



Power contactor  
BFD150

Product designation

Product type designation

**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 $I_{th}$	A	165
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A 160
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	400V	A 165
	600V	A 165
	800V	A 125
	1000V	A 100
Short-time allowable current for 10s (IEC/EN60947-1)	A	1200
Protection fuse	gG (IEC)	A 250
	aM (IEC)	A 160
Resistance per pole (average value)	m $\Omega$	0.45
Power dissipation per pole (average value)	$I_{th}$	W 12
Tightening torque for terminals	min	Nm 6
	max	Nm 7
	min	lbin 4.4
	max	lbin 5.2
Tightening torque for coil terminal	min	Nm 0.8
	max	Nm 1
	min	lbft 0.59
	max	lbft 0.74
Max number of wires simultaneously connectable	nr.	2
Conductor section	Flexible w/o lug conductor section	
	min	mm <sup>2</sup> 1.5
	max	mm <sup>2</sup> 70
	Flexible c/w lug conductor section	
	min	mm <sup>2</sup> 1.5
	max	mm <sup>2</sup> 70
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	2460
<b>Operations</b>			
Mechanical life		cycles	15000000
<b>Safety related data</b>			
EMC compatibility			yes
<b>AC coil operating</b>			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	20
	max	V	250
<b>AC operating voltage</b>			
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
<b>AC operating voltage at 20°C</b>			
of 50/60Hz coil powered at 50Hz	in-rush	VA	70...175
	holding	VA	1.7...3.5
of 50/60Hz coil powered at 60Hz	in-rush	VA	70...175
	holding	VA	1.7...3.5
of 60Hz coil powered at 60Hz	in-rush	VA	70...175
	holding	VA	1.7...3.5
Dissipation at holding ≤20°C 50Hz		W	1.3...1,5
<b>DC coil operating</b>			
DC rated control voltage			
	min	V	20
	max	V	250
<b>DC operating voltage</b>			
pick-up	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out	max	%Us	≤70 Us min
<b>Average coil consumption ≤20°C</b>			
	in-rush	W	70...80
	holding	W	1.3...1.5
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	2000
<b>Operating times</b>			
Average time for Us control			

in AC

Closing NO	min	ms	45
	max	ms	40
Opening NO	min	ms	24
	max	ms	60

in DC

Closing NO	min	ms	45
	max	ms	90
Opening NO	min	ms	24
	max	ms	60

**UL technical data**

General USE

Contactor

	AC current	A	165
4 poles in series DC1	600V	A	165

**Ambient conditions**

Temperature

Operating temperature

min	°C	-40
max	°C	70

Storage temperature

min	°C	-50
max	°C	80

Max altitude

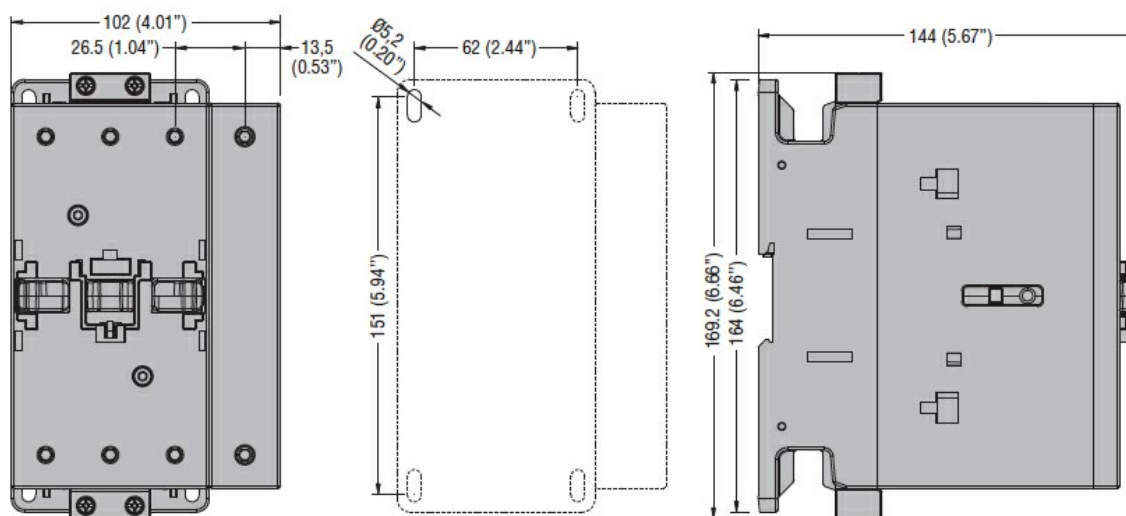
m 3000

**Resistance & Protection**

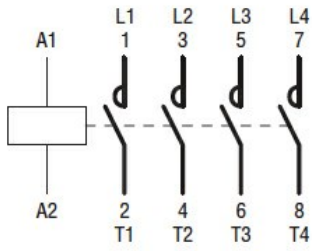
Pollution degree

3

**Dimensions**



**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