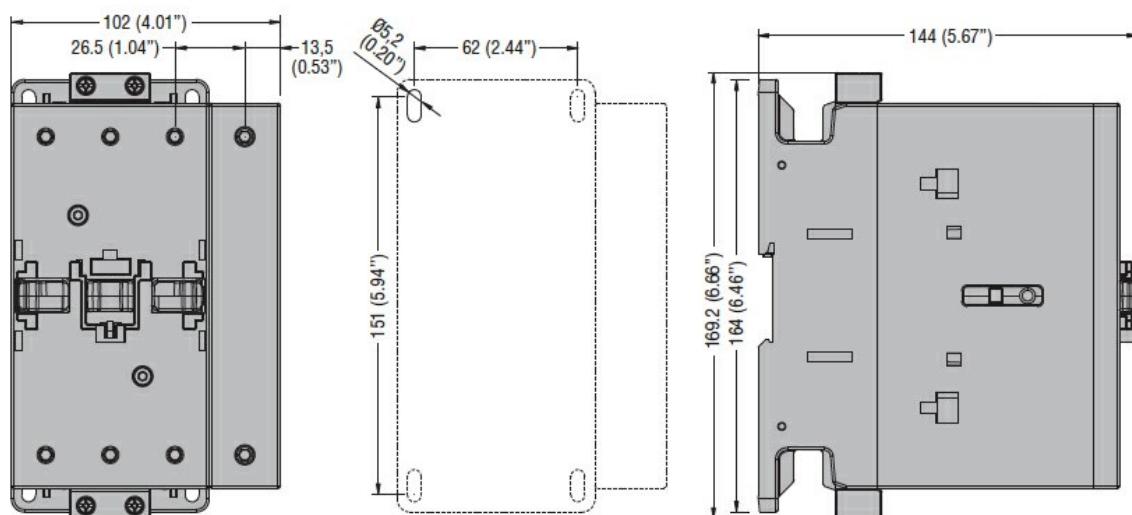




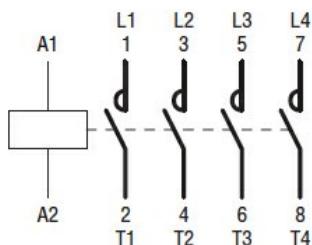
Product designation	Power contactor		
Product type designation	BFD150		
<b>Contact characteristics</b>			
Number of poles	Nr.	4	
Rated insulation voltage $Ui$ IEC/EN	V	1000	
Rated impulse withstand voltage $Uimp$	kV	8	
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current $Ith$		A	165
IEC max current $le$ 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 <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		
<b>Mechanical features</b>			
Operating position			

	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight	g	2460
Conductor section		
AWG/kcmil conductor section	max	2/0
Operations		
Mechanical life	cycles	15000000
Safety related data		
EMC compatibility		yes
AC coil operating		
Rated AC voltage at 50/60Hz, 60Hz	min max	V 20 48
Rated AC voltage at 50/60Hz	V	24
AC operating voltage		
of 50/60Hz coil powered at 50Hz		
pick-up	min max	%Us 80 Us min 110 Us max
drop-out	max	%Us ≤70 Us min
of 50/60Hz coil powered at 60Hz		
pick-up	min max	%Us 80 Us min 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 holding	VA 70...175 1.7...3.5
of 50/60Hz coil powered at 60Hz	in-rush holding	VA 70...175 1.7...3.5
of 60Hz coil powered at 60Hz	in-rush holding	VA 70...175 1.7...3.5
Dissipation at holding ≤20°C 50Hz	W	1.3...1.5
DC coil operating		
DC rated control voltage	min max	V 20 48
DC rated control voltage	V	24
DC operating voltage		
pick-up	min max	%Us 85 Us min 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
<b>Max cycles frequency</b>				
<b>Mechanical operation</b>			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		
<b>UL technical data</b>				
<b>General USE</b>				
Contactor				
	AC current	A	165	
4 poles in series DC1	600V	A	165	
<b>Ambient conditions</b>				
<b>Temperature</b>				
Operating temperature				
	min	°C	-40	
	max	°C	70	
Storage temperature				
	min	°C	-50	
	max	°C	80	
<b>Max altitude</b>			m	3000
<b>Resistance &amp; Protection</b>				
<b>Pollution degree</b>				3
<b>Dimensions</b>				



### 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