



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
Operational current I_e	AC-1 ($\leq 55^\circ\text{C}$)	A 0
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)	m Ω	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 ±30°
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		575
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

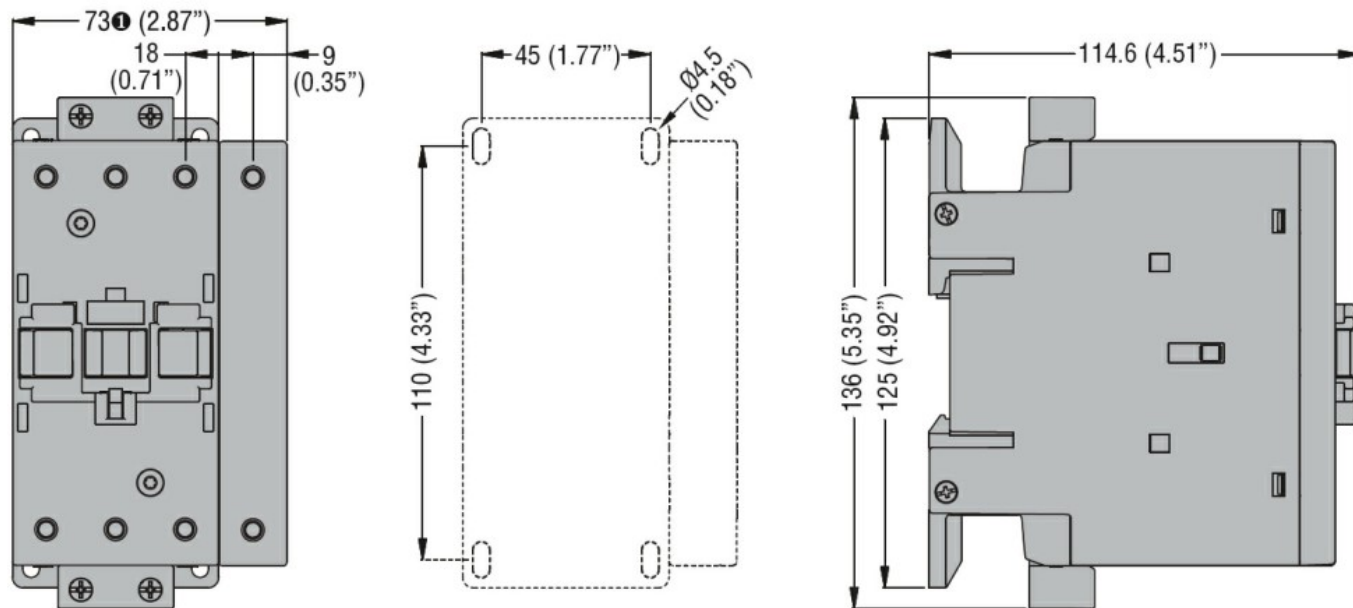
Max altitude

Resistance & Protection

Pollution degree

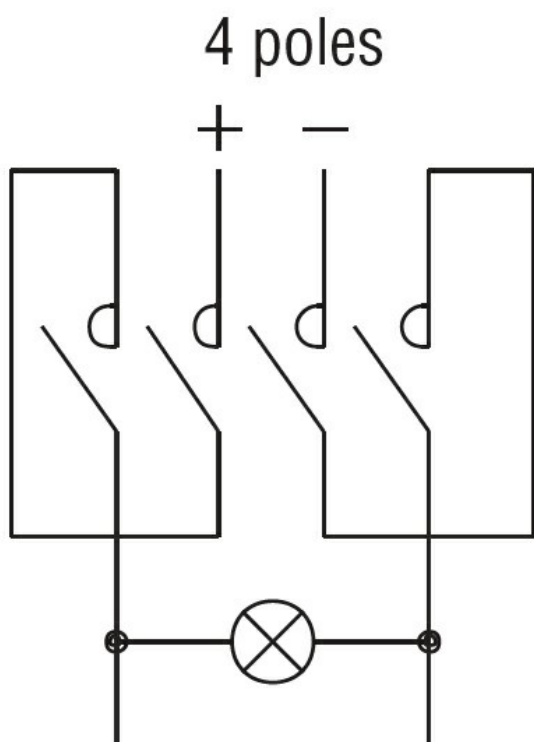
3

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