



Product designation  
Product type designation

Power contactor  
BF150

**Contact characteristics**

Number of poles	Nr.	3
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
Rated operational power AC-3 (T≤55°C)	230V	kW 45
	400V	kW 75
	415V	kW 75
	440V	kW 75
	500V	kW 90
	690V	kW 110
	1000V	kW 55
Rated operational current AC-3 (T≤55°C)	230V	A 150
	400V	A 150
	415V	A 150
	440V	A 150
	500V	A 128
	690V	A 113
	1000V	A 51
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 165
	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	165
	48V	A	165
	75V	A	165
	110V	A	160
	220V	A	150
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IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V	A	165
	48V	A	165
	75V	A	165
	110V	A	165
	220V	A	165
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IEC max current Ie in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A	165
	48V	A	60
	75V	A	44
	110V	A	6
	220V	A	–
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IEC max current Ie 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
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IEC max current Ie 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
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IEC max current Ie 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
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Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
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Protection fuse	gG (IEC)	A	250
	aM (IEC)	A	160
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Making capacity (RMS value)		A	1500
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Breaking capacity at voltage	440V	A	1200
	500V	A	1025
	690V	A	905
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Resistance per pole (average value)		mΩ	0.45
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Power dissipation per pole (average value)	Ith	W	12
	AC-3	W	10.1
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Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	Ibin	4.4
	max	Ibin	5.2

Tightening torque for coil terminal

min	Nm	0.8
max	Nm	1
min	Ibin	0.59
max	Ibin	0.74

Conductor section

AWG/Kcmil

max		2/0
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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°
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Fixing

Screw / DIN rail  
35mm

Weight

g 2020

Conductor section

AWG/kcmil conductor section

max	2/0
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**Operations**

Mechanical life

cycles 15000000

Electrical life

cycles 800000

**Safety related data**

EMC compatibility

yes

**AC coil operating**

Rated AC voltage at 50/60Hz

V 400

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

**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**

Yielded mechanical performance for three-phase AC motor			
	200/208V	HP	50
	220/230V	HP	50
	460/480V	HP	100
	575/600V	HP	125

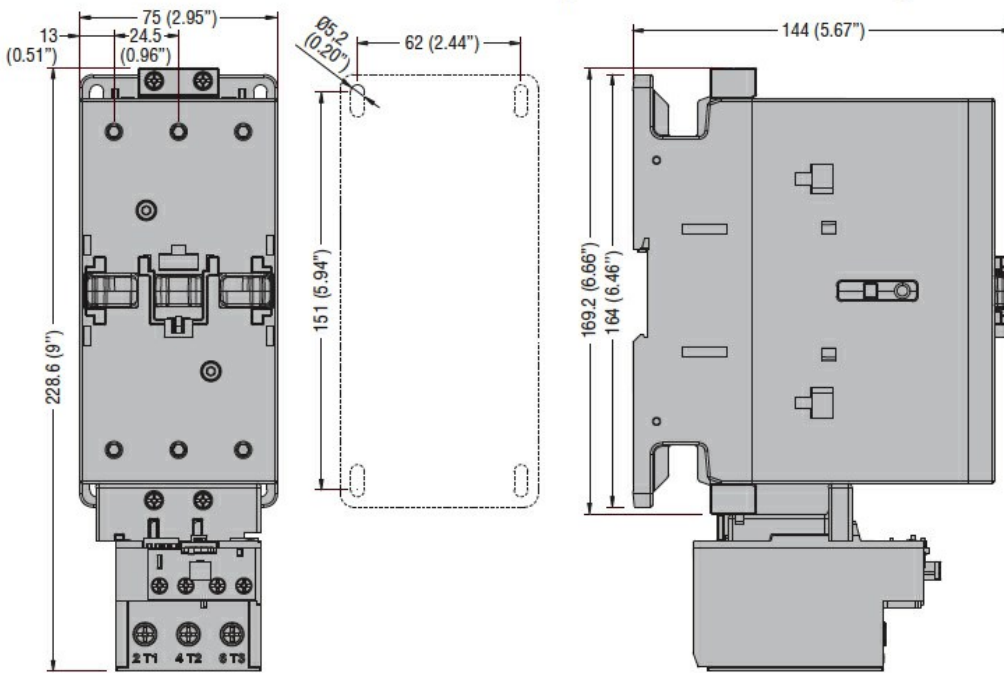
**General USE**

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

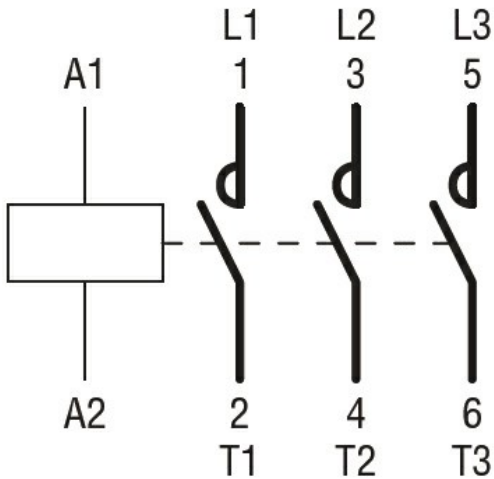
**Ambient conditions**

Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	80
Max altitude		m	3000

**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

### ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching