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Product designation			Power contactor
Product type designation			BF18
Contact characteristics			
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		Α	32
Operational current le			_
	AC-1 (≤40°C)	Α	32
	AC-1 (≤55°C)	Α	26
	AC-1 (≤70°C)	Α	23
	AC-3 (≤440V ≤55°C)	Α	18
	AC-4 (400V)	Α	8.5
Rated operational power AC-3 (T≤55°C)			
	230V	kW	4
	400V	kW	7.5
	415V	kW	9
	440V	kW	9
	500V	kW	10
	690V	kW	10
Rated operational power AC-1 (T≤40°C)			
	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	17
	48V	Α	15
	75V	Α	15
	110V	Α	6
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	20
	48V	Α	20
	75V	Α	20
	110V	Α	13
	220V	Α	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	22
	48V	Α	22
	75V	Α	20
	110V	Α	16



	220V	Α	11
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	22
	48V	Α	22
	75V	Α	20
	110V	Α	18
	220V	Α	13
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			-
, , , , , , , , , , , , , , , , , , ,	≤24V	Α	12
	48V	A	11
	75V	Α	11
	110V	A	2
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	220 V		
TEC max current le in DC3-DC3 with E/K = 13ms with 2 poles in series	≤24V	Α	15
	48V	A	13
	75V	A	13
	110V	A	8
	220V	Α	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series		_	
	≤24V	Α	18
	48V	Α	18
	75V	Α	16
	110V	Α	12
	220V	Α	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	18
	48V	Α	18
	75V	Α	16
	110V	Α	13
	220V	Α	8
Short-time allowable current for 10s (IEC/EN60947-1)		Α	200
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	20
Making capacity (RMS value)	()	Α	180
Breaking capacity at voltage		,,	
	440V	Α	144
	500V	A	120
	690V	A	94
Posietance per pole (average value)	090 v	mΩ	2.5
Resistance per pole (average value)		11177	۷.ن
Power dissipation per pole (average value)	141	107	2.0
	Ith	W	2.6
Till to die teen et de teet de	AC3	W	0.8
Tightening torque for terminals			
	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.1
	max	lbin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8

		max	lbin	0.74
Max number of wires	simultaneously connectable		Nr.	2
Conductor section				
	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section			
		min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
	ction according to IEC/EN 60529			IP20 when wired
Mechanical features				
Operating position				Maderi
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Moight			~	359
Weight Conductor section			g	359
Conductor section	ANAC // careil acan divertor acastic in			
	AWG/kcmil conductor section			10
Auxiliary contact chara	actoriation	max		10
Thermal current Ith	acteristics		А	10
IEC/EN 60947-5-1 de	aignation		A	A600 - P600
Operating current AC	-			A000 - P000
Operating current AC	15	230V	Α	3
		400V	A	3 1.9
		500V	A	1.4
Operating current DC	12	300 V		1.4
Operating current DC	12	110V	Α	5.7
Operating current DC	12	1100	^	5.7
Operating current DC	15	24V	Α	5.7
		48V	A	2.9
		60V	A	2.9
		110V	A	2.3 1.25
		110V 125V	A	1.25
		220V	A	0.55
		600V	A	0.33
Operations		000 V		J. <u>Z</u>
Mechanical life			cycles	20000000
Electrical life			cycles	1600000
Safety related data			Oyolea	1000000
· · · · · · · · · · · · · · · · · · ·	0d according to EN/ISO 13489-1			
i chomance level DI	od docording to E14/100 10400-1	rated load	cycles	1600000
		mechanical load	cycles	2000000
Mirror contate accordi	ing to IEC/EN 609474-4-1	medianidal idad	cycles	
	IIIY 10 1EC/EIN 0034/4-4-1			yes
EMC compatibility				yes
AC coil operating	:0/60Hz		V	110
Rated AC voltage at 5	00/00F12		V	110

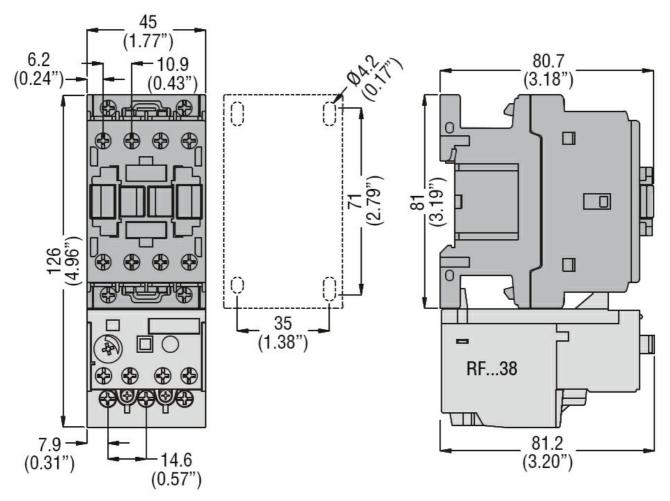
AC an arating valtage				
AC operating voltage)			
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
	·	min	%Us	85
		max	%Us	110
	drop-out		,,,,,	
		min	%Us	20
		max	%Us	55
AC average coil cons	sumntion at 20°C	max	7000	
to average con con				
	of 50/60Hz coil powered at 50Hz	in-rush	VA	75
			VA VA	9
	of EO/GOLLT poil noward at COLLT	holding	٧A	J
	of 50/60Hz coil powered at 60Hz	امند ما	١/٨	70
		in-rush	VA	70 6.5
	. (001	holding	VA	6.5
	of 60Hz coil powered at 60Hz			7-
		in-rush	VA	75
		holding	VA	9
Dissipation at holding			W	2.5
Max cycles frequenc				
Mechanical operatior	1		cycles/h	3600
Operating times				
Average time for Us	control			
	in AC			
	Closing NO			
	-	min	ms	8
		min max	ms ms	8 24
	Opening NO			
		max	ms	24
	Opening NO	max min	ms ms	10
		max min	ms ms	10
	Opening NO	max min max	ms ms ms	24 10 20
	Opening NO Closing NC	max min max min	ms ms ms	24102014
	Opening NO	max min max min max	ms ms ms ms	24 10 20 14 28
	Opening NO Closing NC	max min max min max min	ms ms ms ms	24 10 20 14 28
Ul. technical data	Opening NO Closing NC	max min max min max	ms ms ms ms	24 10 20 14 28
UL technical data	Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms	24 10 20 14 28
	Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	24 10 20 14 28 7 18
	Opening NO Closing NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (FL	Opening NO Closing NC Opening NC A) for three-phase AC motor	max min max min max min max	ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (FL	Opening NO Closing NC Opening NC A) for three-phase AC motor performance	max min max min max min max at 480V	ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (FL	Opening NO Closing NC Opening NC A) for three-phase AC motor	max min max min max at 480V at 600V	ms ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (FL	Opening NO Closing NC Opening NC A) for three-phase AC motor performance	max min max min max min max at 480V at 600V	ms ms ms ms ms A A	24 10 20 14 28 7 18
Full-load current (FL	Opening NO Closing NC Opening NC A) for three-phase AC motor performance for single-phase AC motor	max min max min max at 480V at 600V	ms ms ms ms ms ms	24 10 20 14 28 7 18
Full-load current (FL	Opening NO Closing NC Opening NC A) for three-phase AC motor performance	max min max min max min max at 480V at 600V 110/120V 230V	ms ms ms ms ms ms HP	24 10 20 14 28 7 18 14 17
	Opening NO Closing NC Opening NC A) for three-phase AC motor performance for single-phase AC motor	max min max min max min max at 480V at 600V	ms ms ms ms ms A A	24 10 20 14 28 7 18



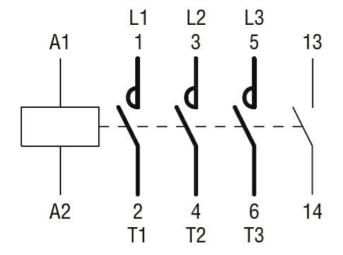


		460/480V	HP	10
		575/600V	HP	15
General USE				
	Contactor			
		AC current	Α	32
	Auxiliary contacts			
	•	AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protect	tion fuse. 600V			
	High fault			
	r light radic	Short circuit current	kA	100
		Fuse rating	A	60
		Fuse class	,,	J
	Standard fault	1 400 01400		
	Standard radit	Short circuit current	kA	5
		Fuse rating	A	80
Contact rating of au	uxiliary contacts according to UL	T doc rating		A600 - P600
Ambient conditions				A000 - 1 000
Temperature				
remperature	Operating temperature			
	Operating temperature	i	°C	F0
		min	°C	-50 -70
	01	max	<u> </u>	70
	Storage temperature		0.0	22
		min	°C	-60
		max	°C	80
Max altitude	<u> </u>		m	3000
Resistance & Prote	ection			
Pollution degree				3
Dimensions				





Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC



BF1810A110

Three-pole contactor, IEC operating current le (AC3) = 18A, AC coil 50/60Hz, 110VAC, 1NO auxiliary contact

cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching