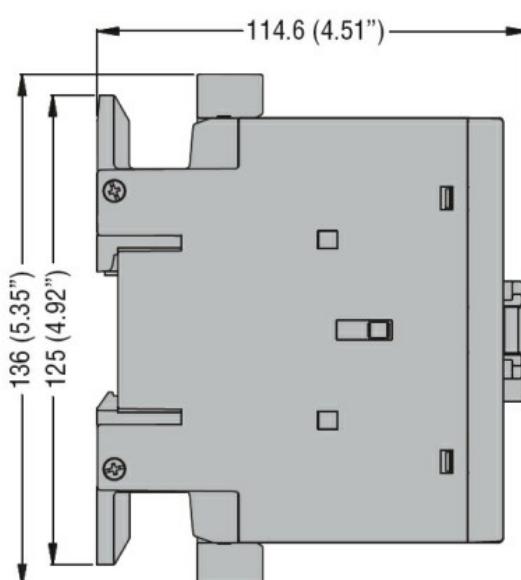
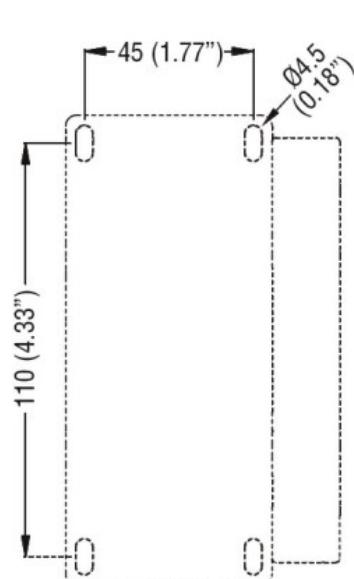
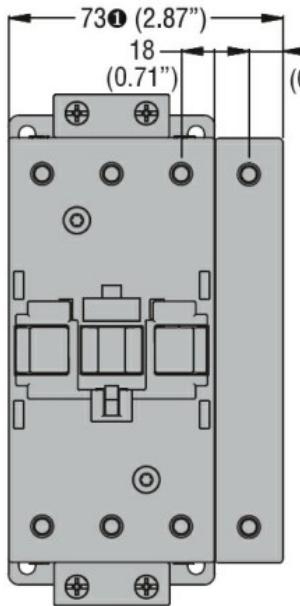




Product designation	Power contactor		
Product type designation	BFD80		
Contact characteristics			
Number of poles	Nr.	4	
Rated insulation voltage Ui IEC/EN	V	1000	
Rated impulse withstand voltage $Uimp$	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith	A	115	
IEC max current le 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)	mΩ	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	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	460
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		

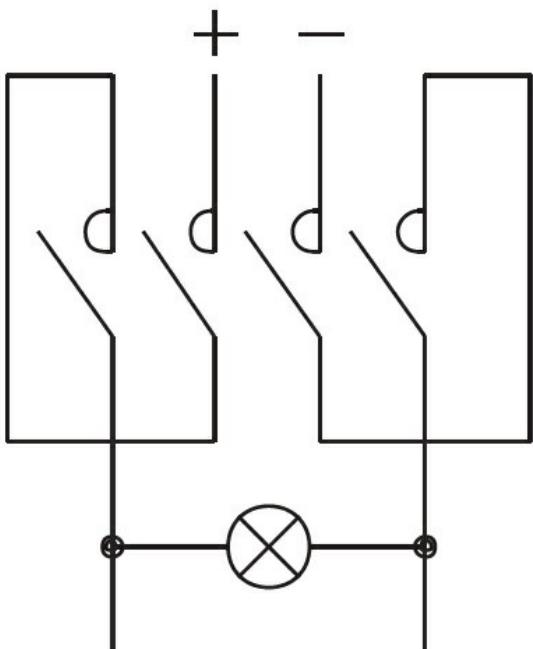
	min	°C	-50
	max	°C	70
Storage temperature			
Max altitude			
Resistance & Protection			
Pollution degree			3
Dimensions			



① BF80T2 82mm/3.23"

Wiring diagrams

4 poles



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