



Product designation				Power contactor
Product type designation				BF150
<b>Contact characteristics</b>				
Number of poles	Nr.			4
Rated insulation voltage U <sub>i</sub> IEC/EN	V			1000
Rated impulse withstand voltage U <sub>imp</sub>	kV			8
Operational frequency	min	Hz		25
	max	Hz		400
IEC Conventional free air thermal current I <sub>th</sub>	A			165
Operational current I <sub>e</sub>	AC-1 (=40°C)	A		165
	AC-1 (=55°C)	A		135
	AC-1 (=70°C)	A		118
	AC-3 (=440V =55°C)	A		150
	AC-4 (400V)	A		70
IEC max current I <sub>e</sub> in DC1 with L/R = 1ms with 1 poles in series	=24V	A		165
	48V	A		165
	75V	A		150
	110V	A		10
	220V	A		–
	IEC max current I <sub>e</sub> in DC1 with L/R = 1ms with 2 poles in series	=24V	A	
48V		A		165
75V		A		165
110V		A		150
220V		A		14
IEC max current I <sub>e</sub> in DC1 with L/R = 1ms with 3 poles in series		=24V	A	
	48V	A		165
	75V	A		165
	110V	A		160
	220V	A		150
	IEC max current I <sub>e</sub> in DC1 with L/R = 1ms with 4 poles in series	=24V	A	
48V		A		165
75V		A		165
110V		A		165
220V		A		165
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 1 poles in series		=24V	A	
	48V	A		60
	75V	A		44
	110V	A		6

	220V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 2 poles in series			
	=24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
	220V	A	7
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 3 poles in series			
	=24V	A	165
	48V	A	195
	75V	A	110
	110V	A	120
	220V	A	120
IEC max current I <sub>e</sub> in DC3-DC5 with L/R = 15ms with 4 poles in series			
	=24V	A	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
Protection fuse			
	gG (IEC)	A	250
	aM (IEC)	A	160
Making capacity (RMS value)		A	1500
Breaking capacity at voltage			
	440V	A	1200
	500V	A	1025
	690V	A	905
Resistance per pole (average value)		m?	0.45
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	12
	AC3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I <sub>bin</sub>	4.4
	max	I <sub>bin</sub>	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	0.59
	max	I <sub>bin</sub>	0.74
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

### Mechanical features

Operating position

	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight	g	2420
Conductor section	AWG/kcmil conductor section	
	max	2/0

**Operations**

Mechanical life	cycles	15000000
Electrical life	cycles	800000

**Safety related data**

EMC compatibility	yes
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**AC coil operating**

Rated AC voltage at 60Hz	V	24
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AC operating voltage	of 60Hz coil powered at 60Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	min	%Us	20
		max	%Us	55

AC average coil consumption at 20°C	of 60Hz coil powered at 60Hz			
		in-rush	VA	300
		holding	VA	20

Dissipation at holding =20°C 50Hz	W	6.5
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**Max cycles frequency**

Mechanical operation	cycles/h	1500
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**Operating times**

Average time for Us control	in AC			
	Closing NO	min	ms	45
		max	ms	32
	Opening NO	min	ms	9
		max	ms	24

**UL technical data**

General USE	Contactor	AC current	A	165
Short-circuit protection fuse, 600V	High fault	Short circuit current	kA	100
		Fuse rating	A	200
		Fuse class	J	
	Standard fault	Short circuit current	kA	10
		Fuse rating	A	250
		Fuse class	RK5	

**Ambient conditions**

Temperature

Operating temperature

min	°C	-50
max	°C	70

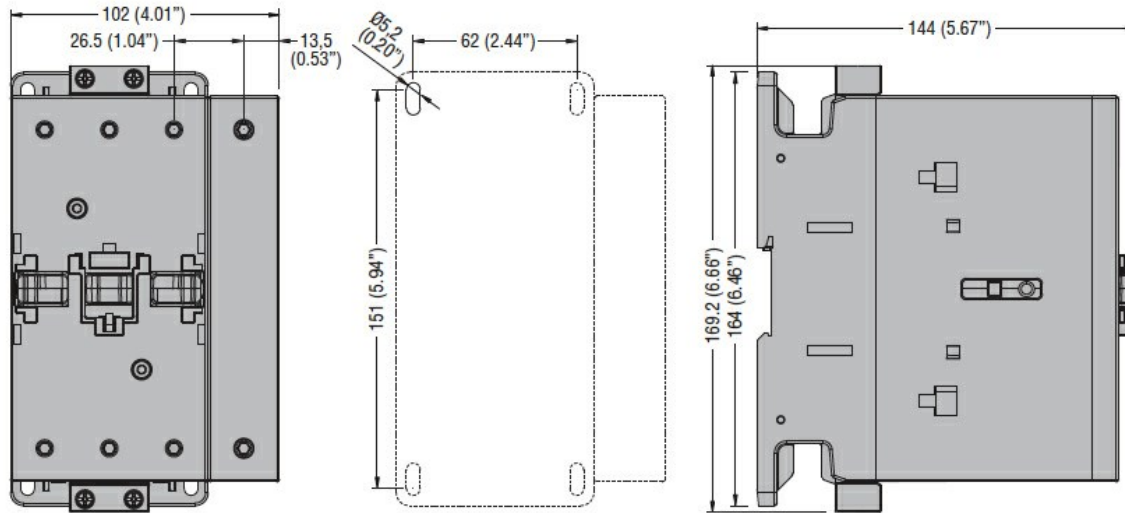
Storage temperature

min	°C	-60
max	°C	80

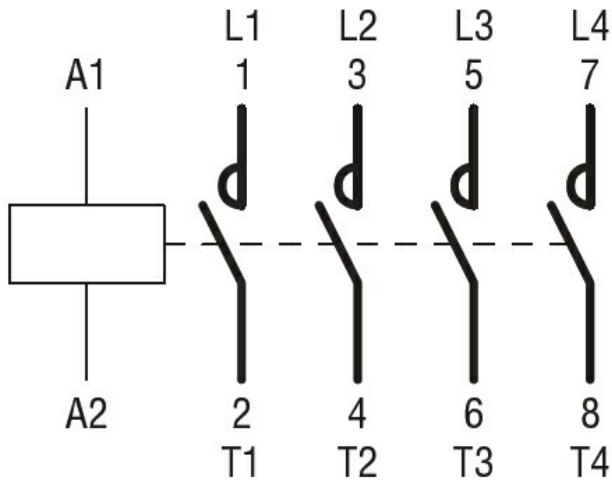
Max altitude

m	3000
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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

CCC

cULus

EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching