BF1201D024

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 12A, DC COIL, 24VDC, 1NC AUXILIARY CONTACT

Product designation			Power contactor
Product type designation			BF12
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui		V	690
Rated impulse withstand voltage Uimp		kV	6
Operating frequency			
	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith		A	28
Operating current			
	Operational current AC1 (≤40°C)	A	28
	Operational current AC3 (≤440V ≤55°C)	A	12
	Operational current AC4 (400V)	A	7.9
Rated operational power AC1 (T≤40°C)			
	230V	kW	10
	400V	kW	18
	500V	kW	23
	690V	kW	32
Rated operational power AC3 (T≤55°C)			
	230V	kW	3.2
	400V	kW	5.7
	415V	kW	6.2
	440V	kW	6.2
	500V	kW	7.5
	690V	kW	10
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) Ith	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	0.8
		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	mm²	1
		max	mm²	6
	Flexible c/w lug conductor section			
		min	mm²	1
		max	mm²	4
	Flexible with insulated spade lug conductor section			
		min	mm²	1
		max	mm²	4
Power terminal protection according to IEC/EN 60529				IP20 when wired
Auxiliary contact characteristics				
Type of contact				1 NC
Thermal current Ith			A	10
IEC/EN 60947-5-1 designation				A600 - P600
Operational current AC1 (≤40°C)			A	28
Operating current AC15				
		230V	A	3
		400V	A	1.9
		500V	A	1.4
Operating current DC12				
		110V	A	5.7
Operating current DC13				
		24V	A	5.7
		48V	A	2.9
		60V	A	2.3
		110V	A	Screw / DIN rail 35mm
		125V	A	0.6
		220V	A	0.2
		600V	A	1.2
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-50
		max	°C	70
	Storage temperature			
		min	°C	-60
		max	°C	80
Max altitude			m	3000
Operating position				
		normal		Vertical plan
		allowable		±30°
Mounting				Screw / DIN rail 35mm
Weight			g	0.49

Operations				
Mechanical life			Cycles	20000000
Electrical life			Cycles	2000000
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		rated load	Cicli	2000000
		mechanical load	Cicli	20000000
Mirror contats according to IEC/EN 609474-4-1				yes
EMC compatibility				yes
DC coil operating				
DC rated control voltage				
		min	V	6
		max	V	250
DC operating voltage				
	pick-up			
		min	%Us	0.7
		max	%Us	1.25
	drop-out			
		min	%Us	0.1
		max	%Us	0.40
Average coil consuption ≤20°C				
		in-rush	W	5.4
		holding	W	5.4
Max cycles frequency				
Mechanical operations			Cycles/h	3600
Operating times				
Average time for Us control				
	in DC			
		Closing NO		
		min	ms	54
		max	ms	66
		Opening NO		
		min	ms	14
		max	ms	17
		Closing NC		
		min	ms	24
		max	ms	30
		Opening NC		
		min	ms	47
		max	ms	57
UL technical data				
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				A600 - P600

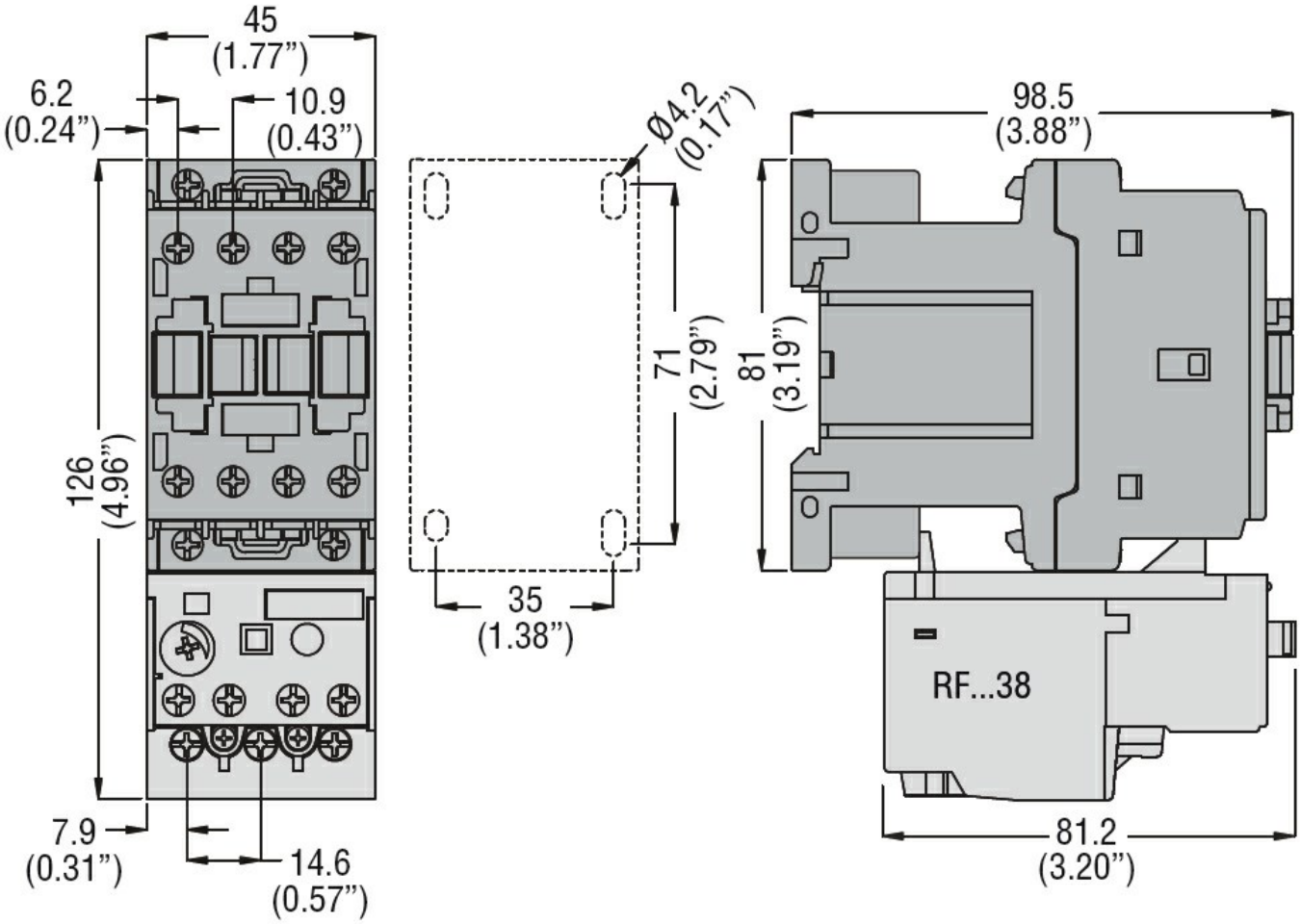
General USE

Contactor			
	AC current	A	28

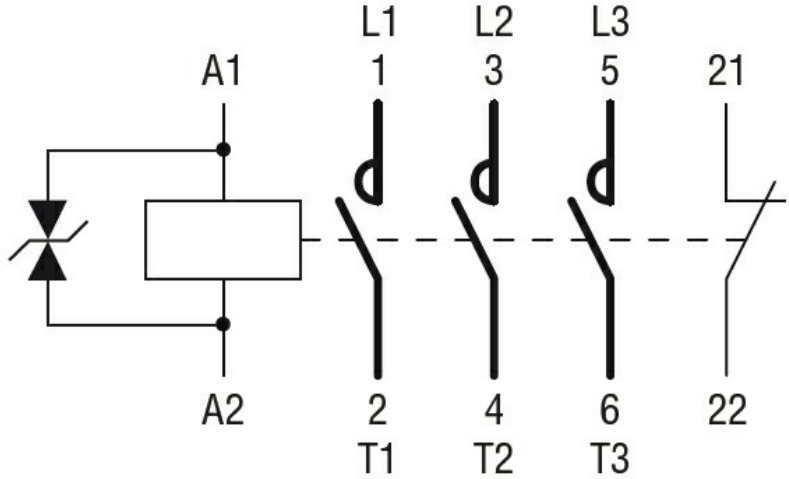
Other features

Pollution degree	3

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