



Contact characteristics

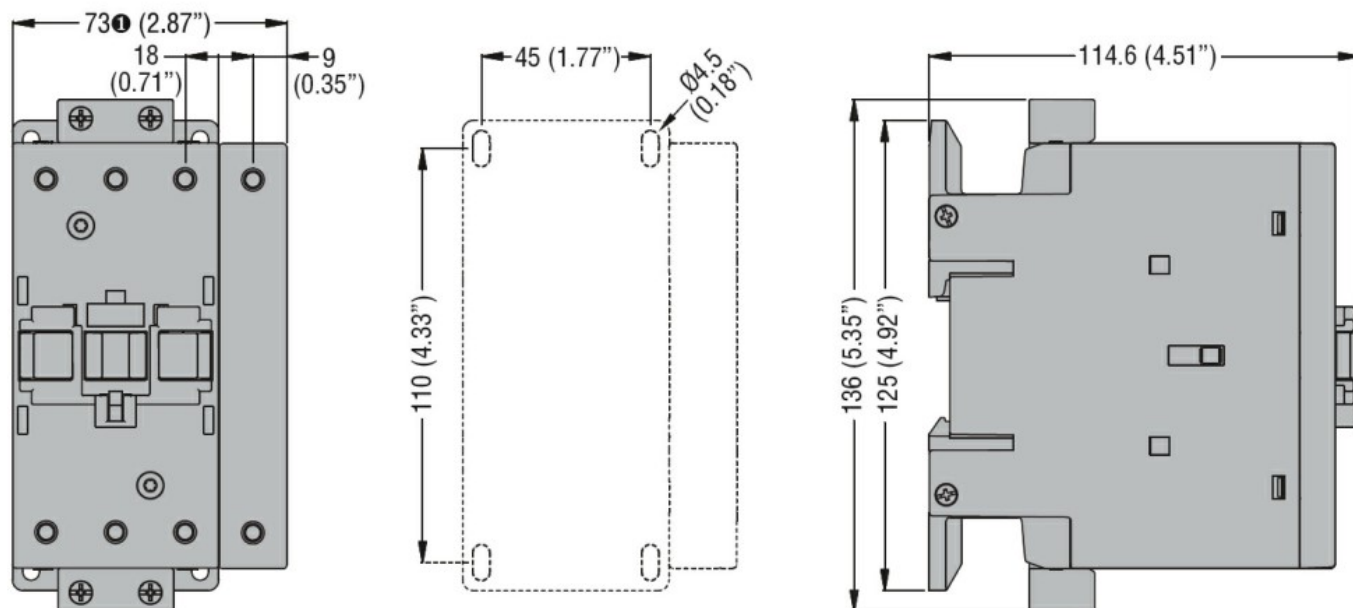
Number of poles	Nr.	4
Rated insulation voltage U_i IEC/EN	V	1000
Rated impulse withstand voltage U_{imp}	kV	8
Operational frequency	min	Hz 25
	max	Hz 400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A	115
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in 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 $\pm 30^\circ$
--------------------	---------------------	---------------------------------

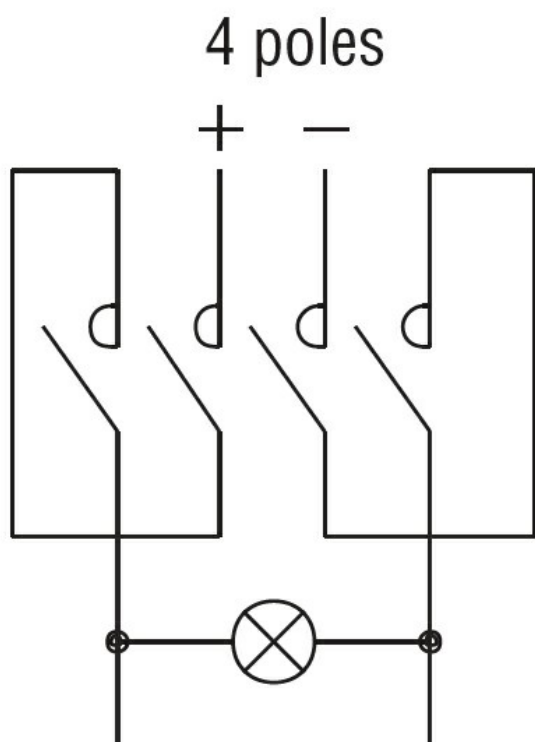
Fixing			Screw / DIN rail 35mm			
Weight		g	1240			
Operations						
Mechanical life		cycles	15000000			
Safety related data						
Performance level B10d according to EN/ISO 13489-1						
		mechanical load	cycles	15000000		
EMC compatibility			yes			
AC coil operating						
Rated AC voltage at 50/60Hz		V	48			
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		
AC average coil consumption at 20°C						
of 50/60Hz coil powered at 50Hz		in-rush	VA	210		
		holding	VA	15		
of 50/60Hz coil powered at 60Hz		in-rush	VA	195		
		holding	VA	13		
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
Max altitude			m	3000
Resistance & Protection				
Pollution degree				3
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