



Product designation Power contactor Product type designation **BF18** Contact characteristics 4 Nr. Number of poles Rated insulation voltage Ui IEC/EN ٧ 690 k√ Rated impulse withstand voltage Uimp 6 Operational frequency min Ηъ 25 max Hz 400 IEC Conventional free air thermal current Ith 32 Α 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) 8.5 Rated operational power AC-1 (T≤40°C) 12 230V kW 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 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 22 ≤24V Α 48V 22 Α 75V Α 20 110V Α 16 220V 11 IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series ≤24V 22 Α 48V Α 22 75V 20 Α 110V Α 18 220V 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			
	≤24V	Α	15
	48V	Α	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	220 V		
TEO max current le in 200-200 with E/TC = 10m3 with 5 poles in series	≤24V	۸	18
	≤24V 48V	A A	18
	75V 110V	A	16
		A	12
IEC many automatic in DC2 DC5 with 1/D < 45 1/1/14 1/2	220V	Α	6
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series	-0.01		4.0
	≤24V	A	18
	48V	Α	18
	75V	Α	16
	110V	Α	13
	220V	A	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)			
	Ith	W	2.6
	AC-3	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	Пах		
riginoring torquo for our communi	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8
May number of wires simultaneously connectable	max	lbin Nr	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			4.0
	max		10
Flexible w/o lug conductor section		_	
	min	mm²	1





Period plan				
Per Per		max	mm²	6
Flexible with insulated spade lug conductor section		Flexible c/w lug conductor section		
Plexible with insulated spade lug conductor section min min mm² 1 1 1 1 1 1 1 1 1		min		1
Max			mm²	4
Power terminal protection according to IEC/EN 60529 Power terminal protection allowable Power terminal protection Power terminal protection				
Power terminal protection according to IEC/EN 60529 IP20 when properly wired		min		
Prower terminal protection according to IEC/EN 60529 properly wired Mechanical features Vertical plan allowable Vertical plan 130° Fixing Screw / DIN rail 35mm Weight g 35 Conductor section max 10 Operations max 10 Mechanical life cycles 20000000 Electrical life cycles 20000000 Electrical life cycles 1600000 Safety related data rated load cycles 1600000 Electrical life cycles 1600000 Electrical life cycles 1600000 Electrical life cycles 1600000 Electrical life cycles 1600000 Miximal colspan="2">cycles 1600000 Miximal colspan="2">cycles 1600000 cycles<		max	mm ²	
Mechanical features Operating position normal allowable Vertical plan ± 30° Fixing Screw / DIN rail 35mm Weight g 355 Conductor section max 10 Operations Mechanical life cycles 20000000 Electrical life cycles 20000000 Safety related data rated load cycles 1600000 Performance level B10d according to EN/ISO 13489-1 yes 20000000 EMC compatibility yes 20000000 AC coll operating yes 20000000 EMC compatibility yes 20000000 AC coll operating voltage yes yes AC coll operating voltage min %Us 30 AC operating voltage f60Hz coil powered at 60Hz yes 50 AC average coil consumption at 20°C f60Hz coil powered at 60Hz in-rush VA 75 AC average coil consumption at bolding ≤20°C 50Hz yes yes 10 Max cycles frequency yes	Power terminal protect	tion according to IEC/EN 60529		
Operating position normal allowable Vertical plan 430° Fixing Screw / DIN rail 35mm Weight g 355 Conductor section max 10 Operations Mechanical life cycles 20000000 Electrical life cycles 20000000 Electrical life cycles 1600000 Safety related data cycles 1600000 Performance level B10d according to EN/ISO 13489-1 rated load properties 1600000 Mirror contats according to IEC/EN 609474-4-1 yes 20000000 Mirror contats according to IEC/EN 609474-4-1 yes 20000000 Mirror contats according to IEC/EN 609474-4-1 yes 2000000 AC operating voltage yes 2000000 AC operating voltage min %Us 30 AC operating voltage min %Us 30 AC average coil consumption at 20°C min %Us 30 AC average coil consumption at 20°C in-rush VA 75 holding VA	Mechanical features			properly wired
Fixing Screw / DIN rail DIN rail	Operating position			
Fixing Screw / DIN rail DIN rail		normal		Vertical plan
Fixing g 355mm		allowable		
Weight Samm Samm	F			Screw / DIN rail
Conductor section max 10 Operations Mechanical life cycles 20000000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 cycles 200000000 Mirror contats according to IEC/EN 609474-4-1 yes 20000000 Mirror contats according to IEC/EN 609474-4-1 yes 20000000 AC coil operating wes 20000000 Rated AC voltage at 60Hz v 230 AC operating voltage of 60Hz coil powered at 60Hz min %Us 80 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding %Us 20 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding VA 75 Mac yoles frequency W 2.5	Fixing			
Conductor section max 10 Operations Mechanical life cycles 20000000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 cycles 200000000 Mirror contats according to IEC/EN 609474-4-1 yes 20000000 Mirror contats according to IEC/EN 609474-4-1 yes 20000000 AC coil operating wes 20000000 Rated AC voltage at 60Hz v 230 AC operating voltage of 60Hz coil powered at 60Hz min %Us 80 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding %Us 20 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding VA 75 Mac yoles frequency W 2.5	Weight		g	
AWG/kcmil conductor section max				
Operations Mechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 cycles 20000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility yes AC coil operating Rated AC voltage at 60Hz yick-up min %Us 30 AC operating voltage min %Us 80 AC operating voltage min %Us 80 Max %Us 20 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding VA 75 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding VA 75 AC average tinequency W 2.5 Max cycles frequency W 2.5 Max cycles frequency min m		AWG/kcmil conductor section		
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Mechanical life	Operations			
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Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 mechanical load cycles 200000000				
Performance level B10d according to EN/ISO 13489-1 rated load mechanical load mechanic			0,0.00	
Rated load Cycles 1600000 mechanical load Cycles 20000000 mechanical load Cycles Cyc		Od according to EN/ISO 13489-1		
Mirror contats according to IEC/EN 609474-4-1 mechanical load cycles 20000000 Mirror contats according to IEC/EN 609474-4-1 yes AC yes AC AC coll operating V 230 AC coll operating voltage V 230 AC operating voltage V 230 AC operating voltage min %Us 80 Max %Us 110 Max %Us 110 Max %Us 110 Max Max %Us 20 Max Max %Us 55 AC AC average coil consumption at 20°C of 60Hz coil powered at 60Hz In-rush holding VA 75 Max Max Max 75 Max Max Max 9 Dissipation at holding ≤20°C 50Hz W 2.5 Max Max Cycles/h 3600 According times Average time for Us control Max Max 8 Max Max Max 24 According NO Min min ms 8 Max Max According NO Max Max Max Max Max	1 Griormando lovor Bix		cycles	1600000
Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 60Hz Of 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out min %Us 20 max %Us 55 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 9 Dissipation at holding ≤20°C 50Hz Max oycles frequency Mechanical operation Operating times Average time for Us control in AC Closing NO min ms 8 max ms 24 Opening NO min ms 10			-	
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drop-out min				
min %Us 20 max %Us 55 AC average coil consumption at 20°C 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 Operating times Average time for Us control in AC Closing NO min ms 8 max ms 24 Opening NO min ms 10			,000	
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AC average coil consumption at 20°C 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 Operating times Average time for Us control in AC Closing NO min ms 8 max ms 24 Opening NO min ms 10				
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in-rush VA 75 holding VA 9 Dissipation at holding ≤20°C 50Hz W 2.5 Max cycles frequency Mechanical operation cycles/h 3600 Operating times Average time for Us control in AC Closing NO min ms 8 max ms 24 Opening NO min ms 10	5			
Dissipation at holding ≤20°C 50HzNA9W2.5Max cycles frequencyMechanical operationcycles/h3600Operating timesAverage time for Us controlin ACminms8maxms24Opening NOminms10			VA	75
Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC Closing NO min ms 8 max ms 24 Opening NO min ms 10				
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min ms 8 max ms 24 Opening NO min ms 10				
max ms 24 Opening NO min ms 10			ms	8
Opening NO min ms 10				
min ms 10			5	• •
		• •	ms	10
		max	ms	20



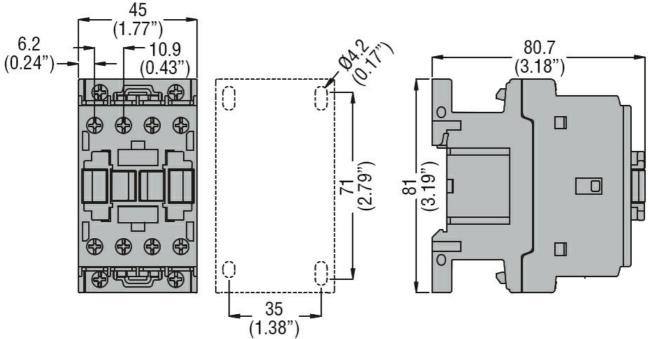


	Closing NC			
	ŭ	min	ms	14
		max	ms	28
	Opening NC			
		min	ms	7
		max	ms	18
UL technical data				
Full-load current (FLA)	for three-phase AC motor			
		at 480V	Α	14
		at 600V	Α	17
Yielded mechanical pe				
	for single-phase AC motor			
		110/120V	HP	1
	·	230V	HP	3
	for three-phase AC motor			
		200/208V	HP	5
		220/230V	HP	5
		460/480V	HP	10
		575/600V	HP	15
General USE	_			
	Contactor			
		AC current	A	32
Short-circuit protection				
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	60
		Fuse class		J
	Standard fault			_
		Short circuit current	kA	5
A self-tendence little		Fuse rating	Α	80
Ambient conditions				
Temperature				
	Operating temperature		0.0	
		min	°C	-50 -70
	2	max	°C	70
	Storage temperature	•	0.0	22
		min	°C	-60
Manualitanal		max	°C	80
Max altitude			m	3000
Resistance & Protection	on			
Pollution degree				3
Dimensions				

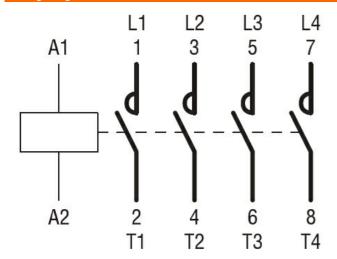


ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 60HZ, 230VAC



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

EAC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching