



Power contactor  
BF12

Product designation

Product type designation

**Contact characteristics**

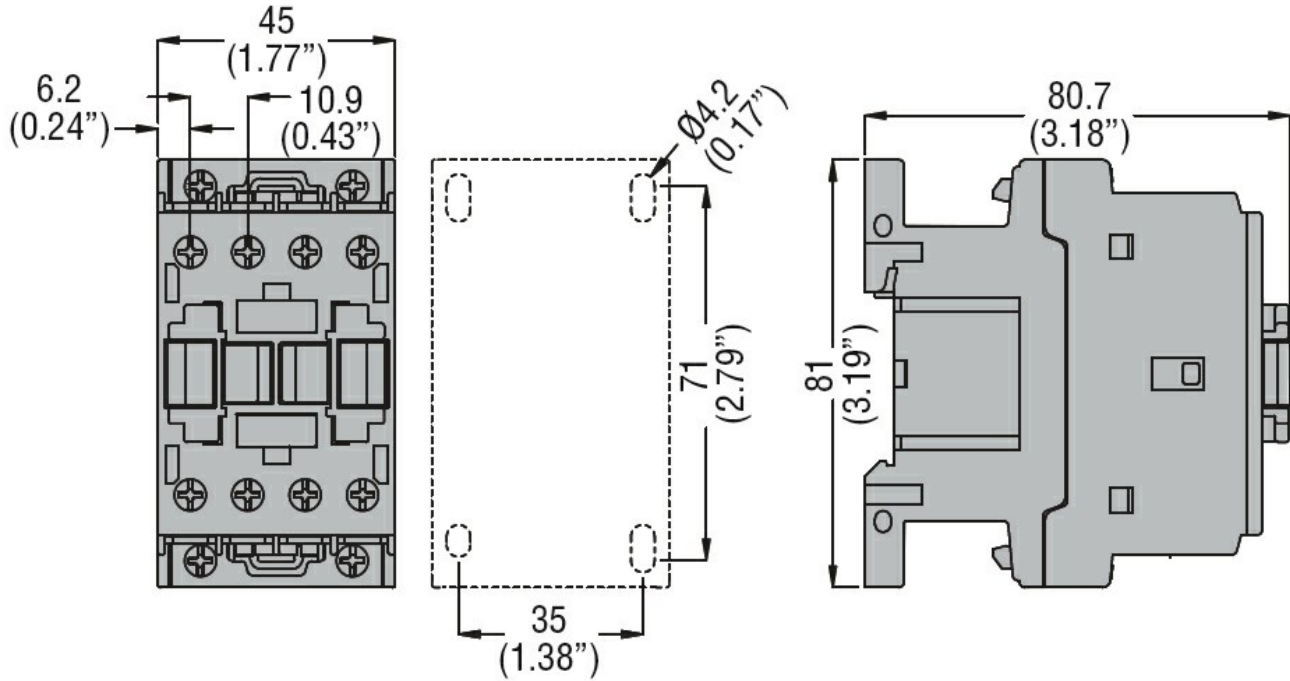
Number of poles	nr.	3	
Rated insulation voltage U <sub>i</sub>	V	690	
Rated impulse withstand voltage U <sub>imp</sub>	kV	6	
Operating frequency	Operational frequency min	Hz 25	
	Operational frequency max	Hz 400	
Conventional free air thermal current I <sub>th</sub>	A	28	
Operating current	Operational current AC3 (≤440V ≤55°C)	A 12	
	Operational current AC4 (400V)	A 7.9	
Short-time allowable current for 10s (IEC/EN60947-1)	A	150	
Protection fuse	gG (IEC)	A 32	
	aM (IEC)	A 12	
Making capacity (RMS value)	A	120	
Breaking capacity at voltage	Breaking capacity 440V	A 96	
	Breaking capacity 500V	A 96	
	Breaking capacity 690V	A 94	
Resistance per pole (average value)	mΩ	2.5	
Power dissipation per pole (average value)	Power dissipation pole (average value) I <sub>th</sub>	W 2	
	AC3	W 0.4	
Tightening torque for terminals	min	Nm 1.5	
	max	Nm 1.8	
	min	lbft 1.1	
	max	lbft 1.5	
Tightening torque for coil terminal	min	Nm 0.8	
	max	Nm 1	
	min	lbft 0.59	
	max	lbft 0.74	
max number of wires simultaneously connectable	nr.	2	
Conductor section	AWG	min	16
		max	10
Flexible w/o lug conductor section	min	mm <sup>2</sup> 1	
	max	mm <sup>2</sup> 6	
Flexible c/w lug conductor section			

	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	4
Flexible with insulated spade lug conductor section			
	min	mm <sup>2</sup>	1
	max	mm <sup>2</sup>	4
Power terminal protection according to IEC/EN 60529			IP20
<b>Auxiliary contact characteristics</b>			
Type of contact			1 NA
Thermal current Ith			A 28
IEC/EN 60947-5-1 designation			A600
<b>Ambient conditions</b>			
Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude			m 3,000
Operating position			
	normal allowable		Vertical plan ±30°
Mounting			Screw / DIN rail 35mm
Weight			g 0.367
<b>Operations</b>			
Mechanical life			Cycles 20,000,000
Electrical life			Cycles 2000000
<b>Safety related data</b>			
Performance level B10d according to EN/ISO 13489-1 -			
	Performance level B10d according to EN/ISO 13489-1 1000000 load		
	Performance level B10d according to EN/ISO 13489-2 2000000 load		
Mirror contacts according to IEC/EN 60947-4-1			Yes
EMC compatibility			Yes
<b>AC coil operating</b>			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	12
	max	V	600
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up			
	min	%Us	85
	max	%Us	110
drop-out			
	min	%Us	20
	max	%Us	55

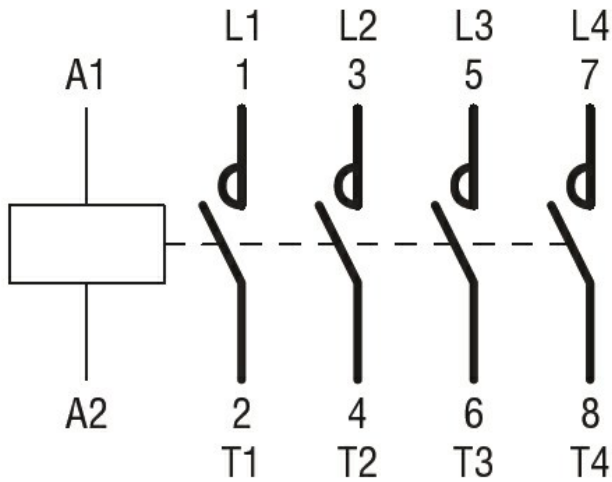
of 60Hz coil powered at 60Hz			
pick-up		min	%Us 80
		max	%Us 110
drop-out			
		min	%Us 20
		max	%Us 55
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
		in-rush	VA 75
		holding	VA 9
of 50/60Hz coil powered at 60Hz			
		in-rush	VA 70
		holding	VA 6.5
of 60Hz coil powered at 60Hz			
		in-rush	VA 75
		holding	VA 9
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	2.5
<b>Max cycles frequency</b>			
Mechanical operations		Cycles/h	3,600
<b>Operating times</b>			
Average time for Us control			
in AC			
Closing NO			
		min	ms 8
		max	ms 24
Opening NO			
		min	ms 10
		max	ms 20
Closing NC			
		min	ms 14
		max	ms 28
Opening NC			
		min	ms 7
		max	ms 18
<b>UL technical data</b>			
Full-load current (FLA) for three-phase AC motor			
		at 480V	A 11
		at 600V	A 11
Yielded mechanical performance			
for single-phase AC motor			
		at 110/120V	hp 1
		at 230V	hp 2
for three-phase AC motor			
		at 200/208V	hp 5
		at 220/230V	hp 5
		at 460/480V	hp 7.5
		at 575/600V	hp 10
Contact rating of auxiliary contacts according to UL		SI - A600	
General USE			
Contactor			
		AC current	A 28
Auxiliary contacts			
		AC voltage	V 600

AC current	A	10
DC voltage	V	250
DC current	A	1

**Dimensions**



**Wiring diagrams**



**Certifications and compliance**

**Certifications**

- CSA C22.2 n° 60947-1
- CSA C22.2 n° 60947-4-1
- IEC/EN 60947-1
- IEC/EN 60947-4-1
- UL 60947-1
- UL 60947-4-1

**Compliance**

- CCC
- cULus
- EAC

**ETIM 6 classification**

EC000066 - Power contactor, AC switching