



Product designation			Power contactor BF18
Product type designation Contact characteristics			DF10
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Operational frequency		K V	0
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	IIIax	A	32
Operational current le			J2
Operational current le	AC-1 (≤40°C)	٨	32
	AC-1 (≤40 C) AC-1 (≤55°C)	A A	26
	AC-1 (≤55 C) AC-1 (≤70°C)		23
	AC-1 (≤70 C) AC-3 (≤440V ≤55°C)	A	18
	AC-3 (\$440V \$55 C) AC-4 (400V)	A A	8.5
Rated operational power AC-1 (T≤40°C)	AC-4 (400V)	^	0.5
Nated operational power AC-1 (1540 C)	230V	kW	12
	400V	kW	21
	500V	kW	
			26
IFC may augreent to in DC1 with 1/D < 1 mg with 1 pales in series	690V	kW	36
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	<041/	۸	4.7
	≤24V	A	17 15
	48V	A	15
	75V	A	15
	110V	A	6
150	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	40.4) /		00
	≤24V	A	20
	48V	Α	20
	75V	A	20
	110V	A	13
	220V	Α	
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	Α	16
	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



ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, DC COIL, 125VDC

IEC max current le in Do	C3-DC5 with L/R ≤ 15ms with 1 poles in series			
	·	≤24V	Α	12
		48V	Α	11
		75V	Α	11
		110V	A	2
		220V	A	_
IFC many assument to in Di	C2 DC5 with L/D < 15 may with 2 males in series	220 V	<u> </u>	<u>-</u>
iec max current le in Di	C3-DC5 with L/R ≤ 15ms with 2 poles in series	-0.01		
		≤24V	Α	15
		48V	Α	13
		75V	Α	13
		110V	Α	8
		220V	Α	2
IEC max current le in Do	C3-DC5 with L/R ≤ 15ms with 3 poles in series			
		≤24V	Α	18
		48V	Α	18
		75V	Α	16
		110V	A	12
		220V	A	6
IFC may summed to in Di	C2 DCE with 1/D < 45-pag with 4 malas in and	2201	Α	U
IEC max current le in Do	C3-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 cur	rrent for 10s (IEC/EN60947-1)		Α	200
Protection fuse	,			
		gG (IEC)	Α	32
		aM (IEC)	Α	20
Making capacity (RMS v	value)	aw (ILO)	A	180
	· · · · · · · · · · · · · · · · · · ·		A	100
Breaking capacity at vol	tage	4.401.4		
		440V	Α	144
		500V	Α	120
-		690V	Α	94
Resistance per pole (av	erage value)		$m\Omega$	2.5
Power dissipation per po	ole (average value)			
		Ith	W	2.6
		AC-3	W	0.8
Tightening torque for ter	minals			
. Ignioning torque for ter		min	Nm	1.5
		min		
		max	Nm	1.8
		min	lbin	1.1
		max	Ibin	1.5
Tightening torque for co	il terminal			
		min	Nm	0.8
		max	Nm	1
		min	lbin	0.8
		max	lbin	0.74
Max number of wires sir	multaneously connectable		Nr.	2
Conductor section	,			
	AWG/Kcmil			
	AVVO/ROTH	mar		10
	Fig. 11	max		10
	Flexible w/o lug conductor section		•	
		min	mm²	1





FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, DC COIL, 125VDC

max Florible of the born and testan and testan	mm²	6
Flexible c/w lug conductor section	mm²	1
min	mm² mm²	1
Flexible with insulated spade lug conductor section	111111	4
min	mm²	1
max	mm²	4
		IP20 when
Power terminal protection according to IEC/EN 60529		properly wired
Mechanical features		
Operating position		
normal		Vertical plan
allowable		±30°
Fixing		Screw / DIN rail
<u> </u>		35mm
Weight	g	496
Conductor section		
AWG/kcmil conductor section		10
Operations max		10
Mechanical life	cycles	20000000
Electrical life	cycles	1600000
Safety related data	Cycles	1000000
Performance level B10d according to EN/ISO 13489-1		
rated load	cycles	1600000
mechanical load	cycles	2000000
Mirror contats according to IEC/EN 609474-4-1	0,0.00	yes
EMC compatibility		yes
DC coil operating		7
DC rated control voltage	V	125
DC operating voltage		
pick-up		
min	%Us	70
max	%Us	125
drop-out drop-out		
min	%Us	10
max	%Us	40
Average coil consumption ≤20°C		
in-rush	W	5.4
holding	W	5.4
Max cycles frequency		
Mechanical operation	cycles/h	3600
Operating times		
Average time for Us control		
in AC		
Closing NO min	me	8
max	ms ms	24
Opening NO	1113	∠ ¬
min	ms	10
max	ms	20
Closing NC		-
min	ms	14
max	ms	28

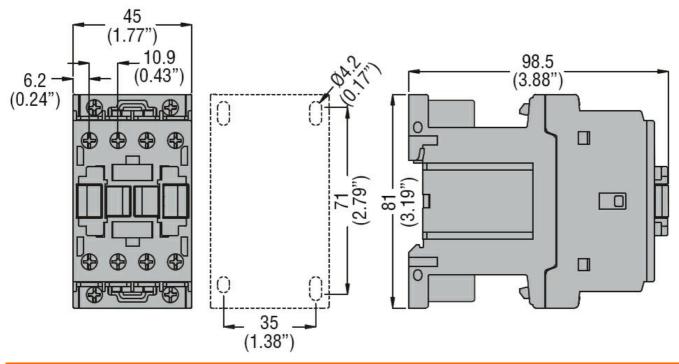


FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 32A, DC COIL, 125VDC

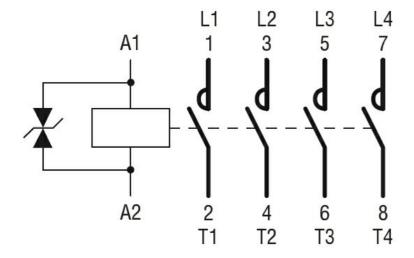
	Opening NC			
		min	ms	7
		max	ms	18
	in DC			
	Closing NO			
	Olosing No	min	ms	54
		max	ms	66
	Opening NO	IIIdx	1113	00
	Opening NO	min	mc	14
			ms	17
UL technical data		max	ms	17
) for three phase AC mater			
Full-load current (FLA) for three-phase AC motor	-1.4001/	^	4.4
		at 480V	A	14
		at 600V	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	Α	32
Short-circuit protection	n fuse, 600V			
	High fault			
	- ngiri aan	Short circuit current	kA	100
		Fuse rating	A	60
		Fuse class	, ,	J
	Standard fault	1 430 01433		
	Standard fault	Short circuit current	kA	5
		Fuse rating	A	80
Ambient conditions		i use ratifly	^	
Temperature				
remperature	Operating temperature			
	Operating temperature	yan !	°C	5 0
		min		-50 70
	-	max	°C	70
	Storage temperature		0.0	00
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protecti	on			
Pollution degree				3
Dimensions				



ENERGY AND AUTOMATION



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