

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, AC COIL 60HZ, 460VAC



Product designation			Power contactor
Product type designation Contact characteristics			BF32
Number of poles		Nr.	3
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		IX V	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	- Indix	A	56
Operational current le			
	AC-1 (≤40°C)	Α	56
	AC-1 (≤55°C)	Α	45
	AC-1 (≤70°C)	Α	40
	AC-3 (≤440V ≤55°C)	Α	32
	AC-4 (400V)	Α	13.5
Rated operational power AC-3 (T≤55°C)			
	230V	kW	8.8
	400V	kW	16
	415V	kW	17
	440V	kW	17
	500V	kW	20
	690V	kW	22
Rated operational power AC-1 (T≤40°C)			
	230V	kW	21
	400V	kW	36
	500V	kW	45
	690V	kW	62
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	30
	48V	Α	26
	75V	Α	22
	110V	Α	8
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	32
	48V	Α	32
	75V	Α	28
	110V	A	25
IFO was a summer that in DOA with 1/D 444 and 1/1 On 1 in 1	220V	Α	3
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	40.01	Δ.	20
	≤24V	A	32
	48V	A	32
	75V	Α	32
	110V	Α	27





THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, AC COIL 60HZ, 460VAC

	220V	Α	23
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
·	≤24V	Α	_
	48V	Α	_
	75V	A	_
	110V	Α	_
	220V		_
IFO	220 V	A	-
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		_	
	≤24V	Α	20
	48V	Α	17
	75V	Α	15
	110V	Α	2,5
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	25
	48V	Α	22
	75V	Α	20
	110V	A	15
IFO was assemble in DOO DOE will LID 445. Who had a see a second and the second a	220V	A	3
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series		_	
	≤24V	Α	30
	48V	Α	28
	75V	Α	28
	110V	Α	20
	220V	Α	23
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	_
	48V	Α	_
	75V	A	
			_
	110V	A	_
	220V	Α .	
Short-time allowable current for 10s (IEC/EN60947-1)		Α	320
Protection fuse			
	gG (IEC)	Α	63
	aM (IEC)	Α	32
Making capacity (RMS value)		Α	320
Breaking capacity at voltage			
	440V	Α	256
	500V	A	240
	690V	A	192
Desigtance per pale (everage vielve)	090 V		
Resistance per pole (average value)		mΩ	2
Power dissipation per pole (average value)			
	Ith	W	6
	AC-3	W	2
Tightening torque for terminals			
	min	Nm	2.5
	max	Nm	3
	min	Ibin	1.8
	max	lbin	2.2
Tightening torque for coil terminal	HUX		
rightoning torque for contentinal	nain	Nim	Λ Θ
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.8





THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, AC COIL 60HZ,

Operating position normal allowable ✓ Vertical plan allowable ±30° Fixing g 422 Conductor section max 6 AWG/kcmil conductor section max 6 Operations cycles 20000000 Bechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data rated load cycles 1600000 Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 Mirror contats according to IEC/EN 609474-4-1 yes yes EMC compatibility yes yes AC operating voltage at 60Hz v 40 AC operating voltage of 60Hz coil powered at 60Hz pick-up min %Us 80 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz min %Us 50 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush folding VA 75 holding Dissipation at holding ≤20°C 50Hz w 2,5 4 Mechanical loperation cycles/h			max	Ibin	0.74	
AWG/Kcmil Flexible w/o lug conductor section min mm² 2.5 16 16 16 16 16 16 16 1	Max number of wires	simultaneously connectable		Nr.	2	
Flexible w/o lug conductor section	Conductor section					
Flexible w/o lug conductor section		AWG/Kcmil				
Plexible c/W lug conductor section			max		6	
Flexible c/w lug conductor section		Flexible w/o lug conductor section		2	0.5	
Flexible c/w lug conductor section						
Pickible with insulated spade lug conductor section		Florible of the panduster agation	max	mm ⁻	16	
Flexible with insulated spade lug conductor section min mm² 1 mm2 1 mm3 mm² 1 mm²		Flexible c/w lug conductor section	min	mm²	1	
Flexible with insulated spade lug conductor section						
Power terminal protection according to IEC/EN 60529 min max mm² m² m² 10 1P20 when property wired property property wired property property wired property		Flavible with insulated spade lug conductor section		111111	10	
Power terminal protection according to IEC/EN 60529 Power terminal protection allowable Power terminal protection		Trexible with insulated space rug conductor section		mm²	1	
Power terminal protection according to IEC/EN 60529 IP20 when properly wired Mechanical features IP20 when properly wired IP20 when properly IP20 when properly wired IP20 when properly IP20 when properly wired IP20 when properly IP20 when properly wired IP20 when properly wired IP20 when properly wired IP20 when properly IP20 when properly wired IP20 when properly IP20 when properly wired IP20 when properly IP20 when properly wired IP20					· ·	
Mechanical features Foliation with allowable with allow	D (
Operating position normal allowable ✓ Vertical plan allowable ±30° Fixing g 422 Conductor section max 6 AWG/kcmil conductor section max 6 Operations cycles 20000000 Bechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data rated load cycles 1600000 Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 Mirror contats according to IEC/EN 609474-4-1 yes yes EMC compatibility yes yes AC operating voltage at 60Hz v 40 AC operating voltage of 60Hz coil powered at 60Hz pick-up min %Us 80 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz min %Us 50 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush folding VA 75 holding Dissipation at holding ≤20°C 50Hz w 2,5 4 Mechanical loperation cycles/h	Power terminal protec	ction according to IEC/EN 60529				
Normal allowable 130° 1	Mechanical features					
Fixing Screw / DIN rail S	Operating position					
Screw / DIN rail 35mm Scr					•	
#####################################			allowable			
AWG/kcmil conductor section max	Fixing					
AWG/kcmil conductor section max	Weight			g	422	
max 6 Operations 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 yes EMC compatibility yes AC coil operating W 460 AC operating voltage of 60Hz coil powered at 60Hz yick-up min %Us 80 AC operating voltage min %Us 80 Max w y y y y y y <td r<="" td=""><td>Conductor section</td><td></td><td></td><td></td><td></td></td>	<td>Conductor section</td> <td></td> <td></td> <td></td> <td></td>	Conductor section				
Operations Cycles 20000000 Electrical life cycles 1600000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 mechanical load cycles 20000000 Mirror contats according to IEC/EN 609474-4-1 yes EMC compatibility yes AC 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 AC average coil consumption at 20°C foll powered at 60Hz in-rush VA 9 Dissipation at holding ≤20°C 50Hz w 2.5 Max cycles frequency Mechanical operation cycles/h <t< td=""><td></td><td>AWG/kcmil conductor section</td><td></td><td></td><td></td></t<>		AWG/kcmil conductor section				
Mechanical life cycles 20000000 Electrical life cycles 1600000 Safety related data rated load occording to EN/ISO 13489-1 rated load occording to IEC/EN 609474-4-1 yes EMC compatibility yes AC coil operating Rated AC voltage at 60Hz y 460 AC operating voltage min wulst %Us 80 AC operating voltage min wulst %Us 80 AC operating voltage min wulst %Us 80 Max oyeles frequency wulst xulst A colspan="2">ac yes ac yes			max		6	
Electrical life cycles 1600000 Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 20000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min %Us 80 max %Us 110 drop-out 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 holding VA 9 Dissipation at holding ≤20°C 50Hz Mechanical operation Mechanical operation Cycles 1600000 rated load cycles 1600000 yes 20000000 yes 20000000 yes 200000000 yes 20000000 yes 20000000 yes 200000000 yes 20000000 yes 2000000 yes 20000000 yes 20000000 yes 2000000 yes 20000000 yes 2000000 yes 2	•					
Safety related data Performance level B10d according to EN/ISO 13489-1 rated load mechanical load cycles 1600000 2000000 Mirror contats according to IEC/EN 609474-4-1 yes 20000000 EMC compatibility yes AC coil operating V 460 AC operating voltage min %Us 80 AC operating voltage 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 W 2.5 Max cycles frequency Mechanical operation cycles/h 3600				-		
Performance level B10d according to EN/ISO 13489-1 rated load cycles 1600000 mechanical load cycles 20000000 Mirror contats according to IEC/EN 609474-4-1 EMC compatibility yes AC coil operating Rated AC voltage at 60Hz AC operating voltage 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 kolding ✓A 9 Dissipation at holding ≤20°C 50Hz Mechanical operation vycles/h 3600				cycles	1600000	
rated load mechanical load cycles 2000000 mechanical load cycles 20000000 Mirror contats according to IEC/EN 609474-4-1 yes EMC compatibility yes AC coil operating V 460 Rated AC voltage at 60Hz V 460 AC operating voltage min %Us 80 max %Us 110 pick-up min %Us 20 max %Us 55 AC average coil consumption at 20°C of 60Hz coil powered at 60Hz 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 cycles/h 3600	•	10d according to EN/ISO 12490 1				
Mirror contats according to IEC/EN 609474-4-1 yes EMC compatibility yes AC coil operating V 460 Rated AC voltage at 60Hz V 460 AC operating voltage min %Us 80 pick-up min %Us 110 drop-out min %Us 20 max %Us 55 AC average coil consumption at 20°C in-rush VA 75 holding VA 9 Dissipation at holding ≤20°C 50Hz W 2.5 Max cycles frequency Mechanical operation cycles/h 3600	Performance level b	Tod according to EN/13O 13469-1	rated load	cyclos	1600000	
Mirror contats according to IEC/EN 609474-4-1 EMC compatibility AC coil operating Rated AC voltage at 60Hz AC operating voltage 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 Mechanical operation yes yes yes Ac 20 yes Ac 400 Ac 75 holding VA 9 Dissipation at holding ≤20°C 50Hz Mechanical operation yes yes Ac 20 yes Ac 400 Ac 70 holding VA 9 Dissipation at holding ≤20°C 50Hz Mechanical operation yes yes Ac 400 Ac 75 holding VA 9 Dissipation at holding ≤20°C 50Hz Mechanical operation yes yes Ac 400 Ac 75 holding VA 9 Dissipation at holding ≤20°C 50Hz Ac 20 Mechanical operation yes yes Ac 400 Ac 75 holding VA 9 Dissipation at holding ≤20°C 50Hz Ac 20 Mechanical operation yes yes Ac 20 max 9Us 50 Ac 20 max 9Us 60 max 9Us		m		-		
EMC compatibility AC coil operating Rated AC voltage at 60Hz AC operating voltage 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 cycles frequency Mechanical operation y 460 V 460 A 75 holding %Us 80 max %Us 55 AC 20 max %Us 55 AC 300 Max 300	Mirror contats accord		lecriariicai ioau	Cycles		
AC coil operating Rated AC voltage at 60Hz AC operating voltage 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 cycles frequency Mechanical operation V 460 V 460 V 460 AC 0 in-rush %Us 80 max %Us 55 NUS 55 AC 20 max 9Us 55 AC 300 NUS 55 AC 300 NUS 55 AC 300		mig to 120/214 000474 4 1			•	
Rated AC voltage at 60Hz AC operating voltage 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 in-rush VA 75 of 60Hz coil powered at 60Hz in-rush VA 9 Dissipation at holding ≤20°C 50Hz W 2.5 Max cycles frequency Mechanical operation cycles/h 3600					yes	
AC operating voltage 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 cycles frequency Mechanical operation cycles/h 3600		60Hz		V	460	
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 Mechanical operation cycles/h 3600						
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 cycles frequency Mechanical operation cycles/h 3600	, ,					
drop-out max %Us 110 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		·				
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 W 2.5 Max cycles frequency Mechanical operation cycles/h 3600			min	%Us	80	
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 cycles frequency Mechanical operation min %Us 20 max vyls 20 max vyls 55			max	%Us	110	
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 Cycles/h 3600		drop-out				
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 cycles frequency Mechanical operation cycles/h 3600			min			
of 60Hz coil powered at 60Hz in-rush VA 75 holding VA 9 Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation cycles/h 3600			max	%Us	55	
in-rush VA 75 holding VA 9 Dissipation at holding ≤20°C 50Hz W 2.5 Max cycles frequency Mechanical operation cycles/h 3600	AC average coil cons	•				
holdingVA9Dissipation at holding ≤20°C 50HzW2.5Max cycles frequencyCycles/h3600		of 60Hz coil powered at 60Hz		3.74	75	
Dissipation at holding ≤20°C 50Hz W 2.5 Max cycles frequency Mechanical operation cycles/h 3600						
Max cycles frequency Mechanical operation cycles/h 3600	Dissipation at In-1-1	-20°C FOLI-	nolaing			
Mechanical operation cycles/h 3600				VV	∠.5	
				cycles/b	3600	
	Operating times			cycles/II	3000	



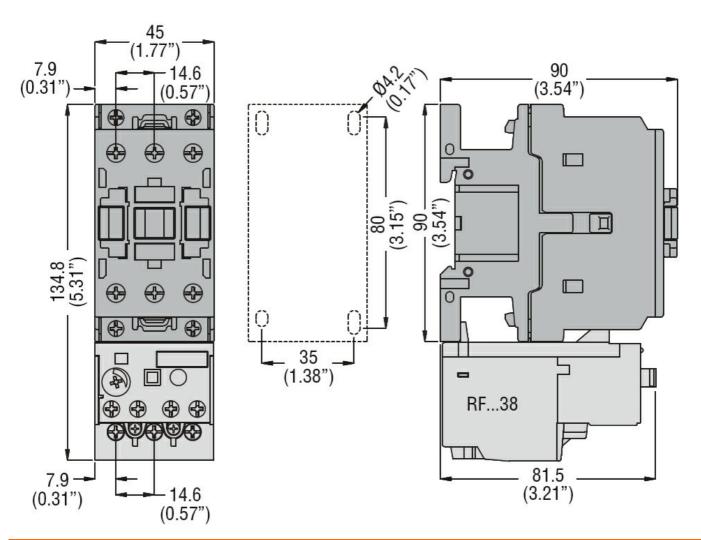


THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, AC COIL 60HZ,

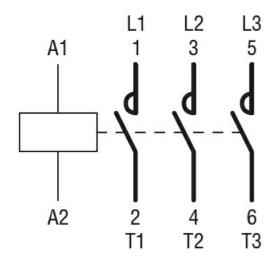
Average time for Us of	ontrol				
· ·	in AC				
		Closing NO			
			min	ms	8
			max	ms	24
		Opening NO			
			min	ms	5
		01 : 110	max	ms	15
		Closing NC	•		•
			min	ms	9 20
		Opening NC	max	ms	20
		Opening NC	min	ms	9
			max	ms	17
UL technical data			max	1110	11
	for three-phase AC mot	or			
,	•		at 480V	Α	27
			at 600V	Α	27
Yielded mechanical pe	erformance				
	for single-phase AC m	otor			
			110/120V	HP	3
			230V	HP	7.5
	for three-phase AC mo	otor			
			200/208V	HP	10
			220/230V	HP	10
			460/480V	HP	20
0			575/600V	HP	25
General USE	Contonton				
	Contactor		AC current	Α	55
Short-circuit protection	fuse 600V		AC current		
Short-circuit protection	High fault				
	i ligit tault		Short circuit current	kA	100
			Fuse rating	A	100
			Fuse class		J
	Standard fault				
			Short circuit current	kA	5
			Fuse rating	Α	125
Ambient conditions					
Temperature					
	Operating temperature)			
			min	°C	-50
	<u> </u>		max	°C	70
	Storage temperature		_	0	••
			min	°C	-60
Manuality 1:			max	°C	80
Max altitude	0.0			m	3000
Resistance & Protection	on				2
Pollution degree					3
Dimensions					

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, AC COIL 60HZ,



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



ENERGY AND AUTOMATION

BF3200A46060

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 32A, AC COIL 60HZ,

	UL 60947-4-1	
Certificates		
	CCC	
	cULus	
	EAC	
ETIM classification	n	

ETIM 8.0

EC000066 -Power contactor, AC switching