



Product designation	Power contactor		
Product type designation	BF18		
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage U _i IEC/EN	V	690	
Rated impulse withstand voltage U _{imp}	kV	6	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current I _{th}	A	32	
Operational current I _e	AC-1 (=40°C)	A	32
	AC-1 (=55°C)	A	26
	AC-1 (=70°C)	A	23
	AC-3 (=440V =55°C)	A	18
	AC-4 (400V)	A	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)	A	200	
Protection fuse	gG (IEC)	A	32
	aM (IEC)	A	20
Making capacity (RMS value)	A	180	
Breaking capacity at voltage	440V	A	144
	500V	A	120
	690V	A	94
Resistance per pole (average value)	m?	2.5	
Power dissipation per pole (average value)	I _{th}	W	2.6
	AC3	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	lbin	0.8
	max	lbin	0.74
Max number of wires simultaneously connectable	Nr.	2	

Conductor section

AWG/Kcmil	max	10
Flexible w/o lug conductor section	min	mm ² 1
	max	mm ² 6
Flexible c/w lug conductor section	min	mm ² 1
	max	mm ² 4
Flexible with insulated spade lug conductor section	min	mm ² 1
	max	mm ² 4

Power terminal protection according to IEC/EN 60529

IP20 when wired

Mechanical features

Operating position	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight	g	362

Conductor section

AWG/kcmil conductor section	max	10	
Operations			
Mechanical life	cycles	20000000	
Electrical life	cycles	1600000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	rated load mechanical load	cycles cycles	1600000 20000000

Mirror contacts according to IEC/EN 609474-4-1

YES

EMC compatibility

yes

AC coil operating

Rated AC voltage at 50/60Hz

V 24

AC operating voltage

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	min	%Us	85
	max	%Us	110
drop-out	min	%Us	20
	max	%Us	55

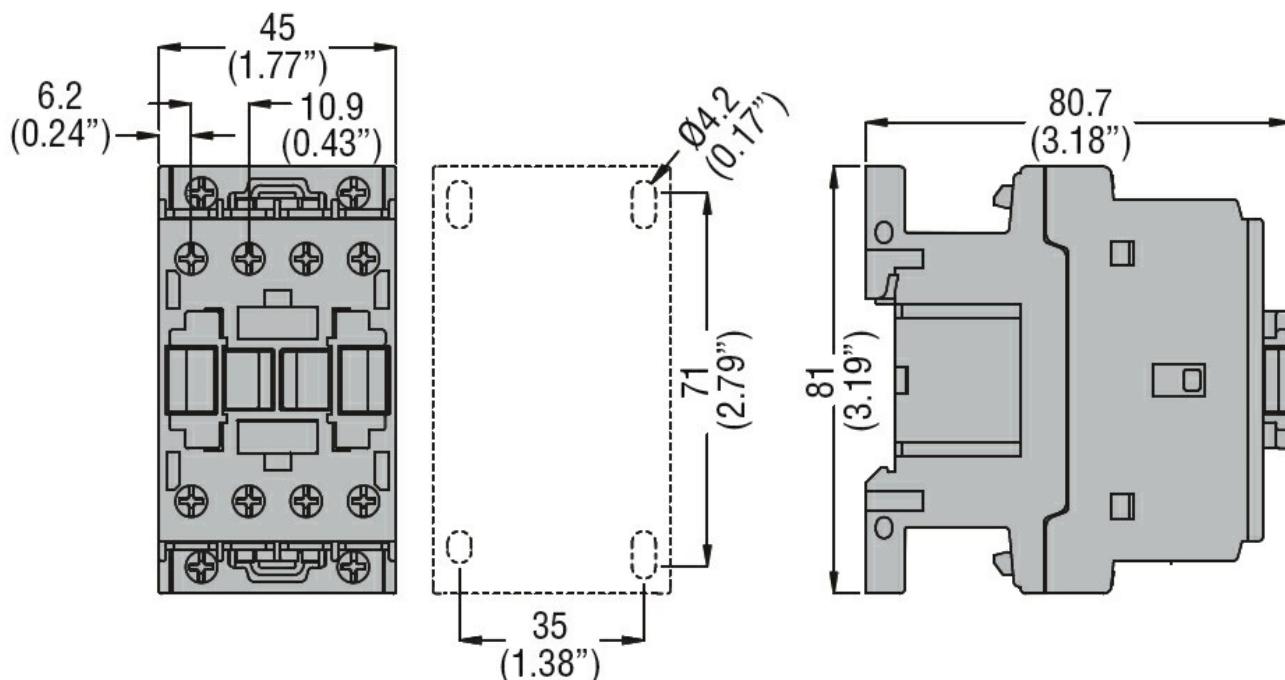
AC average coil consumption at 20°C

of 50/60Hz coil powered at 50Hz

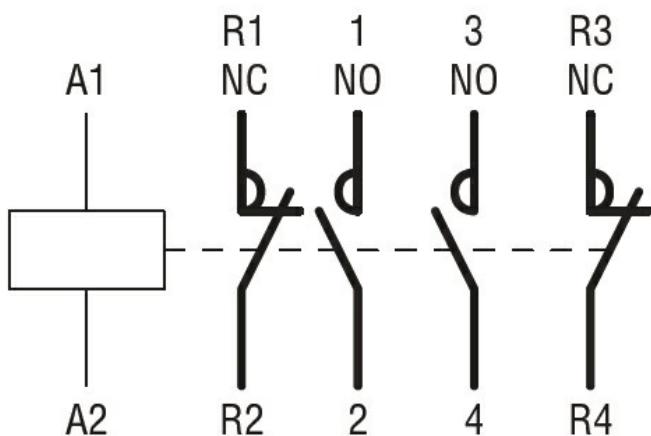
in-rush	VA	75
holding	VA	9

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, AC COIL 50/60HZ,
24VAC, 2NO AND 2NC

of 50/60Hz coil powered at 60Hz	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 control				
in AC				
	Closing NO			
		min	ms	8
		max	ms	24
	Opening NO			
		min	ms	10
		max	ms	20
	Closing NC			
		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	A	14	
	at 600V	A	17	
Yielded mechanical performance				
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	
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	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 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching