

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



Product designation Power contactor Product type designation BF12 Contact characteristics 4 Nr. Number of poles Rated insulation voltage Ui IEC/EN ٧ 690 k√ Rated impulse withstand voltage Uimp 6 Operational frequency min Ηъ 25 max Hz 400 IEC Conventional free air thermal current Ith 28 Α 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) 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 Α 17 48V 15 75V Α 13 110V Α 6 220V IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series ≤24V Α 20 48V Α 20 75V Α 18 110V Α 13 220V Α 1 IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series 22 ≤24V Α 48V 22 Α 75V Α 20 110V Α 16 220V 11 IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series ≤24V 20 Α 48V Α 20 75V 20 Α 110V Α 16 220V 12





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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 (KWIS value)				
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





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	max	mm²	6
	Flexible c/w lug conductor section		
	min	mm²	1
	max	mm²	4
	Flexible with insulated spade lug conductor section	2	
	min	mm²	1
-	max	mm²	4
Power terminal protec	tion according to IEC/EN 60529		IP20 when
Mechanical features	-		properly wired
Operating position			
Operating position	normal		Vertical plan
	allowable		±30°
	allowable		Screw / DIN rail
Fixing			35mm
Weight		g	350
Conductor section		9	
23.1443.01 000.011	AWG/kcmil conductor section		
	max		10
Operations			y
Mechanical life		cycles	20000000
Electrical life		cycles	2000000
Safety related data		0,0100	2000000
•	0d according to EN/ISO 13489-1		
	rated load	cycles	2000000
	mechanical load	cycles	20000000
Mirror contats accordi	ng to IEC/EN 609474-4-1	-,	yes
EMC compatibility	3		yes
AC coil operating			
Rated AC voltage at 6	0Hz	V	220
AC operating voltage			
, , ,	of 60Hz coil powered at 60Hz		
	, pick-up		
	min	%Us	80
	max	%Us	110
	drop-out		
	min	%Us	20
	max	%Us	55
AC average coil consu	umption at 20°C		
	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 co			
	in AC		
	Closing NO		
	min	ms	8
	max	ms	24
	Opening NO		
	min	ms	10
	max	ms	20





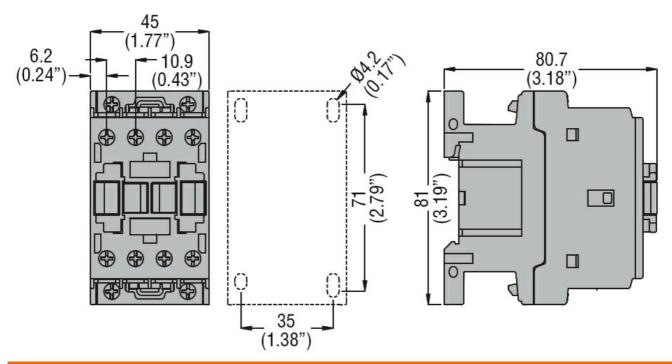
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	Closing NC					
	· ·	min	ms	14		
		max	ms	28		
	Opening NC					
		min	ms	7		
		max	ms	18		
UL technical data						
Full-load current (FLA) for three-phase AC motor						
		at 480V	Α	11		
		at 600V	Α	11		
Yielded mechanical pe	Yielded mechanical performance					
	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						
	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	n Table 1					
Pollution degree				3		
Dimensions						

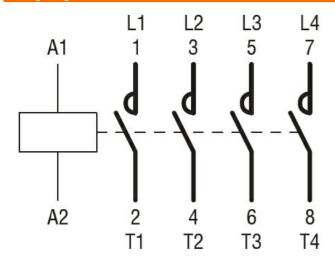
220VAC



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