



Product designation
Product type designation

Power contactor
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 max	Hz Hz 25 400
IEC Conventional free air thermal current I_{th}	A	165
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series	400V 600V 800V 1000V	A A A A 165 165 125 100
Short-time allowable current for 10s (IEC/EN60947-1)	A	1200
Protection fuse	gG (IEC) aM (IEC)	A A 250 160
Resistance per pole (average value)	mΩ	0.45
Power dissipation per pole (average value)	I_{th} W	12
Tightening torque for terminals	min max min max	Nm Nm lbin lbin 6 7 4.4 5.2
Tightening torque for coil terminal	min max min max	Nm Nm lbin lbin 0.8 1 0.59 0.74
Max number of wires simultaneously connectable	Nr.	2
Conductor section	AWG/Kcmil	
	max	2/0
Flexible w/o lug conductor section	min max	mm ² mm ² 1.5 70
Flexible c/w lug conductor section	min max	mm ² mm ² 1.5 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	
Operations			
Mechanical life	cycles	15000000	
Safety related data			
Performance level B10d according to EN/ISO 13489-1			
	mechanical load	cycles	15000000
EMC compatibility		yes	
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz			
	min	V	20
	max	V	48
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 ≤20°C 50Hz		W	1.3...1,5
DC coil operating			
DC rated control voltage			
	min	V	20
	max	V	48
DC operating voltage			
pick-up			
	min	%Us	85 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

Rated operational voltage AC (UL)

V	600
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General USE

Contactor

AC current	A	165
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4 poles in series DC1

600V	A	165
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Ambient conditions

Temperature

Operating temperature

min	°C	-40
max	°C	70

Storage temperature

min	°C	-50
max	°C	80

Max altitude

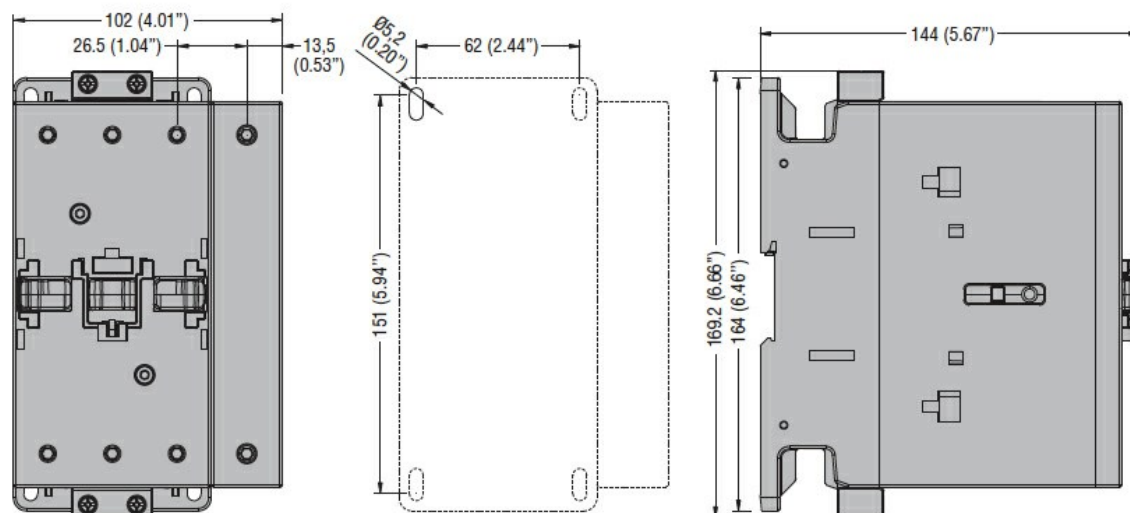
m	3000
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Resistance & Protection

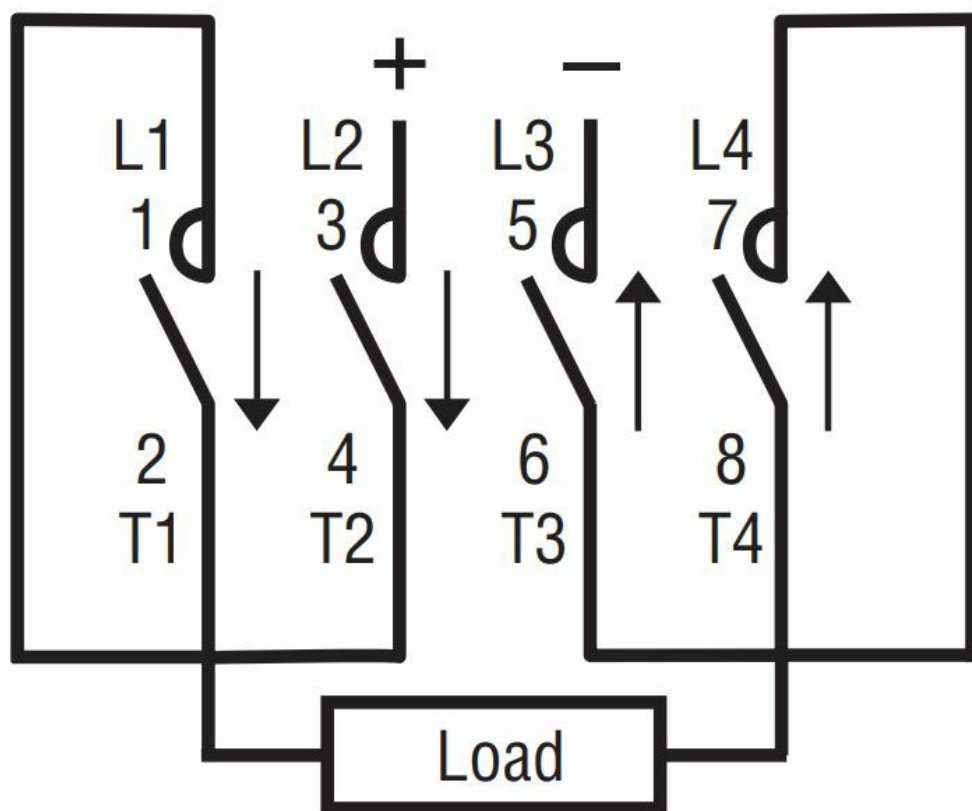
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching