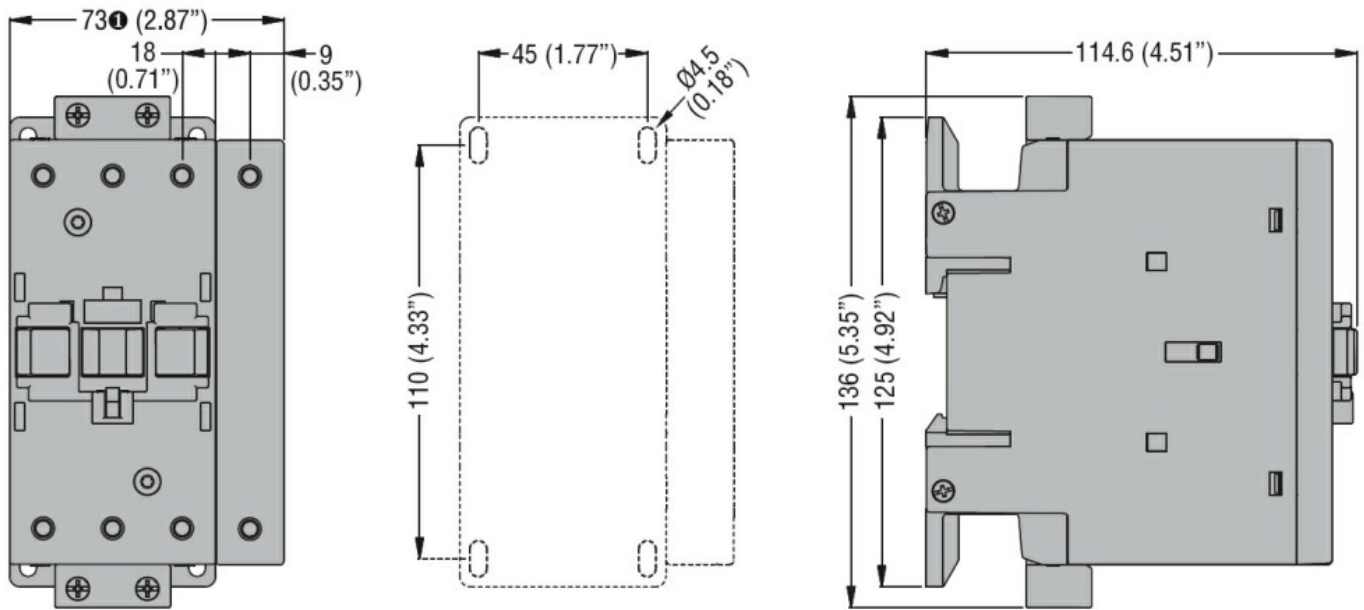




Product designation			Power contactor
Product type designation			BFD80
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	115
IEC max current Ie in DC1 with L/R = 1ms 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?	0.6
Power dissipation per pole (average value)			
	Ith	W	7.9
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	Ibin	2.95
	max	Ibin	3.69
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
Max number of wires simultaneously connectable		Nr.	2
Conductor section			
	AWG/Kcmil		
	max		2
Flexible w/o lug conductor section			
	min	mm²	1.5
	max	mm²	35
Flexible c/w lug conductor section			
	min	mm²	1.5
	max	mm²	35
Power terminal protection according to IEC/EN 60529			IP20 front
Mechanical features			
Operating position			

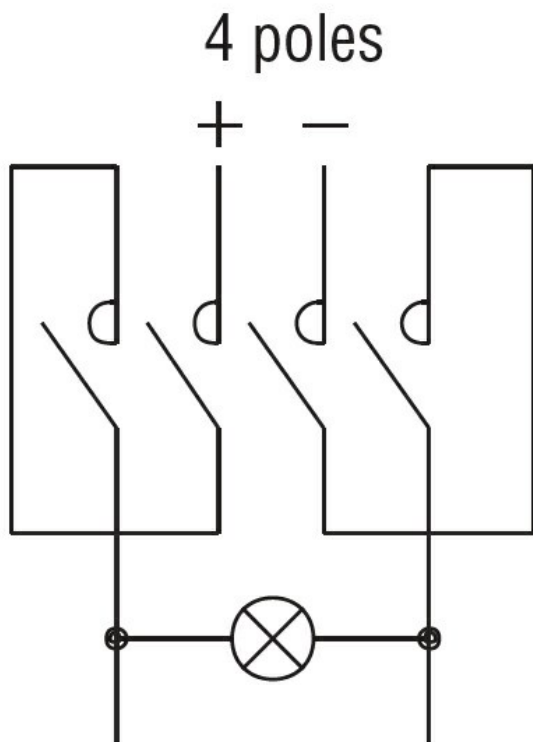
	normal allowable	Vertical plan ±30°	
Fixing		Screw / DIN rail 35mm	
Weight	g	1280	
Conductor section	AWG/kcmil conductor section		
	max	2	
Operations			
Mechanical life	cycles	15000000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1	mechanical load	cycles	15000000
EMC compatibility		yes	
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz	min	V	20
	max	V	48
Rated AC voltage at 50/60Hz		V	24
AC operating voltage	of 50/60Hz coil powered at 50Hz		
	pick-up		
	min	%Us	80 Us min
	max	%Us	110 Us max
	drop-out		
	max	%Us	=70 Us min
	of 50/60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	80 Us min
	max	%Us	110 Us max
	drop-out		
	max	%Us	=70 Us min
AC average coil consumption at 20°C	of 50/60Hz coil powered at 50Hz		
	in-rush	VA	35...120
	holding	VA	1.5...3.7
	of 50/60Hz coil powered at 60Hz		
	in-rush	VA	35...120
	holding	VA	1.5...3.7
	of 60Hz coil powered at 60Hz		
	in-rush	VA	210
	holding	VA	15
Dissipation at holding =20°C 50Hz		W	1...2.5
DC coil operating			
DC rated control voltage	min	V	20
	max	V	48
DC rated control voltage		V	24
DC operating voltage	pick-up		
	min	%Us	85 Us min
	max	%Us	110 Us max
	drop-out		

		max	%Us	=70 Us min
Average coil consumption =20°C		in-rush	W	23...68
		holding	W	1.2...1.9
Max cycles frequency				
Mechanical operation		cycles/h		1500
Operating times				
Average time for Us control				
in AC				
Closing NO		min	ms	40
		max	ms	85
Opening NO		min	ms	20
		max	ms	55
in DC				
Closing NO		min	ms	40
		max	ms	85
Opening NO		min	ms	20
		max	ms	55
UL technical data				
General USE				
Contactor				
		AC current	A	115
4 poles in series DC1				
		600V	A	100
Ambient conditions				
Temperature				
Operating temperature		min	°C	-40
		max	°C	70
Storage temperature		min	°C	-50
		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 60947-1
IEC/EN 60947-4-1
UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0

EC002552 -
Power contactor,
DC switching