



Product designation			Power contactor
Product type designation			BF12
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		А	28
Operational current le			
	AC-1 (≤40°C)	А	28
	AC-1 (≤55°C)	А	23
	AC-1 (≤70°C)	А	20
	AC-3 (≤440V ≤55°C)	А	12
	AC-4 (400V)	А	7.9
Rated operational power AC-1 (T≤40°C)			
	230V	kW	10
	400V	kW	18
	500V	kW	23
	690V	kW	32
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	А	17
	48V	А	15
	75V	А	13
	110V	А	6
	220V	А	-
IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series			
	≤24V	А	20
	48V	А	20
	75V	А	18
	110V	А	13
	220V	А	1
IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series			
	≤24V	А	22
	48V	А	22
	75V	А	20
	110V	А	16
	220V	А	11
IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series			
	≤24V	А	20
	48V	А	20
	75V	А	20
	110V	А	16
	220V	А	12



IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	А	12
	48V	Α	11
	75V	А	10
	110V	А	2
	220V	А	-
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series			
	≤24V	А	15
	48V	Α	13
	75V	Α	12
	110V	А	8
	220V	А	2
IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series			
	≤24V	А	18
	48V	Α	18
	75V	А	15
	110V	А	12
	220V	А	6
IEC max current le in DC3-DC5 with L/R \leq 15ms with 4 poles in series			
•	≤24V	А	15
	48V	А	15
	75V	А	15
	110V	А	16
	220V	А	7
Short-time allowable current for 10s (IEC/EN60947-1)		Α	150
Protection fuse			
	gG (IEC)	А	32
	aM (IEC)	A	12
Making capacity (RMS value)	(A	120
Breaking capacity at voltage			
	440V	А	96
	500V	А	96
	690V	A	94
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)			
	Ith	W	2
	AC-3	W	0.4
Tightening torque for terminals			
	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
	max	Ibin	1.5
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.8
	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
AWG/Kcmil			
	max		10
Flexible w/o lug conductor section	max		
richible w/o lug conductor accilon	min	mm²	1
	11011	111111	I

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FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 28A, AC COIL 60HZ, 48VAC

	2	
	mm²	6
Flexible c/w lug conductor section	····· 2	4
min	mm²	1
max Flexible with insulated spade lug conductor section	mm²	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
Fixing		35mm
Weight	g	360
Conductor section		
AWG/kcmil conductor section		
max		10
Operations		
Mechanical life	cycles	2000000
Electrical life	cycles	2000000
Safety related data		
Performance level B10d according to EN/ISO 13489-1	_	
rated load	cycles	200000
mechanical load	cycles	20000000
Mirror contats according to IEC/EN 609474-4-1		yes
EMC compatibility		yes
AC coil operating	M	
AC coil operating Rated AC voltage at 60Hz	V	48
AC coil operating Rated AC voltage at 60Hz AC operating voltage	V	
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz	V	
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up		48
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min	%Us	<u>48</u> 80
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max		48
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out	%Us %Us	48 80 110
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out min	%Us %Us %Us	48 80 110 20
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out min max	%Us %Us	48 80 110
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out AC average coil consumption at 20°C	%Us %Us %Us	48 80 110 20
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out min max	%Us %Us %Us	48 80 110 20
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out AC average coil consumption at 20°C of 60Hz coil powered at 60Hz	%Us %Us %Us %Us	48 80 110 20 55
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush	%Us %Us %Us %Us VA	48 80 110 20 55 75
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding	%Us %Us %Us %Us VA VA	48 80 110 20 55 75 9
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz	%Us %Us %Us %Us VA VA	48 80 110 20 55 75 9 2.5
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out Min max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times	%Us %Us %Us %Us VA VA VA W	48 80 110 20 55 75 9 2.5
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out Max cycles frequency Mechanical operation	%Us %Us %Us %Us VA VA VA W	48 80 110 20 55 75 9 2.5
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out min max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC	%Us %Us %Us %Us VA VA VA W	48 80 110 20 55 75 9 2.5
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out Max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control	%Us %Us %Us %Us VA VA VA W	48 80 110 20 55 75 9 2.5 3600
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out min max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC	%Us %Us %Us %Us VA VA VA W	48 80 110 20 55 75 9 2.5 3600 8
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out Max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC Closing NO min max	%Us %Us %Us %Us VA VA VA W cycles/h	48 80 110 20 55 75 9 2.5 3600
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out Min max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC Closing NO min max Opening NO	%Us %Us %Us %Us VA VA W cycles/h	48 80 110 20 55 75 9 2.5 3600 8 24
AC coil operating Rated AC voltage at 60Hz AC operating voltage of 60Hz coil powered at 60Hz pick-up min max drop-out Max AC average coil consumption at 20°C of 60Hz coil powered at 60Hz in-rush holding Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC Closing NO min max	%Us %Us %Us %Us VA VA VA vA va vva w cycles/h	48 80 110 20 55 75 9 2.5 3600 8

BF12T4A04860 The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding

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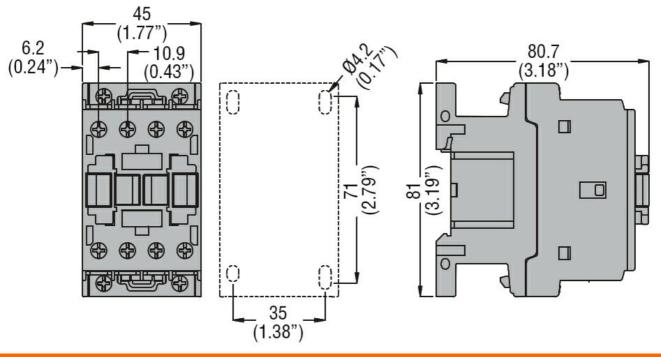
FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 28A, AC COIL 60HZ,

48VAC

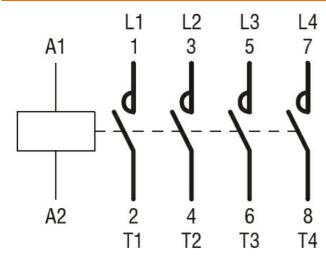
	Closing NC			
	5	min	ms	14
		max	ms	28
	Opening NC			
		min	ms	7
		max	ms	18
UL technical data				
) for three-phase AC motor			
, , , , , , , , , , , , , , , , , , ,		at 480V	А	11
		at 600V	А	11
Yielded mechanical pe	erformance			
	for single-phase AC motor			
		110/120V	HP	1
		230V	HP	2
	for three-phase AC motor			
		200/208V	HP	5
		220/230V	HP	5
		460/480V	HP	7.5
		575/600V	HP	10
General USE		010,0001		
	Contactor			
	Contactor	AC current	А	28
Short-circuit protectior	n fuse 600V		7	20
Choir choar protocilor	High fault			
	- iigii idan	Short circuit current	kA	100
		Fuse rating	A	30
		Fuse class	A	J
	Standard fault	1 030 01035		0
		Short circuit current	kA	5
		Fuse rating	A	70
Ambient conditions			~	
Temperature				
Tompolatale	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature	IIIdX	U	10
	Sidiage lemperature	min	°C	-60
		max	°C	-80 80
Max altitude		IIIdX		3000
Resistance & Protecti	on		m	3000
				3
Pollution degree Dimensions				J
Dimensions				



BF12T4A04860 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 28A, AC COIL 60HZ, 48VAC



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