

# FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ, 230VAC, 4NC



Product designation Product type designation			Power contactor BF18
Contact characteristics			5. 10
Number of poles		Nr.	4
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-1 (T≤40°C)			
	230V	kW	12
	400V	kW	21
	500V	kW	26
	690V	kW	36
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)		$m\Omega$	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			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	lbin	0.74
Max number of wires simultaneously connectable		Nr.	2



# FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ, 230VAC, 4NC

Conductor section			
	AWG/Kcmil		
	max		10
	Flexible w/o lug conductor section		
	min	mm²	1
	max	mm²	6
	Flexible c/w lug conductor section	2	4
	min	mm²	1
	The vible with insulated and delug conductor acction	mm²	4
	Flexible with insulated spade lug conductor section min	mm²	1
	max	mm²	4
			IP20 when
Power terminal protect	ction according to IEC/EN 60529		properly wired
Mechanical features			1 1 2
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Screw / DIN rail 35mm
Weight		g	360
Conductor section			
	AWG/kcmil conductor section		
	max		10
Auxiliary contact chara	acteristics		
Thermal current Ith		Α	32
IEC/EN 60947-5-1 de	signation		A600 - P600
Operations			0000000
Mechanical life		cycles	20000000
Electrical life Safety related data		cycles	1600000
•	0d according to EN/ISO 13489-1		
i enomiance level bi	rated load	cycles	1600000
	mechanical load	-	1000000
		cycles	20000000
Mirror contats accordi		cycles	20000000 YES
	ing to IEC/EN 609474-4-1	cycles	YES
EMC compatibility		cycles	
EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1	cycles V	YES yes
EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1		YES
EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1		YES yes
EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz		YES yes
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz		YES yes
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	V	YES yes 230
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up min max drop-out	V %Us %Us	YES yes 230 80 110
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up min max drop-out min	V %Us %Us %Us	YES yes 230 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max	V %Us %Us	YES yes 230 80 110
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz	V %Us %Us %Us	YES yes 230 80 110 20
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up  min max drop-out  of 50/60Hz coil powered at 60Hz pick-up	V %Us %Us %Us %Us	YES yes 230 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up min max drop-out min max of 50/60Hz coil powered at 60Hz pick-up min min max	V  %Us %Us %Us %Us %Us	YES yes 230 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up  min max drop-out  min max  of 50/60Hz coil powered at 60Hz pick-up  min max	V %Us %Us %Us %Us	YES yes 230 80 110 20 55
EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up  min max drop-out  of 50/60Hz coil powered at 60Hz pick-up  min max  of 50/60Hz coil powered at 60Hz pick-up  min max  drop-out	V  %Us %Us %Us %Us %Us	YES yes 230 80 110 20 55
EMC compatibility AC coil operating	of 50/60Hz  of 50/60Hz coil powered at 50Hz pick-up  min max drop-out  min max  of 50/60Hz coil powered at 60Hz pick-up  min max	V  %Us %Us %Us %Us %Us	YES yes 230 80 110 20 55



FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ, 230VAC, 4NC

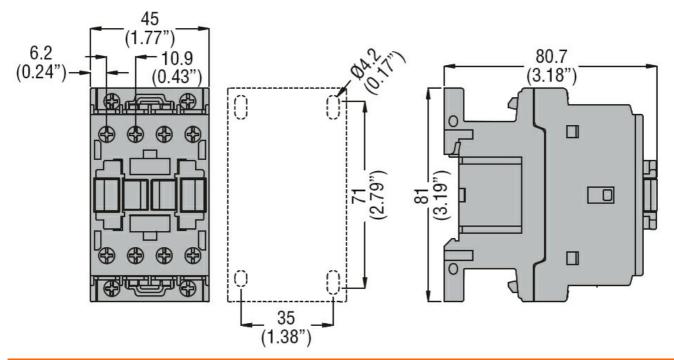
	of 50/001			
	of 50/60Hz coil powered at 50Hz	ماميريس ميا	١/٨	75
		in-rush	VA	75
	(50/0011 3 1 4 0011	holding	VA	9
	of 50/60Hz coil powered at 60Hz	2 1	) /A	70
		in-rush	VA	70
		holding	VA	6.5
	of 60Hz coil powered at 60Hz			
		in-rush	VA	75
		holding	VA	9
Dissipation at holding	≤20°C 50Hz		W	2.5
Max cycles frequency				
Mechanical operation			cycles/h	3600
Operating times				
Average time for Us co	ontrol			
	in AC			
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			
		min	ms	10
		max	ms	20
	Closing NC			
	ŭ	min	ms	14
		max	ms	28
	Opening NC			
	- Parmi 9 - 1-	min	ms	7
		max	ms	18
UL technical data				. •
	for three-phase AC motor			
	for three-phase AC motor	at 480\/	Δ	14
	for three-phase AC motor	at 480V	A A	14 17
Full-load current (FLA)		at 480V at 600V	A A	14 17
	erformance			
Full-load current (FLA)		at 600V	A	17
Full-load current (FLA)	erformance	at 600V 110/120V	A HP	17
Full-load current (FLA)	erformance for single-phase AC motor	at 600V	A	17
Full-load current (FLA)	erformance	at 600V 110/120V 230V	A HP HP	17
Full-load current (FLA)	erformance for single-phase AC motor	at 600V 110/120V 230V 200/208V	HP HP	17 1 3
Full-load current (FLA)	erformance for single-phase AC motor	at 600V 110/120V 230V 200/208V 220/230V	HP HP HP	17 1 3 5 5
Full-load current (FLA)	erformance for single-phase AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V	HP HP HP HP	17 1 3 5 5 10
Full-load current (FLA)  Yielded mechanical pe	erformance for single-phase AC motor	at 600V 110/120V 230V 200/208V 220/230V	HP HP HP	17 1 3 5 5
Full-load current (FLA)	for single-phase AC motor  for three-phase AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V	HP HP HP HP	17 1 3 5 5 10
Full-load current (FLA)  Yielded mechanical pe	erformance for single-phase AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V	HP HP HP HP HP	17 1 3 5 5 10 15
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor	at 600V 110/120V 230V 200/208V 220/230V 460/480V	HP HP HP HP	17 1 3 5 5 10
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V	HP HP HP HP HP	17 1 3 5 5 10 15
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor	at 600V 110/120V 230V 200/208V 220/230V 460/480V 575/600V AC current	HP HP HP HP HP	17 1 3 5 5 10 15 32 600
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current  AC voltage AC current	HP HP HP HP HP A	17 1 3 5 5 10 15 32 600 10
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current AC voltage AC current DC voltage	HP HP HP HP HP	17 1 3 5 5 10 15 32 600
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current  AC voltage AC current	HP HP HP HP HP A	17 1 3 5 5 10 15 32 600 10 250 1
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current AC voltage AC current DC voltage	HP HP HP HP HP V A	17  1 3  5 5 10 15  32  600 10 250
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor  Auxiliary contacts	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current AC voltage AC current DC voltage	HP HP HP HP HP V A	17 1 3 5 5 10 15 32 600 10 250 1
Full-load current (FLA)  Yielded mechanical pe	for single-phase AC motor  for three-phase AC motor  Contactor  Auxiliary contacts	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current AC voltage AC current DC voltage	HP HP HP HP HP V A	17 1 3 5 5 10 15 32 600 10 250 1
Full-load current (FLA)  Yielded mechanical per  General USE  Contact rating of auxilia  Ambient conditions	for single-phase AC motor  for three-phase AC motor  Contactor  Auxiliary contacts	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current AC voltage AC current DC voltage	HP HP HP HP HP V A	17 1 3 5 5 10 15 32 600 10 250 1
Full-load current (FLA)  Yielded mechanical per  General USE  Contact rating of auxilia  Ambient conditions	crformance for single-phase AC motor  for three-phase AC motor  Contactor  Auxiliary contacts  ary contacts according to UL	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current AC voltage AC current DC voltage	HP HP HP HP HP V A	17 1 3 5 5 10 15 32 600 10 250 1
Full-load current (FLA)  Yielded mechanical per  General USE  Contact rating of auxilia  Ambient conditions	crformance for single-phase AC motor  for three-phase AC motor  Contactor  Auxiliary contacts  ary contacts according to UL	at 600V  110/120V 230V  200/208V 220/230V 460/480V 575/600V  AC current  AC voltage AC current DC voltage DC current	HP HP HP HP HP A V A	17  1 3 5 5 10 15 32 600 10 250 1 SI - A600



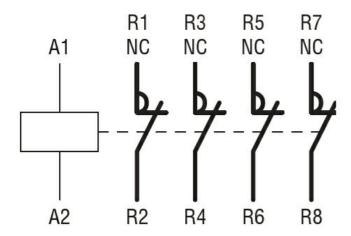
FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ, 230VAC, 4NC

Storage temperature			
·	min	°C	-60
	max	°C	80
Max altitude		m	3000
Resistance & Protection			
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/BS 60947-1 IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

## Certificates

CCC

cULus



## BF18T0A230

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ, 230VAC, 4NC

EAC

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching