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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		Α	28
Operational current le			
	AC-1 (≤40°C)	Α	28
	AC-1 (≤55°C)	Α	23
	AC-1 (≤70°C)	Α	20
	AC-3 (≤440V ≤55°C)	Α	12
	AC-4 (400V)	Α	7.9
Rated operational power AC-1 (T≤40°C)			
	230V	kW	10
	400V	kW	18
	500V	kW	23
150 H. J. BOA W. L. B. J.	690V	kW	32
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series	.0.41.4		
	≤24V	Α	17
	48V	A	15
	75V	A	13
	110V	A	6
150	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	40.417	^	00
	≤24V	A	20
	48V	A	20
	75V	A	18
	110V	A	13
IFC many assument to in DC4 with 1/D < 4 man with 2 males in social	220V	A	1
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	~ 241/	۸	20
	≤24V	A	22
	48V 75V	A	22 20
	110V	A A	16
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series	220V	Α	11
The max current le in DCT with L/R > This with 4 poles in series	~0.AV	۸	20
	≤24V 48V	A	20
	48 V 75 V	A A	20 20
	75V 110V	A	20 16
	220V	A	12
	220 V	^	14





IEC max current le in	DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	•	≤24V	Α	12
		48V	Α	11
		75V	Α	10
		110V	Α	2
		220V	Α	_
IEC max current le in	DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	,	≤24V	Α	15
		48V	Α	13
		75V	A	12
		110V	A	8
		220V	A	2
IEC may current le in	DC3-DC5 with L/R ≤ 15ms with 3 poles in series	220 V		
IEC max current le in	DC3-DC3 with L/K \geq 13ths with 3 poles in series	-04) /	۸	4.0
		≤24V	A	18
		48V	A	18
		75V	A	15
		110V	Α	12
		220V	Α	6
IEC max current le in	DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
		≤24V	Α	15
		48V	Α	15
		75V	Α	15
		110V	Α	16
		220V	Α	7
Short-time allowable of	current for 10s (IEC/EN60947-1)		Α	150
Protection fuse	,			
		gG (IEC)	Α	32
		aM (IEC)	A	12
Making capacity (RMS	S value)	(I LO)	A	120
Breaking capacity at v				
270aming oupdoing at W		440V	Α	96
		500V	A	96
		690V	A	94
Posistanas nar nala /s	avorago valuo)	0907		
Resistance per pole (a			mΩ	2.5
Power dissipation per	poie (average value)	1.1	147	0
		Ith	W	2
		AC-3	W	0.4
Tightening torque for t	erminals			
		min	Nm	1.5
		max	Nm	1.8
		min	lbin	1.1
		max	lbin	1.5
Tightening torque for o	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			
	, J/(C)	max		10
	Flexible w/o lug conductor section	IIIax		10
	i levine min ind collinaciol section	min	mm²	1
		111111	111111	ı





			•
Elevible a/w lug conductor acction	max	mm²	6
Flexible c/w lug conductor section	min	mm²	1
	max	mm²	4
Flexible with insulated spade lug conduct		111111	
Tioxible with indulated space may conduct	min	mm²	1
	max	mm²	4
D			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
			35mm
Weight		g	354
Conductor section			
AWG/kcmil conductor section			40
Operations	max		10
Operations Mechanical life		cycles	20000000
Electrical life		cycles cycles	2000000
Safety related data		cycles	2000000
Performance level B10d according to EN/ISO 13489-1			
1 chomiance level broa according to ENVIOO 10403 1	rated load	cycles	2000000
	mechanical load	cycles	2000000
Mirror contats according to IEC/EN 609474-4-1	moonamoanoaa	0,0.00	yes
EMC compatibility			yes
AC coil operating			,
Rated AC voltage at 60Hz		V	24
AC operating voltage			
of 60Hz coil powered at 60Hz			
pick-up			
	min		
		%Us	80
	max	%Us %Us	80 110
drop-out	max	%Us	110
drop-out	max min	%Us %Us	11020
	max	%Us	110
AC average coil consumption at 20°C	max min	%Us %Us	11020
	max min max	%Us %Us %Us	110 20 55
AC average coil consumption at 20°C	max min max in-rush	%Us %Us %Us	110 20 55 75
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz	max min max	%Us %Us %Us VA	110 20 55 75 9
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz	max min max in-rush	%Us %Us %Us	110 20 55 75
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency	max min max in-rush	%Us %Us %Us VA VA W	110 20 55 75 9 2.5
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation	max min max in-rush	%Us %Us %Us VA	110 20 55 75 9 2.5
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times	max min max in-rush	%Us %Us %Us VA VA W	110 20 55 75 9 2.5
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation	max min max in-rush	%Us %Us %Us VA VA W	110 20 55 75 9 2.5
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control	max min max in-rush	%Us %Us %Us VA VA W	110 20 55 75 9 2.5
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC	max min max in-rush	%Us %Us %Us VA VA W	110 20 55 75 9 2.5
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC	max min max in-rush holding	%Us %Us %Us VA VA VA Cycles/h	110 20 55 75 9 2.5 3600
AC average coil consumption at 20°C of 60Hz coil powered at 60Hz Dissipation at holding ≤20°C 50Hz Max cycles frequency Mechanical operation Operating times Average time for Us control in AC	max min max in-rush holding	%Us %Us %Us VA VA VA w cycles/h	110 20 55 75 9 2.5 3600
AC average coil consumption at 20°C	max min max in-rush holding	%Us %Us %Us VA VA VA w cycles/h	110 20 55 75 9 2.5 3600

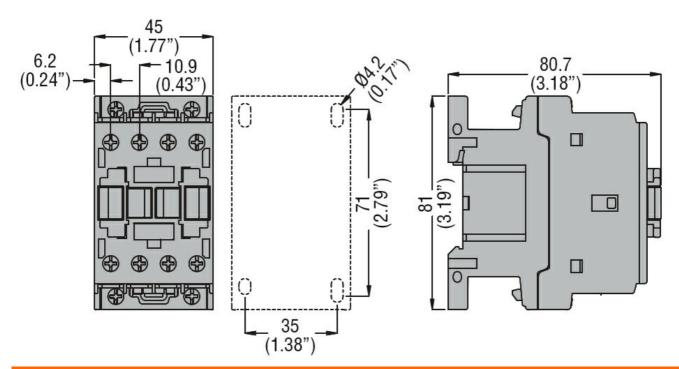




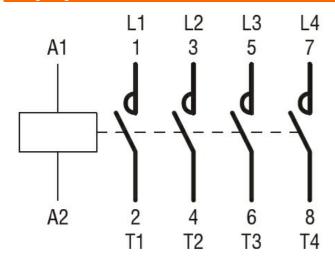
	Closing NC			
	Č	min	ms	14
		max	ms	28
	Opening NC			
		min	ms	7
		max	ms	18
UL technical data				
Full-load current (FLA)	for three-phase AC motor			
		at 480V	Α	11
		at 600V	Α	11
Yielded mechanical performance				
	for single-phase AC motor			
		110/120V	HP	1
		230V	HP	2
	for three-phase AC motor			_
		200/208V	HP	5
		220/230V	HP	5
		460/480V	HP	7.5
		575/600V	HP	10
General USE				
	Contactor			
		AC current	Α	28
Short-circuit protection	fuse, 600V			
	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
	Standard fault			
		Short circuit current	kA	5
		Fuse rating	Α	70
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	on			
Pollution degree				3
Dimensions				

ENERGY AND AUTOMATION

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



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