



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	
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	
	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	
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	
	48V	A		50
	75V	A		40
	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	160
	48V	A	72
	75V	A	65
	110V	A	65
	220V	A	7
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
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
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)			
	I <sub>th</sub>	W	11.5
	AC3	W	6.0
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	1200000

**AC coil operating**

Rated AC voltage at 60Hz	V	575
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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
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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**

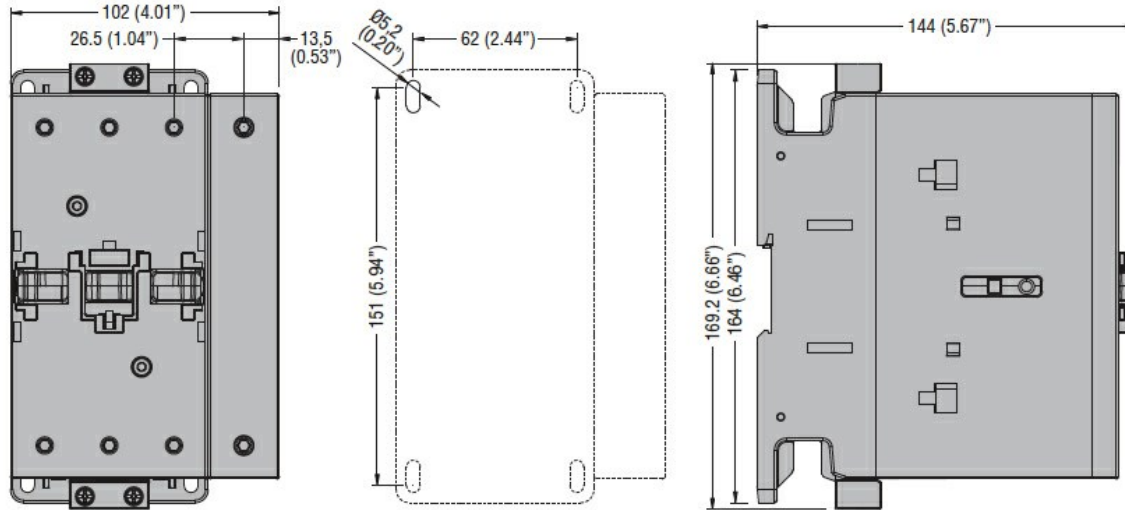
Temperature

Operating temperature

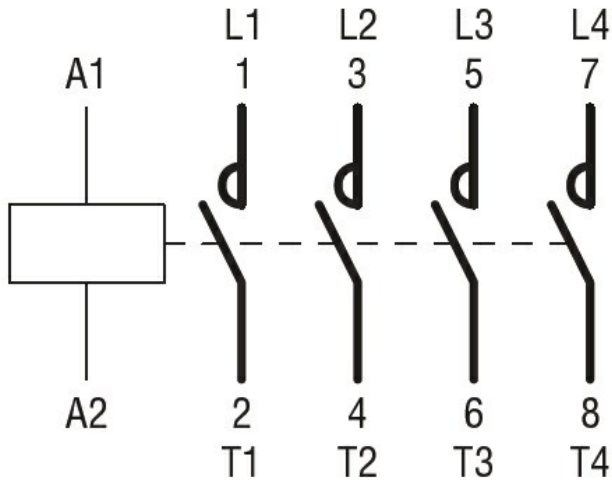
min	°C	-50
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	max	°C	70
Storage temperature	min	°C	-60
	max	°C	+80
Max altitude		m	3000

**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

