



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 $L/R \leq 1ms$ 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 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 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 ±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	V 60
		max	V 110
Rated AC voltage at 50/60Hz		V	110
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 60
		max	V 110
DC rated control voltage		V	110
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
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Operating times

Average time for U_s 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
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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

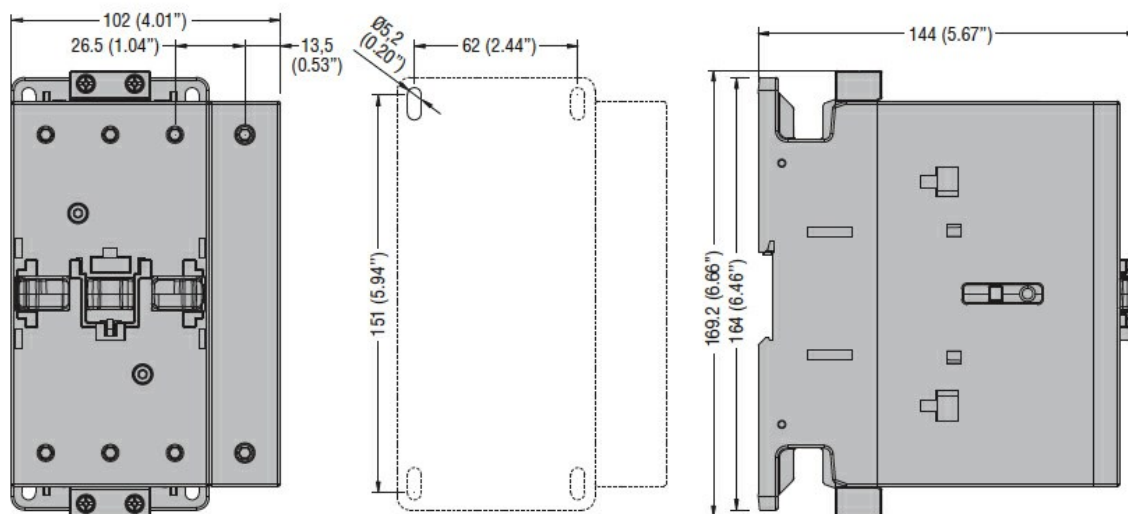
m	3000
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Resistance & Protection

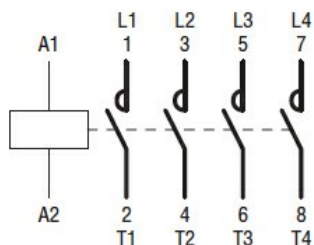
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1
CSA C22.2 n° 60947-4-1.
IEC/EN 60947-1
IEC/EN 60947-4-1
UL 60947-4-1

Certificates

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching