

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 400VAC



Product designation Power contactor Contact characteristics Nr. 4 Rated insulation voltage Ui IEC/EN V 1000 Rated insulation voltage Uir IEC/EN V 1000 Rated insulation voltage Uir Uir EC/EN V 1000 Rated insulation voltage Uir Uir EC/EN Nr. 4 2 5 max Hz 25 max Hz 400 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <t< th=""><th></th><th></th><th></th><th></th></t<>				
Product type designation	Product designation			Power contactor
Contact characteristics Nr. 4 Rated insulation voltage Ui IEC/EN V 1000 Rated insulation voltage Withstand voltage Uimp kV 8 Operational frequency min Hz 25 max Hz 400 IEC Conventional free air thermal current Ith A 115 Operational current Ie AC-1 (≤40°C) A 115 AC-1 (≤45°C) A 80 AC-4 (≤40°C) A 80 AC-3 (≤440V ≤55°C) A 80 AC-4 (400V) A 80 AC-4 (400V) A 38 AC-4 (400V) A 80 AC-4 (440V ≤5°C) A 80 AC-4 (400V) A 80 AC-4 (440V ≤ A A 80 AC-4 (400V) A 80 AC-5 (5440V ≤ A A 80 AC-4 (400V) A 80 AC-6 (440V ≤ A A 80 AC-4 (400V) A 80 AC-7 (540V ≤ A A 80 AC-4 (400V) A 70	•			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 Ith A 115 Operational current Ie AC-1 (≤40°C) A 115 AC-1 (≤70°C) A 80 AC-3 (≤4400 ≤55°C) A 80 AC-4 (400V) A 80 AC-4 (400V) A 80 400V A 80 415V A 80 440V A 80 500V A 78 690V KW 43 400V KW 43 400V KW 48 400V KW 48 500V kW <td>Contact characteristics</td> <td></td> <td></td> <td></td>	Contact characteristics			
Rated impulse withstand voltage Uimp	Number of poles		Nr.	4
Operational frequency min max bit with the problem of the	Rated insulation voltage Ui IEC/EN		V	1000
Min	Rated impulse withstand voltage Uimp		kV	8
EC Conventional free air thermal current lth	Operational frequency			
EC Conventional free air thermal current Ith Operational current Ie AC-1 (≤40°C) A 115		min	Hz	
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-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 440V A 80 480V A 57 1000V A 28 Rated operational power AC-1 (T≤40°C) 230V kW 43 400V kW 75 500V kW 75 690V kW 120 IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V A 100 48V A 100 48V A 100 48V A 100 110V A 80 22V		max		
AC-1 (≤40°C)			A	115
AC-1 (≤55°C)	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 4415V A 80 500V A 78 690V A 57 1000V A 28 Rated operational power AC-1 (T≤40°C) 230V kW 43 440V A 80 500V A 78 690V W 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 1110V 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				
AC-3 (≤440V ≤55°C) A 80 AC-4 (400V) A 38 AC-4 (400V) A 38 AC-4 (400V) A 38 AC-4 (400V) A 80 400V A 80 415V A 80 440V A 80 500V A 78 690V A 57 1000V A 28 AC-3 (T≤55°C) A 80 440V A 80 440V A 80 500V A 57 1000V A 28 AC-3 (T≤40°C) A 80 440V A 80 500V KW 43 440V KW 76 500V kW 95 690V kW 120 A 80 100 A 8 220V A 70 48V A 100 48V A 100 110V A 80 220V A 9 BEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 524V A 100 48V A 100 110V A 80 220V A 9 BEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 524V A 100 48V A		•		
Rated operational current AC-3 (T≤55°C) 230V A 80 400V A 80 415V 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 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 8 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		• • • • • • • • • • • • • • • • • • • •		
Rated operational current AC-3 (T≤55°C) 230V A 80 440V A 80 415V 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 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 8 220V A 9 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series		,		
230V		AC-4 (400V)	A	38
400V	Rated operational current AC-3 (T≤55°C)		_	
415V				
440V				
Soov 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				
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 48V 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 48V A 100				
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				
		1000V	Α	
A00V kW 76 500V kW 95 690V kW 120	Rated operational power AC-1 (T≤40°C)			
EC max current le in DC1 with L/R \leq 1ms with 1 poles in series \leq 24V A 70 48V A 60 75V A 60 110V A 8 220V A -				
EC max current le in DC1 with L/R ≤ 1ms with 1 poles in series				
Section Sec				
		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 -				
110V A 8 220V A -				
EC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V				
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				8
		220V	Α	
	IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series		_	
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				
≤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		_	
75V A 100				
		75V	Α	100



