



Product designation			Power contactor
Product type designation			BFD150
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	165	
Operational current Ie	AC-1 (≤40°C)	A	160
IEC max current Ie in DC1 with L/R ≤ 1ms 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?	0.45	
Power dissipation per pole (average value)	Ith	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	lbin	0.59
	max	lbin	0.74
Max number of wires simultaneously connectable	Nr.	2	
Conductor section	AWG/Kcmil		
	max	2/0	
Flexible w/o lug conductor section	min	mm²	1.5
	max	mm²	70
Flexible c/w lug conductor section	min	mm²	1.5
	max	mm²	70
Power terminal protection according to IEC/EN 60529			IP20 front

Mechanical features

Operating position

	normal allowable	Vertical plan $\pm 30^\circ$
Fixing		Screw / DIN rail 35mm
Weight	g	2460
Conductor section	AWG/kcmil conductor section	
	max	2/0

Operations

Mechanical life	cycles	15000000
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Safety related data

EMC compatibility	yes
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AC coil operating

Rated AC voltage at 50/60Hz, 60Hz

	min	V	100
	max	V	250
Rated AC voltage at 50/60Hz		V	230

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
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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
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AC average coil consumption 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 $\leq 20^\circ\text{C}$ 50Hz

W	1.3...1,5
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DC coil operating

DC rated control voltage

min	V	100
max	V	250

DC rated control voltage

V	230
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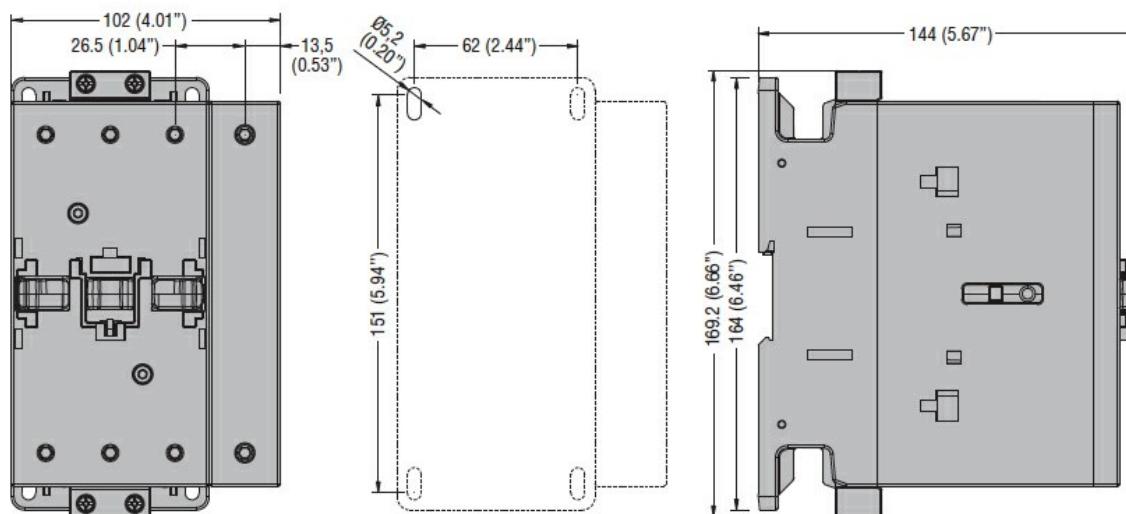
DC operating voltage

pick-up

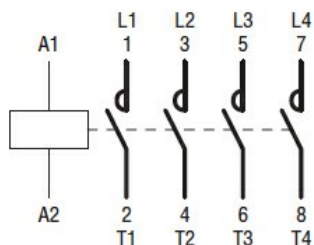
min	%Us	80 Us min
max	%Us	110 Us max

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		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

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching