**ENERGY AND AUTOMATION** 

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



Product designation Product type designation			Power contactor BF18
Contact characteristics			
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)	A	8.5
Rated operational power AC-1 (T≤40°C)			
	230V	kW	12
	400V	kW	21
	500V	kW	26
01 + 12 - 14 - 14 - 15 - 15 - 15 - 15 - 15 - 15	690V	kW	36
Short-time allowable current for 10s (IEC/EN60947-1)		Α	200
Protection fuse	. 0 (150)		00
	gG (IEC)	A	32
Making appairs (DMC value)	aM (IEC)	A	20
Making capacity (RMS value)		Α	180
Breaking capacity at voltage	440\/	۸	1 1 1
	440V 500V	A	144 120
	690V	A A	94
Resistance per pole (average value)	090 V	mΩ	2.5
Power dissipation per pole (average value)		11132	2.0
Tower dissipation per pole (average value)	Ith	W	2.6
	AC-3	W	0.8
Tightening torque for terminals	7.00	• • •	
g.neg terque ter terminate	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

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Conductor section	ANNO II C. II		
	AWG/Kcmil		10
	The vibration and vistage and	(	10
	Flexible w/o lug conductor section	ı mm²	1
	mir max	•	6
	Flexible c/w lug conductor section	111111	U
	mir	n mm²	1
	ma	•	4
	Flexible with insulated spade lug conductor section		•
	mir	n mm²	1
	max		4
Power terminal protect	tion according to IEC/EN 60520		IP20 when
Power terminal protec	tion according to IEC/EN 60529		properly wired
Mechanical features			
Operating position			
	norma		Vertical plan
	allowable	)	±30°
Fixing			Screw / DIN rail
Weight			35mm 496
Conductor section		g	490
Conductor Section	AWG/kcmil conductor section		
	AVG/Kernii conductor section max	,	10
Auxiliary contact chara		<b>\</b>	10
Thermal current Ith		Α	32
IEC/EN 60947-5-1 de	signation		A600 - P600
Operations			
Mechanical life		cycles	20000000
Electrical life		cycles	1600000
Safety related data			
Performance level B1	0d according to EN/ISO 13489-1		
	rated load	l cycles	1600000
	mechanical load	cycles	20000000
	ng to IEC/EN 609474-4-1		YES
EMC compatibility			yes
DC coil operating			
DC rated control volta	ge	V	125
DC operating voltage			
	pick-up	04::	
	mir		70
	max	%Us	125
	drop-out	0/11-	4.0
	mir		10
Average coil consump	max otion < 20°C	%Us	40
Average con consump		. \\/	5.4
	in-rush holding		5.4 5.4
Max cycles frequency	noiding	) VV	J. <del>4</del>
Mechanical operation		cycles/h	3600
Operating times		cycles/II	3000
Average time for Us of	ontrol		
Average time for US C	OHIO		

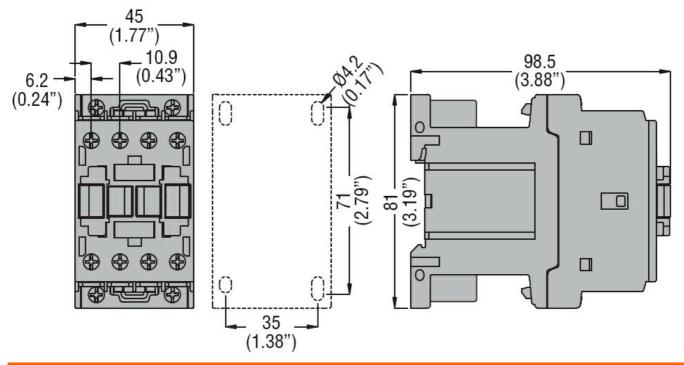
in AC

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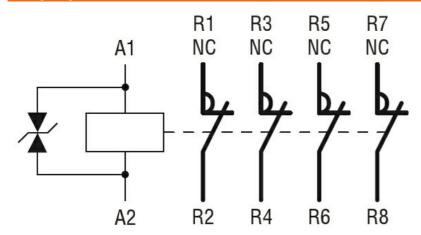
Closing NO						
Copening NO			Closing NO			•
Opening NO						
Max			Opening NO	max	ms	24
Closing NC			Opening NO	min	me	10
Closing NC						
Max			Closing NC	IIIdx	1113	20
Max			Closing No	min	ms	14
Opening NC						
Min			Opening NC			
In DC			1 3	min	ms	7
Closing NC				max	ms	18
March   Marc		in DC				
Max   Mis   30   30   30   30   30   30   30   3			Closing NC			
Opening NC				min	ms	
Minimax   Mini				max	ms	30
Max			Opening NC			
UL technical data   Full-load current (FLA) for three-phase AC motor						
Full-load current (FLA) for three-phase AC motor    14 480V				max	ms	5/
A 14 80V		1) for three phase A	Cmotor			
Teilded mechanical performance for single-phase AC motor           110/120V HP 1           230V HP 3           700/208V HP 5           220/230V HP 5           220/230V HP 5           460/480V HP 10           575/600V HP 15           General USE           AC current A 32           Auxiliary contacts         AC voltage V 600           AC current A 10         DC voltage V 250           DC voltage V 250         DC current A 1           DC current A 1         Temperature           Contact rating of auxiliary contacts according to UL         SI - A600           Ambient conditions         SI - A600           Temperature           Max altitude         min °C -50           max °C 80           Resistance & Protection           Pollution degree         3	i uii-ioau cuitetti (FLA	a) for tiffee-phase At	O ITIULUI	24 ARU/\	Δ	1.4
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           AC current A 32           AL current A 10           DC voltage V 600           AC current A 10           DC voltage V 250           DC current A 1           A 1           Contact rating of auxiliary contacts according to UL           Ambient conditions           Temperature           Operating temperature           Min °C -50           max °C 70           Storage temperature           min °C -50           Max attitude           m 3000           Resistance & Protection           Pollution degree						
For single-phase AC motor	Yielded mechanical r	performance		at 000 v		
110/120V	riolada medilambar p		AC motor			
For three-phase AC motor   200/208V		ror origio pridoo		110/120V	HP	1
For three-phase AC motor   200/208V						
200/208V		for three-phase A	AC motor			
Contactor		•		200/208V	HP	5
Contactor				220/230V	HP	
Contactor				460/480V	HP	10
Contactor   AC current   A   32     Ac voltage   V   600   AC current   A   10   DC voltage   V   250   DC current   A   1   1   1   1   1   1   1   1   1				575/600V	HP	15
AC current	General USE					
Auxiliary contacts		Contactor				
AC voltage				AC current	Α	32
AC current   A   10     DC voltage   V   250     DC current   A   1     Contact rating of auxiliary contacts according to UL   SI - A600     Ambient conditions     Temperature		Auxiliary contacts	}		_	
DC voltage   V   250     DC current   A   1     Contact rating of auxiliary contacts according to UL     Ambient conditions     Temperature     Operating temperature     Min				_		
DC current						
Contact rating of auxiliary contacts according to UL         SI - A600           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						
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         3	Contact rating of access	lion, contacts assert	ling to I II	DC current	А	
Operating temperature		mary contacts accord	ing to or			31 - M000
Operating temperature           min %C -50 max %C 70           Storage temperature         min %C -60 max %C 80           Max altitude         m 3000           Resistance & Protection         3						
min max         °C 70           Storage temperature         min °C -60 max °C 80           Max altitude         m 3000           Resistance & Protection         3	· omporatoro	Operating temper	rature			
max         °C         70           Storage temperature           min         °C         -60           max         °C         80           Max altitude         m         3000           Resistance & Protection           Pollution degree         3		operating temper	0	min	°C	-50
Storage temperature           min or company or c						
min max         °C -60 max         -60 max         °C 80           Max altitude         m 3000         3000           Resistance & Protection           Pollution degree         3		Storage tempera	ture			
Max altitudemax°C80Resistance & Protectionm3000Pollution degree3				min	°C	-60
Max altitude m 3000  Resistance & Protection  Pollution degree 3						
Pollution degree 3	Max altitude					
	Resistance & Protect	tion				
Dimensions						3
	Dimensions					

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



### 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