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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)	A	8.5
Rated operational power AC-3 (T≤55°C)	70-4 (400V)		0.0
Rated operational power AC-3 (1233 C)	2201/	1.1.1.7	4
	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	A	15
	75V	A	15
	110V	A	6
			O
IFO	220V	A	
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	A	16
	1100	, ,	. •

	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	Α	11
	75V	Α	11
	110V	Α	2
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
120 max carrent to in 200 200 mai 21(= 10mb mai 2 poloc in conce	≤24V	Α	15
	48V	A	13
	75V	A	13
	110V	A	8
	220V	A	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	2200	^	
TEC max current le in DC3-DC3 with E/R > 13ms with 3 poles in selles	-24 \/	۸	10
	≤24V 48V	A	18
		A	18
	75V	A	16
	110V	A	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	Α	120
	690V	Α	94
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
\	lth	W	2.6
	AC3	W	0.8
Tightening torque for terminals	7.00	**	<u> </u>
Tightstang to que for terminate	min	Nm	1.5
	max	Nm	1.8
	min	lbin	1.1
		lbin	1.5
Tightening torque for coil terminal	max	וווווו	1.0
rightening torque for con terminal		Nime	0.0
	min	Nm Nm	0.8
	max	Nm	1
	min	lbin	0.8

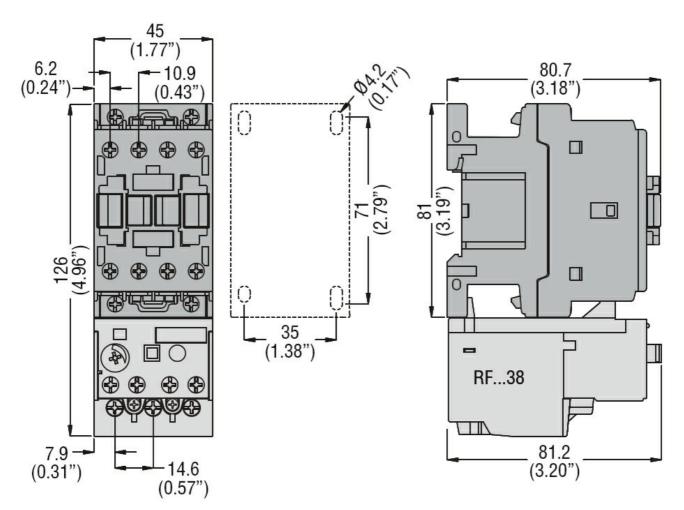
		max	lbin	0.74
Max number of wires	simultaneously connectable	max	Nr.	2
Conductor section				
	AWG/Kcmil			
		max		10
	Flexible w/o lug conductor section			
		min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section		2	
		min	mm²	1
Davier terminal protec	ation according to IEC/EN COECO	max	mm²	4 IP20 when wired
Mechanical features	ction according to IEC/EN 60529			iP20 when wired
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			g	365
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact chara	acteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 de	esignation			A600 - P600
Operating current AC	15			
		230V	Α	3
		400V	Α	1.9
		500V	A	1.4
Operating current DC	12	4401/		
0 " 100	40	110V	A	5.7
Operating current DC	13	0.41/	۸	r 7
		24V 48V	A	5.7
		48 V 60 V	A A	2.9 2.3
		110V	A	2.3 1.25
		125V	A	1.1
		220V	A	0.55
		600V	Α	0.2
Operations				
Mechanical life			cycles	20000000
Electrical life			cycles	1600000
Safety related data				
Performance level B1	0d according to EN/ISO 13489-1			
		rated load	cycles	1600000
		mechanical load	cycles	20000000
	ing to IEC/EN 609474-4-1			yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 5	50/60Hz		V	24

AC operating voltage				
7.0 operating venage	of 50/60Hz coil powered at 50Hz			
	pick-up			
	plck-up	min	%Us	80
		max	%Us	110
	drop out	IIIdx	/005	110
	drop-out	!	0/11-	00
		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 consu	ımption at 20°C		· <u> </u>	
	of 50/60Hz coil powered at 50Hz			
	·	in-rush	VA	75
		holding	VA	9
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz	noiding	٧, ١	
	or our iz con powered at our iz	in-rush	VA	75
				9
Discipation at halding	<00°C 5011-	holding	VA	
Dissipation at holding	≥∠U U DU⊓∠		W	2.5
Max cycles frequency				
INTO CONTROL OF CONTROL			/I	0000
Mechanical operation			cycles/h	3600
Operating times			cycles/h	3600
			cycles/h	3600
Operating times	in AC		cycles/h	3600
Operating times			cycles/h	3600
Operating times	in AC	min	cycles/h	3600 8
Operating times	in AC Closing NO	min max		
Operating times	in AC		ms	8
Operating times	in AC Closing NO		ms	8
Operating times	in AC Closing NO	max	ms ms	8 24
Operating times	in AC Closing NO	max min	ms ms	8 24 10
Operating times	in AC Closing NO Opening NO	max min max	ms ms	8 24 10 20
Operating times	in AC Closing NO Opening NO	max min max min	ms ms ms ms	8 24 10 20
Operating times	in AC Closing NO Opening NO Closing NC	max min max	ms ms ms	8 24 10 20
Operating times	in AC Closing NO Opening NO	max min max min max	ms ms ms ms	8 24 10 20 14 28
Operating times	in AC Closing NO Opening NO Closing NC	max min max min max min	ms ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us c	in AC Closing NO Opening NO Closing NC	max min max min max	ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us c	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max min	ms ms ms ms ms	8 24 10 20 14 28
Operating times Average time for Us c	in AC Closing NO Opening NO Closing NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c	in AC Closing NO Opening NO Closing NC Opening NC	max min max min max at 480V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c UL technical data Full-load current (FLA	in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max	ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c	in AC Closing NO Opening NO Closing NC Opening NC Opening NC Opening NC	max min max min max at 480V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c UL technical data Full-load current (FLA	in AC Closing NO Opening NO Closing NC Opening NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c UL technical data Full-load current (FLA	in AC Closing NO Opening NO Closing NC Opening NC Opening NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c UL technical data Full-load current (FLA	in AC Closing NO Opening NO Closing NC Opening NC Opening NC of three-phase AC motor erformance for single-phase AC motor	max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c UL technical data Full-load current (FLA	in AC Closing NO Opening NO Closing NC Opening NC Opening NC Opening NC	max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c UL technical data Full-load current (FLA	in AC Closing NO Opening NO Closing NC Opening NC Opening NC of three-phase AC motor erformance for single-phase AC motor	max min max min max min max at 480V at 600V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18
Operating times Average time for Us c UL technical data Full-load current (FLA	in AC Closing NO Opening NO Closing NC Opening NC Opening NC of three-phase AC motor erformance for single-phase AC motor	max min max min max min max at 480V at 600V 110/120V 230V	ms ms ms ms ms ms	8 24 10 20 14 28 7 18

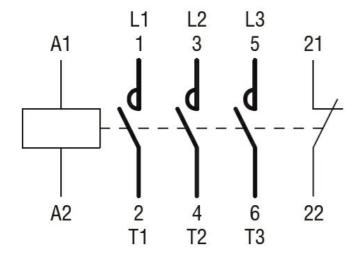


		460/480V	HP	10
		575/600V	HP	15
General USE				
	Contactor			
		AC current	Α	32
	Auxiliary contacts			
	•	AC voltage	V	600
		AC current	Α	10
		DC voltage	V	250
		DC current	Α	1
Short-circuit protec	tion fuse, 600V			
·	High fault			
	-	Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	80
Contact rating of auxiliary contacts according to UL				A600 - P600
Ambient conditions				
Temperature				
•	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Prote	ection			
Pollution degree				3
Dimensions				

Three-pole contactor, IEC operating current le (AC3) = 18A, AC coil 50/60Hz, 24VAC, 1NC auxiliary



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



BF1801A024

electric

Three-pole contactor, IEC operating current le (AC3) = 18A, AC coil 50/60Hz, 24VAC, 1NC auxiliary contact

CCC			
cULus			
EAC			

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching