



Product designation				Power contactor
Product type designation				BF115
<b>Contact characteristics</b>				
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			160
Operational current $I_e$	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
IEC max current $I_e$ 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		–
IEC max current $I_e$ 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
IEC max current $I_e$ 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
IEC max current $I_e$ 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
IEC max current $I_e$ 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	–
IEC max current Ie 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
IEC max current Ie 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
IEC max current Ie 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
Short-time allowable current for 10s (IEC/EN60947-1)		A	920
Protection fuse	gG (IEC)	A	200
	aM (IEC)	A	125
Making capacity (RMS value)		A	1500
Breaking capacity at voltage	440V	A	1200
	500V	A	850
	690V	A	905
Resistance per pole (average value)		m?	0.45
Power dissipation per pole (average value)	Ith	W	11.5
	AC3	W	6.0
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
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
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**Operations**

Mechanical life	cycles	15000000
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Electrical life	cycles	1200000
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**AC coil operating**

Rated AC voltage at 60Hz	V	460
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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

**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	16
		max	ms	32
	Opening NO	min	ms	9
		max	ms	24

**UL technical data**

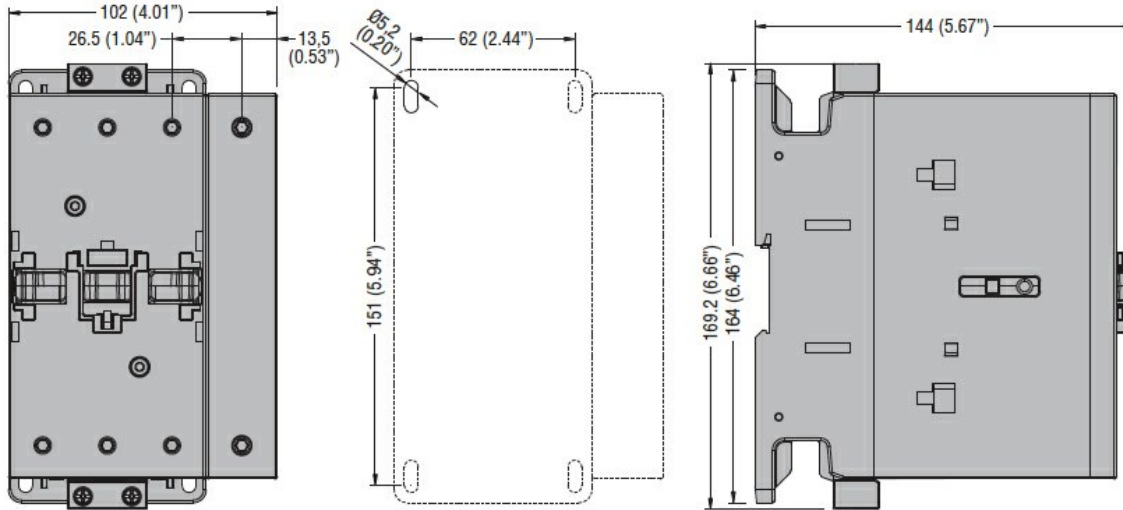
General USE	Contactor	AC current	A	165
Short-circuit protection fuse, 600V	High fault	Short circuit current	kA	100
		Fuse rating	A	200
		Fuse class		J
	Standard fault	Short circuit current	kA	10
		Fuse rating	A	250
		Fuse class		RK5

**Ambient conditions**

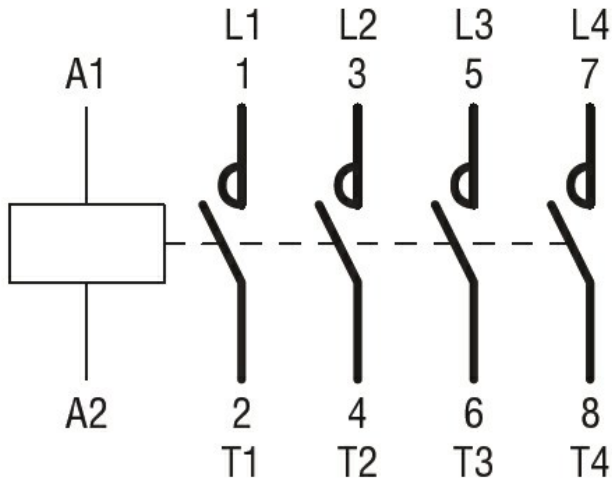
Temperature	Operating temperature	min	°C	-50
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	max	°C	70
Storage temperature	min	°C	-60
	max	°C	+80
Max altitude		m	3000

**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
- EAC

**ETIM classification**

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching