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	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	A	70
	110V	A	60
	220V	A	64
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	220 V		<u> </u>
The max current to in 600-600 with E/TC = 10m3 with 4 poics in 30m63	≤24V	Α	90
	48V	A	90
	75V	A	90
	110V	A	75
	220V	A	80
Short-time allowable current for 10s (IEC/EN60947-1)	220 V	A	640
Protection fuse			040
Protection ruse	«C (IEC)	۸	105
	gG (IEC)	A	125
Malifer and arity (DMC value)	aM (IEC)	A	80
Making capacity (RMS value)		Α	800
Breaking capacity at voltage	4.403.4		0.40
	440V	A	640
	500V	A	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	lbin	2.95
	max	lbin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1





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		min	lbin	0.8
		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	AMO #4			
	AWG/Kcmil			0
	Flevible w/e lug conductor coetion	max		2
	Flexible w/o lug conductor section	min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section	IIIdA	111111	33
	Tiexible 6, wildy definately section	min	mm²	1.5
		max	mm²	35
Power terminal protec	etion according to IEC/EN 60529			IP20 front
Mechanical features	ÿ			
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
Woight				35mm 1240
Weight Conductor section			g	1240
Conductor section	AWG/kcmil conductor section			
	AVVG/RCMII CONductor Section	max		2
Operations		IIIdX		2
Mechanical life			cycles	15000000
Electrical life			cycles	1300000
Safety related data			Oyolos	1000000
•	0d according to EN/ISO 13489-1			
	3	rated load	cycles	1300000
		mechanical load	cycles	15000000
Mirror contats accordi	ng to IEC/EN 609474-4-1			yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	50/60Hz		V	400
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out		0/11-	00
		min	%Us	20
	of 50/60Hz coil powered at 60Hz	max	%Us	55
	pick-up			
	ριοκ-αρ	min	%Us	85
		max	%Us	110
	drop-out	max	,003	110
	arop out	min	%Us	40
		max	%Us	55
AC average coil consu	umption at 20°C			
<u> </u>	of 50/60Hz coil powered at 50Hz			
	,	in-rush	VA	210
		holding	VA	15





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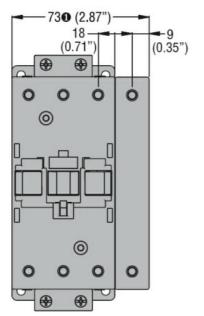
	of 50/60Hz coil power	ared at 60Hz			
	or 30/00112 con powe	ared at our iz	in-rush	VA	195
			holding	VA	13
	of 60Hz coil powered	1 at 60Hz	Holding	V/\	10
	or ouriz con powered	i at ouriz	in-rush	VA	210
			holding	VA VA	15
Discipation at holding	<20°C E0∐-		riolaling	W	5
Dissipation at holding	≥20 C 30HZ			VV	5
Max cycles frequency				ovelee/b	2600
Mechanical operation				cycles/h	3600
Operating times	ontrol				
Average time for Us co					
	in AC	Ola aira a NO			
		Closing NO			40
			min	ms	12
		0 1 110	max	ms	28
		Opening NO			•
			min	ms	8
			max	ms	22
	in DC	a.			
		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 m	otor			
			at 480V	Α	77
-			at 600V	Α	77
Yielded mechanical pe	erformance				
	for three-phase AC n	notor			
			200/208V	HP	25
			220/230V	HP	30
			460/480V	HP	60
			575/600V	HP	75
General USE					
	Contactor				
			AC current	Α	115
Short-circuit protection	fuse, 600V				_
•	High fault				
	5		Short circuit current	kA	100
			Fuse rating	Α	200
			Fuse class		J
	Standard fault		. 200 0.000		
	Januara radit		Short circuit current	kA	10
			Fuse rating	A	200
			Fuse class	, ,	RK5
Ambient conditions			1 430 01433		
Temperature					
romporaturo	Operating temperatu	rΔ			
	Operating temperatu	10	min	°C	-50
				°C	70
	Storage temperature		max	U	10
	Storage temperature		min	°C	-60
			min		-00

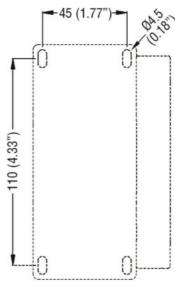


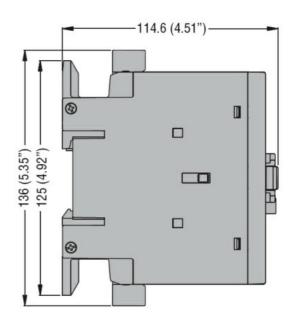
ENERGY AND AUTOMATION

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			

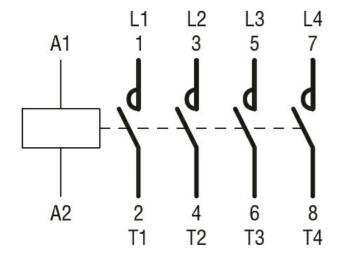






BF80T2 82mm/3.23"

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

CCC

cULus

ETIM classification



BF80T4A400

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 115A, AC COIL 50/60HZ, 400VAC

ETIM 8.0

EC000066 -Power contactor, AC switching