V	60
		max	V	110
AC operating voltage		IIIdA	v	710
, to operating voitage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	ріск-ир	min	%Us	80 Us min
			%Us	110 Us max
	drap out	max	/0US	1 10 05 IIIdX
	drop-out	may	0/110	<70 He min
	of FO/COLLT agil naviored at COLLT	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz			
	pick-up		0/11-	00.11
		min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out			



AC average coil consumption at 20°C 150/60Hz coil powered at 50Hz 161/40Hz 161/40H				max	%Us	≤70 Us min
In-rush A A 35120 In-rush A A 1537 In-rush A A 1025 In-rush A A A 1025 In-rush A A A A A In-rush A A A A In-rush A A A In-rush A In-rush A A In-rush A	AC average coil consu	•				
Nolding		of 50/60Hz coil po	wered at 50Hz			
of 50/60Hz coil powered at 60Hz						
In-rush NA 35120 In-rush NA 1537 In-rush NA 10				holding	VA	1.53.7
Molding \$20°C 50Hz W 12.5 Decoil operating Min V 60 min V 60 max V 110 max V 110 max Mus Mus 10 max Mus Mus 10 max Mus Mus Mus Mus max Mus Mus max Mus Mus max Mus Mus mus mus mus Mus mus m		of 50/60Hz coil po	wered at 60Hz	in much	١/٨	05 400
Dissipation at holding ≤20°C 50Hz W 12.5						
DC rated control voltage	Discipation at halding	<20°C FOLI-		nolaing		
DC rated control voltage		≤20 C 50HZ			VV	12.5
DC operating voltage pick-up pick-up min max %Us 80 Us min max %Us 110 Us max max min max %Us 110 Us max		70				
DC operating voltage pick-up pick-up min %Us 80 Us min max %Us 110 Us max max %Us 570 Us min max	DC Taled Cornior Volla	y e		min	V	60
DC operating voltage						
Pick-up	DC operating voltage			max	v	110
Min	Do operating voltage	nick-un				
Max Mus 110 Us max		plott up		min	%Us	80 Us min
Average coil consumption ≤20°C						
Average coil consumption ≤20°C		drop-out		iiid.		
Average coil consumption ≤20°C in-rush holding W 1.21,9				max	%Us	≤70 Us min
In-rush holding W 121,9	Average coil consump	tion ≤20°C				
Max cycles frequency	<u> </u>			in-rush	W	2368
Mack cycles frequency Mechanical operation cycles/h 1500 Operating times Average time for Us control in AC min ms 12 max ms 28 max ms 28 Opening NO min ms 8 max ms 22 max ms 22 max ms 22 max ms 85 Opening 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 A 77 at 600V A 77 Yielded mechanical performance for three-phase AC motor 200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 General USE Contactor AC current AC current AC 115						
Mechanical operation	Max cycles frequency			<u> </u>		,
Operating times					cycles/h	1500
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 40 max ms 85 Opening NO min ms 55 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 77 at 600V A 77 Yielded mechanical performance for three-phase AC motor 200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 General USE Contactor AC current A 115	Operating times					
Closing NO	Average time for Us co	ontrol				
Min		in AC				
Opening NO min ms 8 max ms 28			Closing NO			
Opening NO				min	ms	12
Min				max	ms	28
Max			Opening NO			
In DC				min	ms	
Closing NO				max	ms	22
Min		in DC				
Opening NO max ms 85			Closing NO	_		
Opening NO min ms 20 max ms 55 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 77 at 600V A 77 Yielded mechanical performance for three-phase AC motor 200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 General USE Contactor AC current A 115						
Min			On order to NO	max	ms	85
Max ms 55			Opening NO	!	me	20
Contactor CFLA CF						
Full-load current (FLA) for three-phase AC motor at 480V A 77 at 600V A 77 Yielded mechanical performance for three-phase AC motor 200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 General USE Contactor AC current A 115	III technical data			max	1118	ວວ
at 480V A 77 at 600V A 77 Yielded mechanical performance		for three-phase AC	motor			
at 600V A 77 Yielded mechanical performance 200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 General USE Contactor AC current A 115	i dii lodd ddifellt (i LA)	, ioi unoc phase AO	motor	at 480\/	Δ	77
Yielded mechanical performance 200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 General USE Contactor AC current A 115						
for three-phase AC motor 200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 General USE Contactor AC current A 115	Yielded mechanical ne	erformance		at 000 v	,,	
200/208V HP 25 220/230V HP 30 460/480V HP 60 575/600V HP 75 The second of the seco	o.aoa moonamoar pe		C motor			
220/230V HP 30 460/480V HP 60 575/600V HP 75		ioi unoo phaoo A		200/208V	HP	25
460/480V HP 60 575/600V HP 75						
575/600V HP 75						
General USE Contactor AC current A 115						
Contactor AC current A 115						
AC current A 115	General USE					
	General USE	Contactor				
	General USE	Contactor		AC current	Α	115



Temperature

Operating temperature

	min	°C	-40	
	max	°C	70	
Storage temperature				
	min	°C	-50	
	max	°C	80	
		m	3000	•

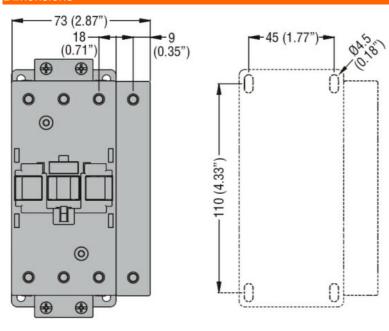
Resistance & Protection

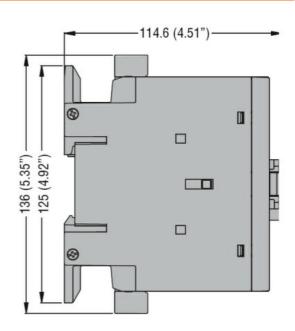
Pollution degree

3

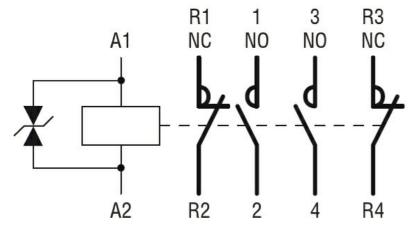
Dimensions

Max altitude





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



BF80T2E110

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC/DC COIL, 110VAC/DC, 2NO AND 2NC

CCC
cULus

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching