





Product designation			Power contactor
Product type designation			BF12
Contact characteristics			
Number of poles		Nr.	3
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-3 (T≤55°C)			
	230V	kW	3.2
	400V	kW	5.7
	415V	kW	6.2
	440V	kW	5.5
	500V	kW	5
	690V	kW	5
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	Α	15
	75V	Α	13
	110V	Α	6
	220V	Α	_
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	220 V	, ,	•
	≤24V	Α	22
	48V	A	22
	75V	A	20
	110V	A	16
	1100	^	10





IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	220V ≤24V 48V 75V 110V 220V	A A A	20 20 20 20
	48V 75V 110V	Α	20
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	48V 75V 110V	Α	20
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	75V 110V		
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	110V	Α	20
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			~ U
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	2201/	Α	16
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	ZZU V	Α	12
·			
	≤24V	Α	12
	48V	Α	11
	75V	Α	10
	110V	A	2
	220V	A	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
inco max current le in 200-200 with E/IV = 10m3 with 2 poles in series	≤24V	Α	15
	48V	A	13
	75V	A	12
	110V	A	8
IFO	220V	Α	2
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	.0.0.1		4.0
	≤24V	Α	18
	48V	Α	18
	75V	Α	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 current for 10s (IEC/EN60947-1)		Α	150
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	12
Making capacity (RMS value)		Α	120
Breaking capacity at voltage			
	440V	Α	96
	500V	A	96
	690V	A	94
Resistance per pole (average value)		mΩ	2.5
Power dissipation per pole (average value)		11122	2.0
i ower dissipation per pole (average value)	Ith	W	2
	AC-3	W	0.4
Tightoning targue for terminals	AC-3	VV	0.4
Tightening torque for terminals		Nime	1 5
	min	Nm	1.5
	max	Nm	1.8
	min	Ibin	1.1
	max	Ibin	1.5
This control of the c			
Tightening torque for coil terminal			
Tightening torque for coil terminal	min	Nm	0.8
Tightening torque for coil terminal	min max min	Nm Nm Ibin	0.8 1 0.8





		max	Ibin	0.74
	s simultaneously connectable		Nr.	2
Conductor section	AMAQ (IC)			
	AWG/Kcmil			10
	Flovible w/e lug conductor acction	max		10
	Flexible w/o lug conductor section	min	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section	IIIax	111111	0
	rickible of wind contactor section	min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			`
	эр эн	min	mm²	1
		max	mm²	4
Dower terminal prote	action according to IEC/EN 60520			IP20 when
Power terminal prote	ection according to IEC/EN 60529			properly wired
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	348
Conductor section				
	AWG/kcmil conductor section			
		max		10
Auxiliary contact cha	aracteristics			
Thermal current Ith			Α	10
IEC/EN 60947-5-1 c				A600 - P600
Operating current A	C15			
		230V	Α	3
		400V	A	1.9
0	040	500V	Α	1.4
Operating current Do	C12	440)/	^	
O	040	110V	A	5.7
Operating current Do	UI3	0.417	۸	E 7
		24V 48V	A	5.7
		48 V 60 V	A A	2.9 2.3
		110V	A	2.3 1.25
		110V 125V	A	1.1
		220V	A	0.55
		600V	Α	0.2
Operations		,,,,,		
Mechanical life			cycles	20000000
			cycles	2000000
Electrical life				
Electrical life Safety related data				
Safety related data	310d according to EN/ISO 13489-1			
Safety related data	310d according to EN/ISO 13489-1	rated load	cycles	2000000
Safety related data	-	rated load nechanical load	cycles cycles	2000000 20000000
Safety related data Performance level E	-		-	
Safety related data Performance level E	m		-	20000000



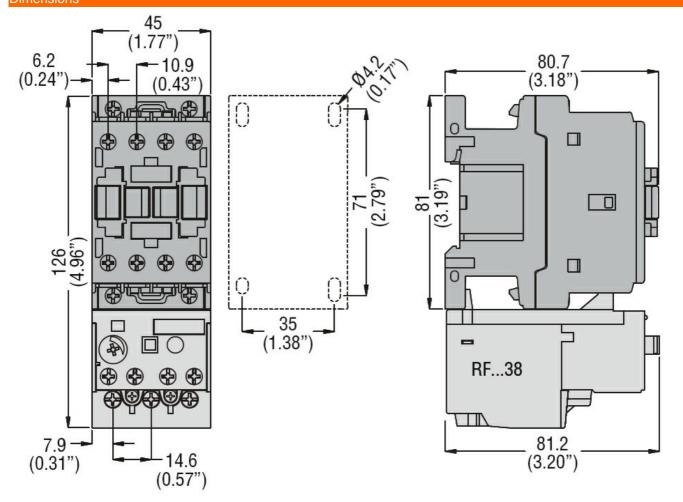


Rated AC voltage at 60	0Hz		V	575
AC operating voltage				
	of 60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	80
		max	%Us	110
	drop-out	•	0/11-	00
		min	%Us	20
AC average coil consu	umption at 20°C	max	%Us	55
AC average con consu	·			
	of 60Hz coil powered at 60Hz	in-rush	VA	75
		holding	VA VA	9
Dissipation at holding :	<20°C 50Hz	Holding	W	2.5
Max cycles frequency	S20 C 30HZ		VV	2.0
Mechanical operation			cycles/h	3600
Operating times			Oyule3/11	
Average time for Us co	ontrol			
worde unic for 03 CC	in AC			
	Closing NO			
	Closing IVC	min	ms	8
		max	ms	24
	Opening NO			
	-1 3 -	min	ms	10
		max	ms	20
	Closing NC			
	Ţ	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				
	for single-phase AC motor			
		110/120V	HP	1
		230V	HP	2
	for three-phase AC motor	000/0001	115	F
		200/208V	HP	5
		220/230V	HP	5
		460/480V	HP up	7.5
General USE		575/600V	HP	10
General USE	Contactor			
	Contactor	AC current	Α	28
	Auvilian/ contacts	AC current		20
	Auxiliary contacts	AC voltage	\/	600
		AC voltage AC current	V A	10
		DC voltage	V	250
		DC voltage DC current	V A	250 1
Short-circuit protection	fuse 600V	DO CUITETIL		<u> </u>
Short official protection	High fault			
	i iigii iault			





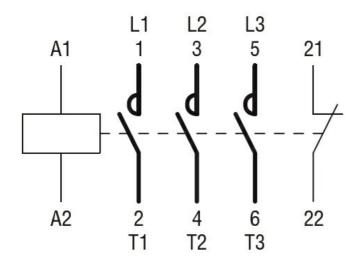
		Short circuit current	kA	100
		Fuse rating	Α	30
		Fuse class		J
Sta	ndard fault			
		Short circuit current	kA	5
		Fuse rating	Α	70
Contact rating of auxiliary co	ontacts according to UL			A600 - P600
Ambient conditions				
Temperature				
Ope	erating temperature			
		min	°C	-50
		max	°C	70
Sto	rage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
Dimensions				



Wiring diagrams

ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, AC COIL 60HZ, 575VAC, 1NC AUXILIARY CONTACT



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