



Product designation				Power contactor
Product type designation				BFD150
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
IEC max current I_e in DC1 with $L/R \leq 1$ 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 Ω			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 ²	1.5	
	max	mm ²	70	
	Flexible c/w lug conductor section			
	min	mm ²	1.5	
	max	mm ²	70	
Power terminal protection according to IEC/EN 60529				IP20 front
Mechanical features				
Operating position	normal		vertical plan	
	allowable		$\pm 30^\circ$	

Fixing				Screw / DIN rail 35mm
Weight	g			2460
Operations				
Mechanical life	cycles			15000000
Safety related data				
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 50/60Hz, 60Hz			min	V 20
			max	V 250
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 operating voltage at 20°C				
	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
DC coil operating				
DC rated control voltage			min	V 20
			max	V 250
DC operating voltage				
	pick-up	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out	max	%Us	≤70 Us min
Average coil consumption ≤20°C			in-rush	W 70...80
			holding	W 1.3...1.5
Max cycles frequency				
Mechanical operation	cycles/h			2000
Operating times				
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

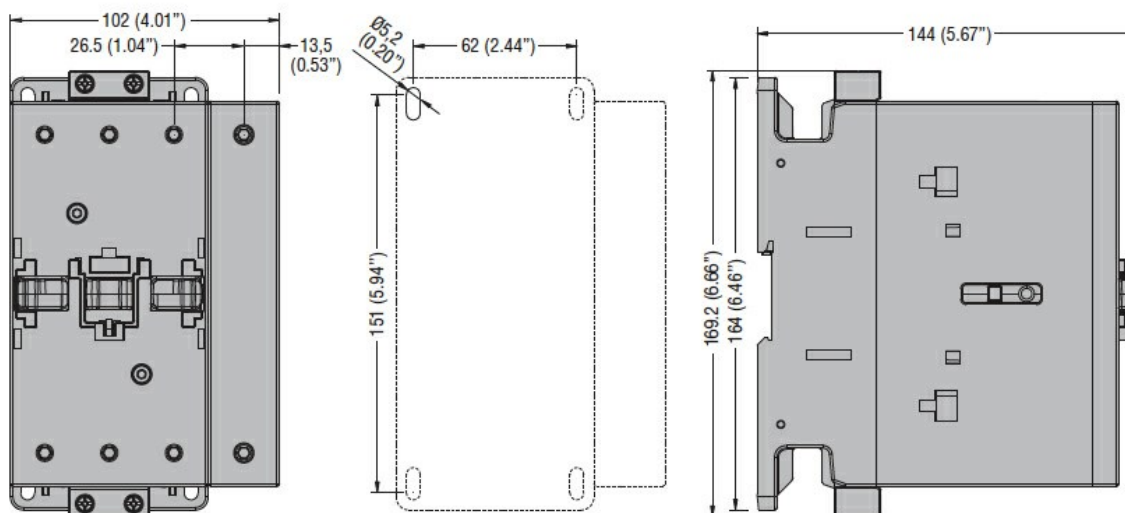
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Resistance & Protection

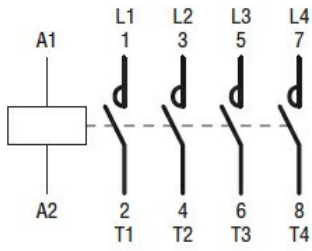
Pollution degree

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