



			D
Product designation			Power contactor
Product type designation			BF18
Contact characteristics		N La	0
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		А	32
Operational current le			
	AC-1 (≤40°C)	A	32
	AC-1 (≤55°C)	А	26
	AC-1 (≤70°C)	A	23
	AC-3 (≤440V ≤55°C)	А	18
	AC-4 (400V)	A	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 $L/R \le 1$ ms with 1 poles in series			
	≤24V	A	17
	48V	A	15
	75V	A	15
	110V	A	6
	220V	A	_
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	20
	48V	А	20
	75V	А	20
	110V	А	13
	220V	Α	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	22
	≤24V 48V	A A	22 22

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 110VAC, 1NC AUXILIARY CONTACT

	220V	А	11	
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series				
	≤24V	А	22	
	48V	А	22	
	75V	А	20	
	110V	А	18	
	220V	Α	13	
IEC max current le in DC3-DC5 with L/R \leq 15ms with 1 poles in series				
	≤24V	А	12	
	48V	А	11	
	75V	А	11	
	110V	А	2	
	220V	Α	-	
IEC max current le in DC3-DC5 with L/R \leq 15ms with 2 poles in series				
	≤24V	A	15	
	48V	А	13	
	75V	А	13	
	110V	А	8	
	220V	A	2	
IEC max current le in DC3-DC5 with L/R \leq 15ms with 3 poles in series				
	≤24V	A	18	
	48V	А	18	
	75V	A	16	
	110V	Α	12	
	220V	A	6	
IEC max current le in DC3-DC5 with L/R \leq 15ms with 4 poles in series		_		
	≤24V	A	18	
	48V	A	18	
	75V	A	16	
	110V	A	13	
	220V	A	8	
Short-time allowable current for 10s (IEC/EN60947-1)		А	200	
Protection fuse		•	20	
	gG (IEC)	A	32	
Maling and aits (DMO status)	aM (IEC)	A	20	
Making capacity (RMS value)		A	180	
Breaking capacity at voltage	44017	^		
	440V 500V	A	144	
		A	120	
	690V	A	94	
Resistance per pole (average value)		mΩ	2.5	
Power dissipation per pole (average value)	146	147	2.0	
	lth AC-3	W W	2.6	
Tightoning torque for terminale	AC-3	٧V	0.8	
Tightening torque for terminals	min	N	1 E	
	min	Nm Nm	1.5 1.8	
	max min	Ibin	1.8 1.1	
	max	lbin	1.1	
Tightening torque for coil terminal	Παλ		1.0	
	min	Nm	0.8	
	max	Nm	0.8 1	
	min	Ibin	0.8	
	111111		0.0	

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 110VAC, 1NC AUXILIARY CONTACT

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Max number of wires	simultaneously connectable	max	Ibin Nr.	0.74
Conductor section			INI.	2
Conductor Section	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section	Пах		10
		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
Power terminal prote	ction according to IEC/EN 60529			IP20 when
-				properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rai
			~	35mm 358
Weight Conductor section			g	300
Conductor section	ANA/C//versil conductor contian			
	AWG/kcmil conductor section	may		10
Auxiliary contact char	ractoristics	max		10
Auxiliary contact chai			<u> </u>	
Thermal current lth			Δ	10
Thermal current Ith IEC/EN 60947-5-1 de	esignation		A	10 A600 - P600
IEC/EN 60947-5-1 de	•		A	10 A600 - P600
	•	230V		A600 - P600
IEC/EN 60947-5-1 de	•	230V 400V	A	A600 - P600 3
IEC/EN 60947-5-1 de	•	400V		A600 - P600 3 1.9
IEC/EN 60947-5-1 de Operating current AC	15		A A	A600 - P600 3
IEC/EN 60947-5-1 de	15	400V	A A	A600 - P600 3 1.9
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400∨ 500∨	A A A	A600 - P600 3 1.9 1.4
IEC/EN 60947-5-1 de Operating current AC	212	400∨ 500∨	A A A	A600 - P600 3 1.9 1.4
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V	A A A A	A600 - P600 3 1.9 1.4 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V 24V	A A A A	A600 - P600 3 1.9 1.4 5.7 5.7
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V 24V 48V	A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3
IEC/EN 60947-5-1 de Operating current AC Operating current DC	212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	212	400V 500V 110V 24V 48V 60V 110V 125V	A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC	212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operations Mechanical life	212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life	212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A A	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	212	400V 500V 110V 24V 48V 60V 110V 125V 220V	A A A A A A A A A A A A Cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	212	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data	212 213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B ²	212 213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000 1600000
IEC/EN 60947-5-1 de Operating current AC Operating current DC Operating current DC Operating current DC Operations Mechanical life Electrical life Safety related data Performance level B	212 213 10d according to EN/ISO 13489-1	400V 500V 110V 24V 48V 60V 110V 125V 220V 600V	A A A A A A A A A A A Cycles cycles	A600 - P600 3 1.9 1.4 5.7 5.7 2.9 2.3 1.25 1.1 0.55 0.2 20000000 1600000 1600000

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 110VAC, 1NC AUXILIARY CONTACT

Rated AC voltage at 5	0/60Hz		V	110
AC operating voltage			•	110
	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		0/11-	05
		min	%Us	85
	drop out	max	%Us	110
	drop-out	min	%Us	20
		max	%Us	55
AC average coil consu	Imption at 20°C	Пах	/000	00
. le average con conde	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz	9		
	·	in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding	≤20°C 50Hz		W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Mechanical operation Operating times			cycles/h	3600
Mechanical operation			cycles/h	3600
Mechanical operation Operating times	in AC		cycles/h	3600
Mechanical operation Operating times		min		
Mechanical operation Operating times	in AC	min max	ms	8
Mechanical operation Operating times	in AC Closing NO	min max		
Mechanical operation Operating times	in AC		ms ms	8 24
Mechanical operation Operating times	in AC Closing NO	max	ms	8
Mechanical operation Operating times	in AC Closing NO	max	ms ms ms	8 24 10
Mechanical operation Operating times	in AC Closing NO Opening NO	max	ms ms ms	8 24 10
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC	max min max	ms ms ms ms	8 24 10 20
Mechanical operation Operating times	in AC Closing NO Opening NO	max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times	in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms ms	8 24 10 20 14 28 7
Mechanical operation Operating times Average time for Us c	in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms ms	8 24 10 20 14 28
Mechanical operation Operating times Average time for Us co UL technical data	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms ms	8 24 10 20 14 28 7
Mechanical operation Operating times Average time for Us co UL technical data	in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us co UL technical data	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max at 480V	ms ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max	ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us co UL technical data	in AC Closing NO Opening NO Closing NC Opening NC opening NC opening NC erformance	max min max min max min max at 480V	ms ms ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms a A A	8 24 10 20 14 28 7 18 14 17
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC opening NC opening NC erformance	max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms ms HP	8 24 10 20 14 28 7 18 14 17 1
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Closing NC Opening NC opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms a A A	8 24 10 20 14 28 7 18 14 17
Mechanical operation Operating times Average time for Us co UL technical data Full-load current (FLA)	in AC Closing NO Opening NO Closing NC Opening NC opening NC opening NC erformance	max min max min max min max at 480V at 600V	ms ms ms ms ms ms ms ms HP	8 24 10 20 14 28 7 18 14 17 1

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 110VAC, 1NC AUXILIARY CONTACT

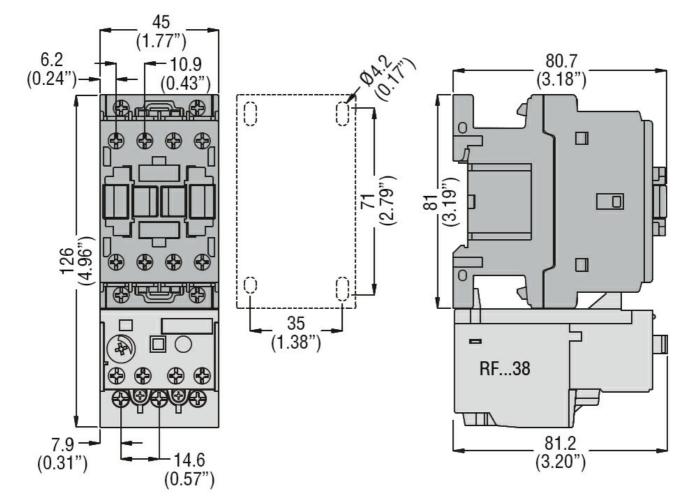
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		220/230V	HP	5
		460/480V	HP	10
		575/600V	HP	15
General USE				
	Contactor			
		AC current	А	32
	Auxiliary contacts			
		AC voltage	V	600
		AC current	А	10
		DC voltage	V	250
		DC current	А	1
Short-circuit protecti	ion fuse, 600V			
	High fault			
	5	Short circuit current	kA	100
		Fuse rating	А	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	А	80
Contact rating of au	kiliary contacts according to UL	5		A600 - P600
Ambient conditions				
Temperature				
	Operating temperature			
	eperaning temperature	min	°C	-50
		max	°Č	70
	Storage temperature		•	
	eterage temperature	min	°C	-60
		max	°Č	80
Max altitude		Пах	m	3000
Resistance & Protect	ction			
Pollution degree				3
Dimensions				
Dimensions				

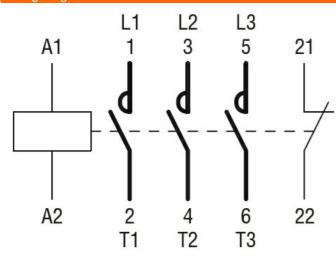
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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 18A, AC COIL 50/60HZ, 110VAC, 1NC AUXILIARY CONTACT



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	

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	CCC
	cULus
	EAC
ETIM classification	

ETIM 8.0

EC000066 -Power contactor, AC switching