



Product designation  
Product type designation

Power contactor  
BF115

**Contact characteristics**

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	160
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A 160
	AC-1 (≤55°C)	A 130
	AC-1 (≤70°C)	A 115
	AC-3 (≤440V ≤55°C)	A 115
	AC-4 (400V)	A 54
Rated operational current AC-3 (T≤55°C)	230V	A 115
	400V	A 115
	415V	A 115
	440V	A 115
	500V	A 106
	690V	A 106
	1000V	A 39
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A 160
	48V	A 160
	75V	A 120
	110V	A 10
	220V	A –
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A 160
	48V	A 160
	75V	A 160
	110V	A 130
	220V	A 14
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A 160
	48V	A 160
	75V	A 160
	110V	A 140
	220V	A 145
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V	A 160
	48V	A 160

	75V	A	160
	110V	A	160
	220V	A	160
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	160
	48V	A	50
	75V	A	40
	110V	A	6
	220V	A	–
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	160
	48V	A	72
	75V	A	65
	110V	A	65
	220V	A	7
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	160
	48V	A	150
	75V	A	100
	110V	A	100
	220V	A	92
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	160
	48V	A	120
	75V	A	120
	110V	A	125
	220V	A	115
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Short-time allowable current for 10s (IEC/EN60947-1)		A	920
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Protection fuse			
	gG (IEC)	A	200
	aM (IEC)	A	125
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Making capacity (RMS value)		A	1500
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Breaking capacity at voltage			
	440V	A	1200
	500V	A	850
	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)			
	I <sub>th</sub>	W	11.5
	AC-3	W	6.0
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Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
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Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	0.74
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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
<b>Mechanical features</b>			
Operating position			
	normal allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight			g 2420
Conductor section			
AWG/kcmil conductor section			
	max		2/0
<b>Operations</b>			
Mechanical life			cycles 15000000
Electrical life			cycles 1200000
<b>AC coil operating</b>			
Rated AC voltage at 60Hz			V 460
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
<b>Max cycles frequency</b>			
Mechanical operation			cycles/h 1500
<b>Operating times</b>			
Average time for Us control in AC			
Closing NO			
	min	ms	16
	max	ms	32
Opening NO			
	min	ms	9
	max	ms	24
<b>UL technical data</b>			
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

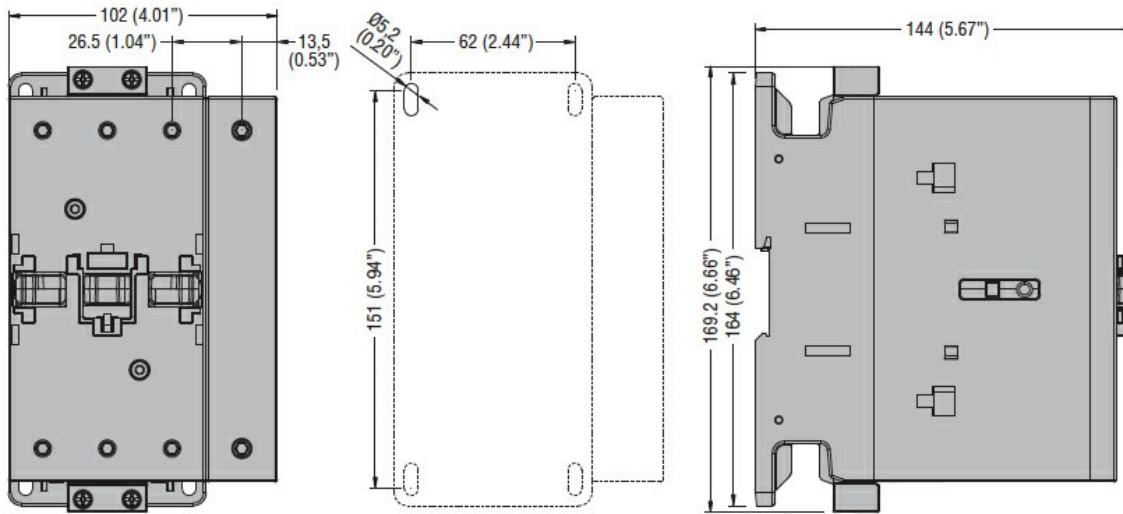
Storage temperature

min	°C	-60
max	°C	+80

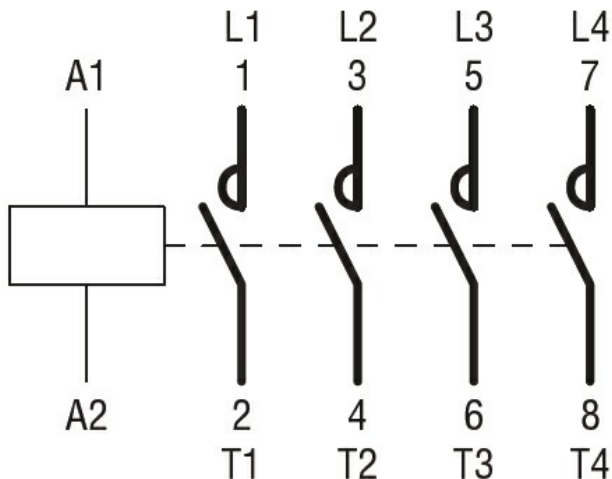
Max altitude

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

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UL 60947-4-1

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Certificates

CCC

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cULus

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EAC

ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching