



Contact characteristics

Number of poles	Nr.	4
Rated insulation voltage U_i IEC/EN	V	1000
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	115
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	400V	A 115
	600V	A 100
	800V	A 90
	1000V	A 80
Short-time allowable current for 10s (IEC/EN60947-1)	A	640
Protection fuse	gG (IEC)	A 125
	aM (IEC)	A 80
Resistance per pole (average value)	mΩ	0.6
Power dissipation per pole (average value)	I_{th}	W 7.9
Tightening torque for terminals	min	Nm 4
	max	Nm 5
	min	lbin 2.95
	max	lbin 3.69
Tightening torque for 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	
	max	2
Flexible w/o lug conductor section	min	mm ² 1.5
	max	mm ² 35
Flexible c/w lug conductor section	min	mm ² 1.5
	max	mm ² 35
Power terminal protection according to IEC/EN 60529		IP20 front

Mechanical features

Operating position	normal allowable	Vertical plan $\pm 30^\circ$
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Fixing			Screw / DIN rail 35mm	
Weight		g	1240	
Operations				
Mechanical life		cycles	15000000	
Safety related data				
Performance level B10d according to EN/ISO 13489-1				
		mechanical load	cycles	15000000
EMC compatibility			yes	
AC coil operating				
Rated AC voltage at 60Hz		V	48	
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 consumption at 20°C				
		of 60Hz coil powered at 60Hz		
		in-rush	VA	210
		holding	VA	15
Dissipation at holding ≤20°C 50Hz		W	5	
Max cycles frequency				
Mechanical operation		cycles/h	3600	
Operating times				
Average time for Us control				
		in AC		
		Closing NO		
		min	ms	12
		max	ms	28
		Opening NO		
		min	ms	8
		max	ms	22
		in DC		
		Closing NO		
		min	ms	40
		max	ms	85
		Opening NO		
		min	ms	20
		max	ms	55
UL technical data				
Rated operational voltage AC (UL)		V	600	
General USE				
		Contactor		
		AC current	A	115
		4 poles in series DC1		
		600V	A	100
Ambient conditions				
Temperature				
		Operating temperature		
		min	°C	-50
		max	°C	70

Storage temperature

min	°C	-60
max	°C	80
	m	3000

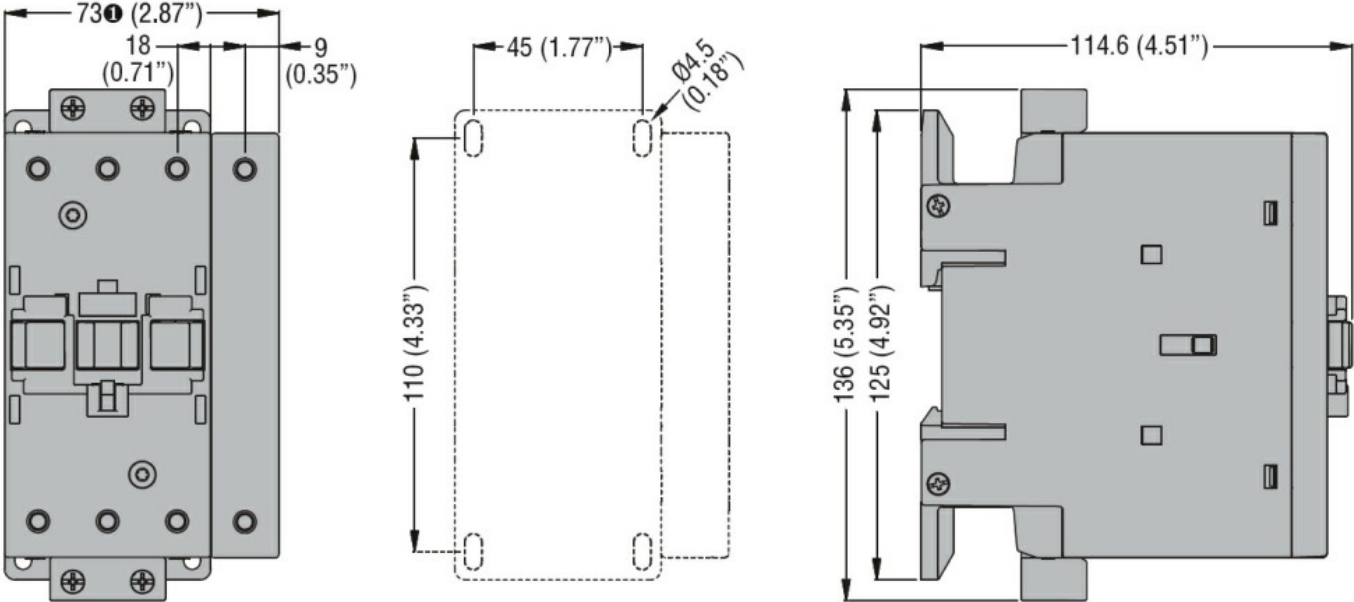
Max altitude

Resistance & Protection

Pollution degree

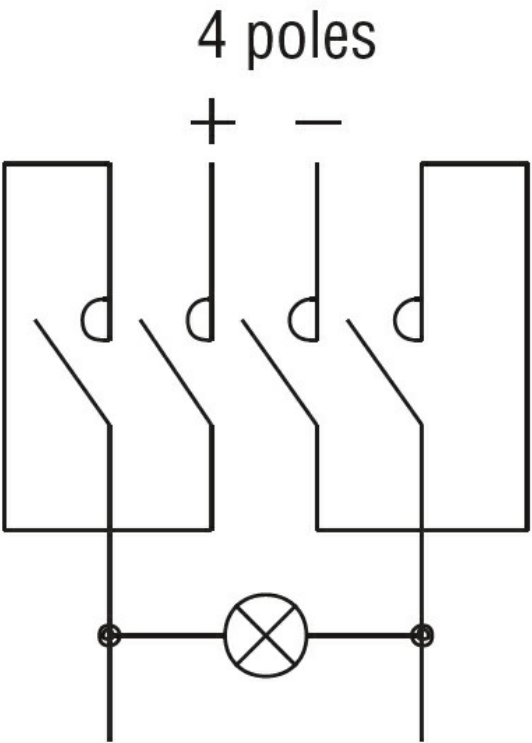
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Dimensions



① BF80T2 82mm/3.23"

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

cULus

ETIM classification

ETIM 8.0

EC002552 -
Power contactor,
DC switching