



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 ($\leq 40^{\circ}\text{C}$)	A	160
IEC max current Ie 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?	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	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 allowable	Vertical plan $\pm 30^\circ$
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Fixing		Screw / DIN rail 35mm
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Weight	g	2460
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Conductor section

AWG/kcmil conductor section	max	2/0
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Operations		
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Mechanical life	cycles	15000000
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Safety related data		
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EMC compatibility		yes
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AC coil operating		
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Rated AC voltage at 50/60Hz, 60Hz	min	V	100
	max	V	250

Rated AC voltage at 50/60Hz		V	230
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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 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	

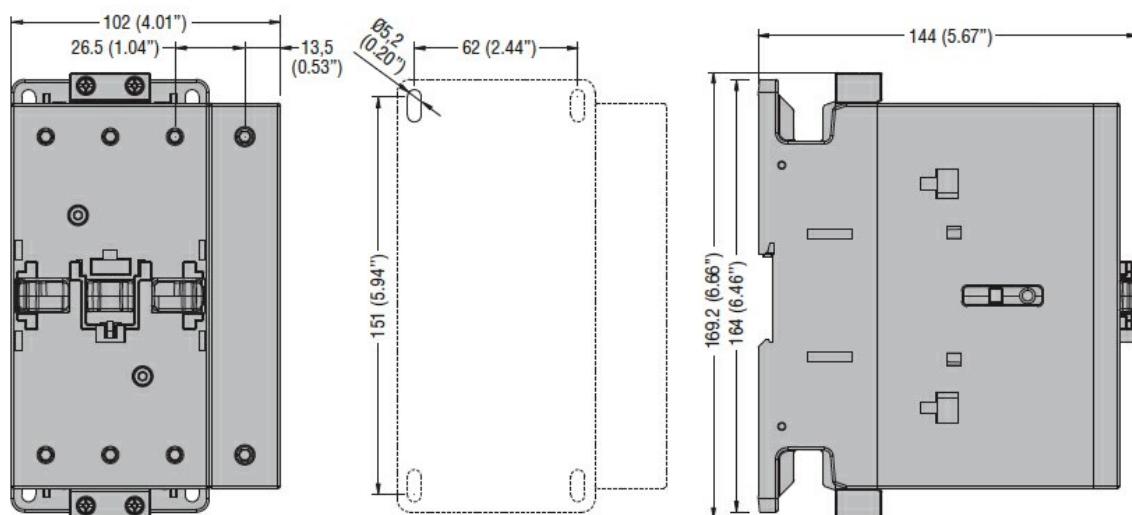
Dissipation at holding $\leq 20^\circ\text{C}$ 50Hz		W	1.3...1,5
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DC coil operating			
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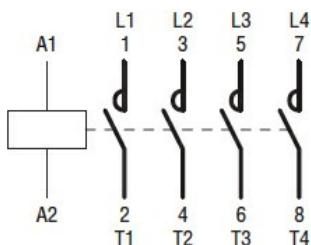
DC rated control voltage			
		V	230

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