



Product designation
Product type designation

Power contactor
BFD80

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 max	Hz Hz 25 400
IEC Conventional free air thermal current I_{th}	A	115
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series	400V 600V 800V 1000V	A A A A 115 100 90 80
Short-time allowable current for 10s (IEC/EN60947-1)	A	640
Protection fuse	gG (IEC) aM (IEC)	A A 125 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 max min max	Nm Nm lbin lbin 4 5 2.95 3.69
Tightening torque for coil terminal	min max min max	Nm Nm lbin lbin 0.8 1 0.8 0.74
Max number of wires simultaneously connectable	Nr.	2
Conductor section	AWG/Kcmil	
	max	2
Flexible w/o lug conductor section	min max	mm ² mm ² 1.5 35
Flexible c/w lug conductor section	min max	mm ² mm ² 1.5 35
Power terminal protection according to IEC/EN 60529		IP20 front

Mechanical features

Operating position

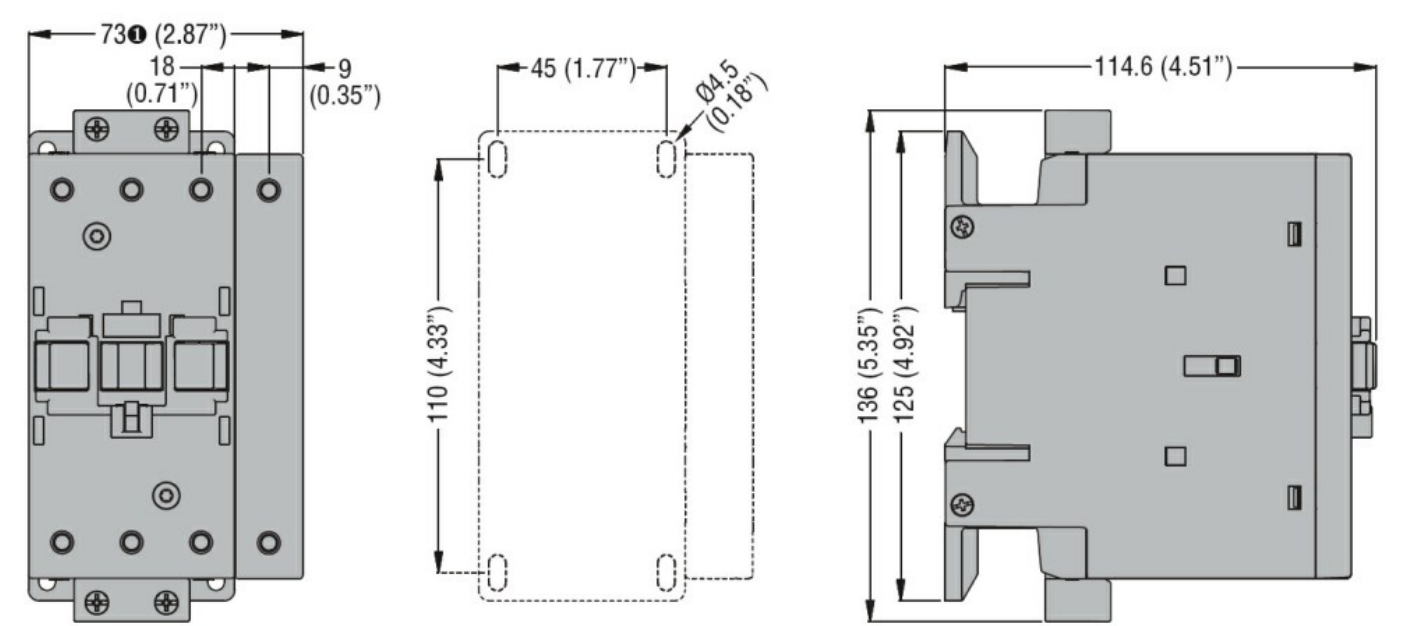
	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight	g		1240
Operations			
Mechanical life		cycles	15000000
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	mechanical load	cycles	15000000
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 60Hz	V		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
Max altitude	m		3000

Resistance & Protection

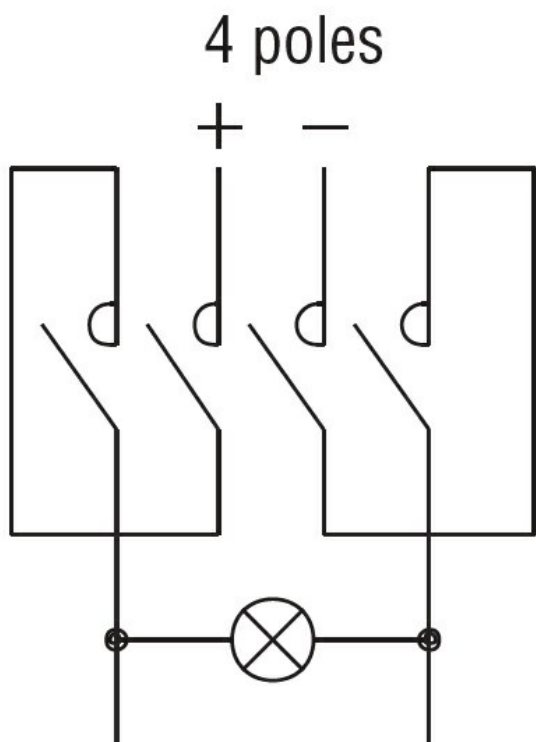
Pollution degree	3
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Dimensions



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