



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 50/60Hz	V	110		
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

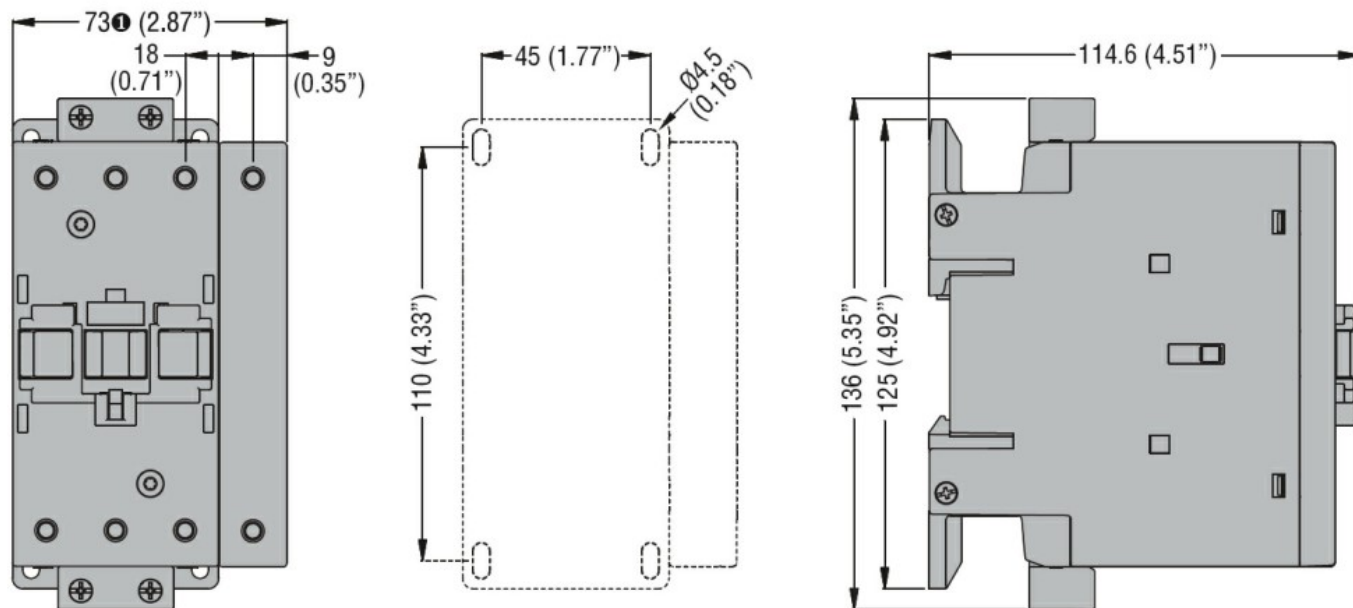
min	°C	-60
max	°C	80

Max altitude m 3000

Resistance & Protection

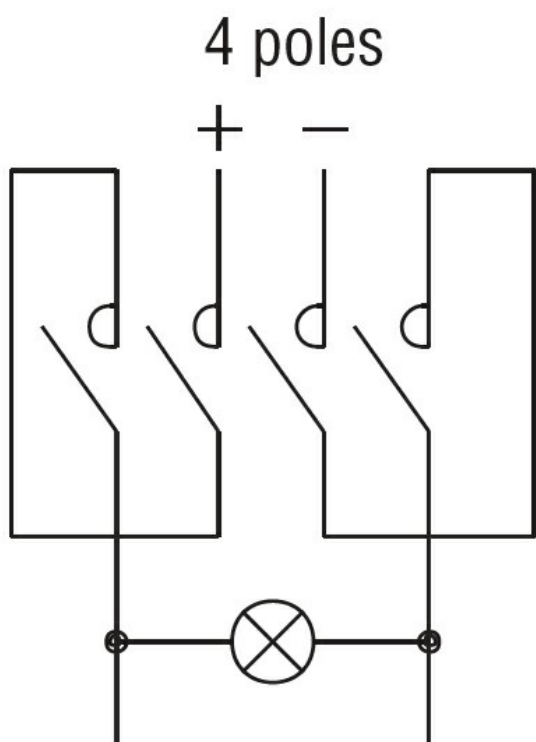
Pollution degree 3

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