



Power contactor
BF150

Product designation

Product type designation

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
Operational current I _e	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 _e 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 _e in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V
48V		A 165
75V		A 165
110V		A 150
220V		A 14
IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series		≤24V
	48V	A 165
	75V	A 165
	110V	A 160
	220V	A 150
	IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V
48V		A 165
75V		A 165
110V		A 165
220V		A 165
IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series		≤24V
	48V	A 60
	75V	A 44
	110V	A 6

	220V	A	–
IEC max current I _e 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 _e 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 _e 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)		mΩ	0.45
Power dissipation per pole (average value)	I _{th}	W	12
	AC3	W	10.1
Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	5.2
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.59
	max	I _{bin}	0.74
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	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 50/60Hz	V	230
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AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up	min	%Us	80
		max	%Us	110
	drop-out	min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up	min	%Us	85
		max	%Us	110
	drop-out	min	%Us	40
		max	%Us	55

AC average coil consumption at 20°C

	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	300
		holding	VA	20
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	275
		holding	VA	17
	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

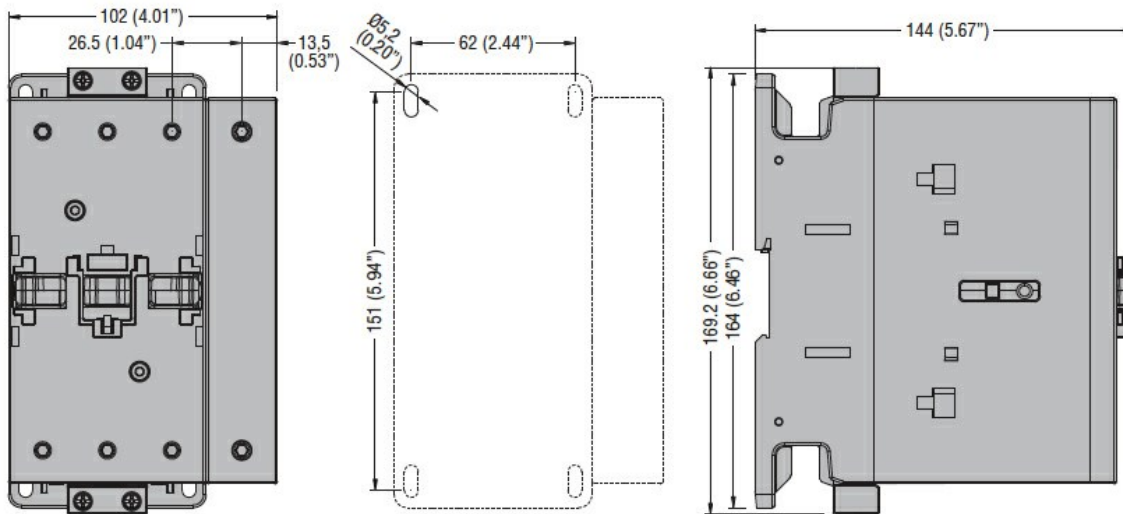
Storage temperature

min	°C	-60
max	°C	80

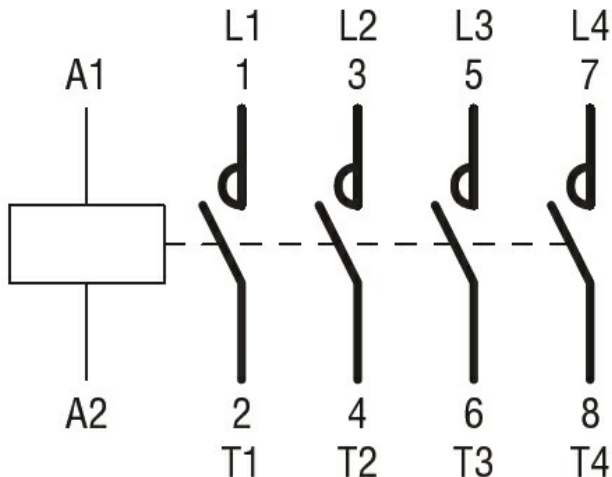
Max altitude

m	3000
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Dimensions [mm (in)]



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