



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	0.8
	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	1240
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 60Hz	V	120
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		
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

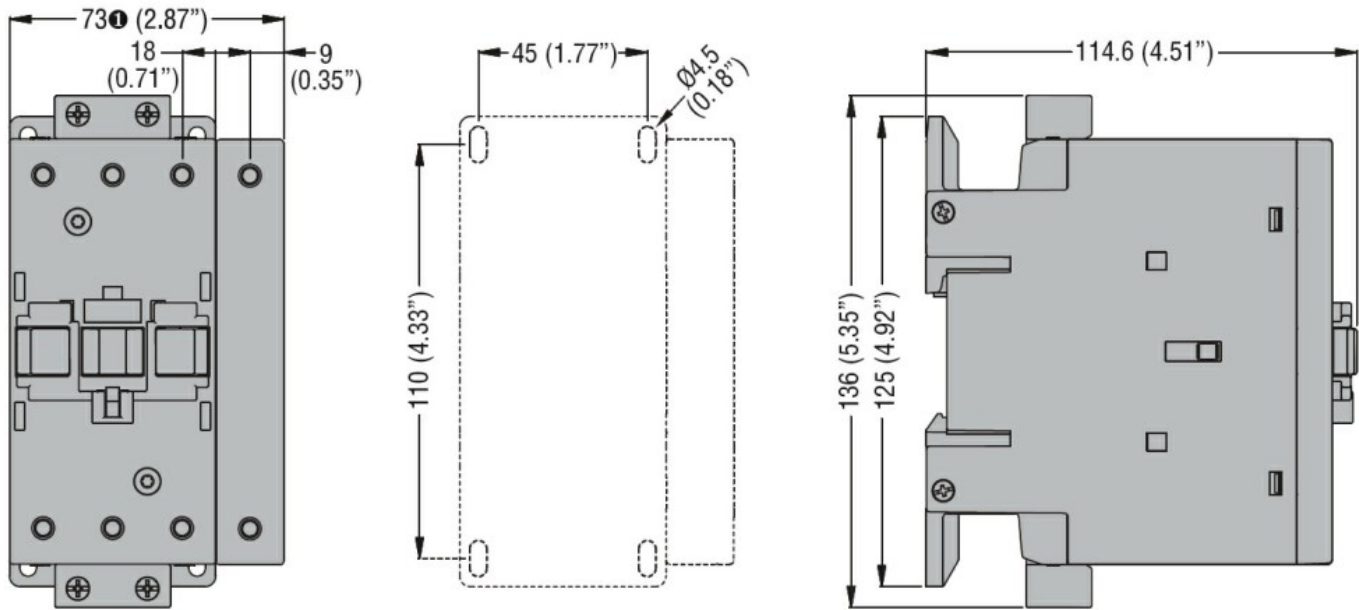
m	3000
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Resistance & Protection

Pollution degree

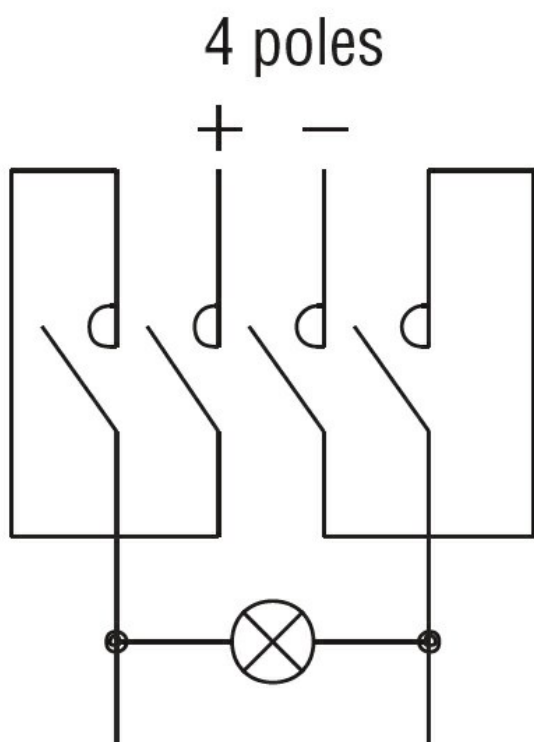
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Dimensions



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 60947-1

IEC/EN 60947-4-1

UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0

EC002552 -
Power contactor,
DC switching