



Product designation	Power contactor		
Product type designation	BF115		
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	160
Operational current I_e			
	AC-1 ($\leq 40^\circ C$)	A	160
	AC-1 ($\leq 55^\circ C$)	A	130
	AC-1 ($\leq 70^\circ C$)	A	115
	AC-3 ($\leq 440V \leq 55^\circ C$)	A	115
	AC-4 (400V)	A	54
Rated operational current AC-3 ($T \leq 55^\circ C$)			
	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_e in DC1 with $L/R \leq 1ms$ with 1 poles in series			
	$\leq 24V$	A	160
	48V	A	160
	75V	A	120
	110V	A	10
	220V	A	—
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series			
	$\leq 24V$	A	160
	48V	A	160
	75V	A	160
	110V	A	130
	220V	A	14
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series			
	$\leq 24V$	A	160
	48V	A	160
	75V	A	160
	110V	A	140
	220V	A	145
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series			
	$\leq 24V$	A	160
	48V	A	160

	75V	A	160
	110V	A	160
	220V	A	160
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	$\leq 24\text{V}$	A	160
	48V	A	50
	75V	A	40
	110V	A	6
	220V	A	—
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	$\leq 24\text{V}$	A	160
	48V	A	72
	75V	A	65
	110V	A	65
	220V	A	7
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	$\leq 24\text{V}$	A	160
	48V	A	150
	75V	A	100
	110V	A	100
	220V	A	92
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series			
	$\leq 24\text{V}$	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)			$\text{m}\Omega$ 0.45
Power dissipation per pole (average value)			
	I _{th}	W	11.5
	AC-3	W	6.0
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
Operations			
Mechanical life	cycles		15000000
Electrical life	cycles		1200000
Safety related data			
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	1200000 15000000
AC coil operating			
Rated AC voltage at 60Hz	V		230
AC operating voltage			
of 50/60Hz coil powered at 50Hz drop-out	max	%Us	55
of 60Hz coil powered at 60Hz pick-up	min max	%Us	80 110
drop-out	min max	%Us	20 55
AC average coil consumption at 20°C			
of 60Hz coil powered at 60Hz	in-rush holding	VA	300 20
Max cycles frequency			
Mechanical operation		cycles/h	1500
Operating times			
Average time for Us control			
in AC			
Closing NO			
	min max	ms	16 32
Opening NO			
	min max	ms	9 24
UL technical data			
Rated operational voltage AC (UL)	V		600
General USE			
Contactor	AC current	A	165

Short-circuit protection fuse, 600V
High fault

Standard fault	Short circuit current Fuse rating Fuse class	kA A J	100 200 J
	Short circuit current Fuse rating Fuse class	kA A RK5	10 250 RK5

Ambient conditions

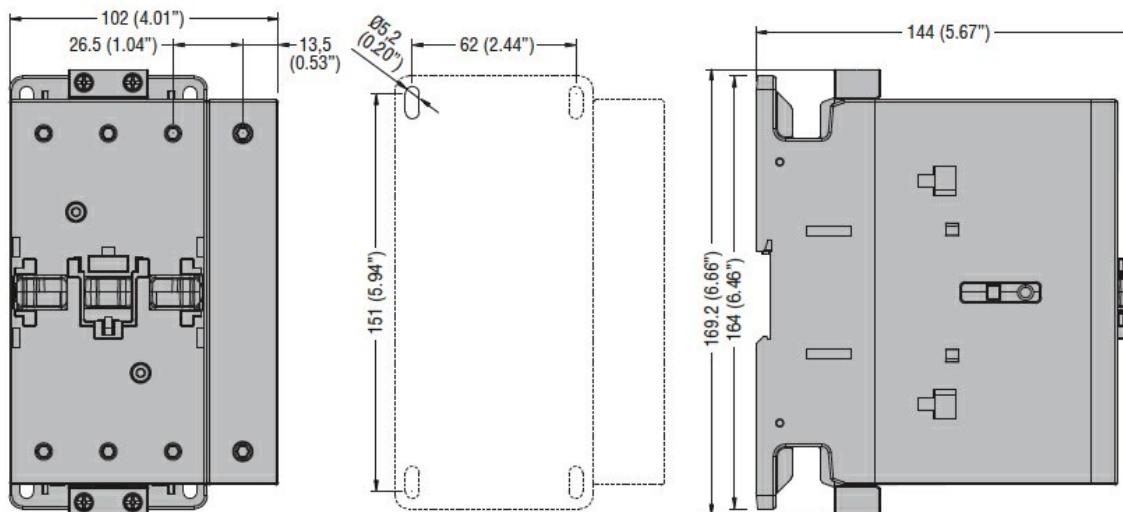
Temperature

Operating temperature	min max	°C °C	-50 70
Storage temperature	min max	°C °C	-60 +80

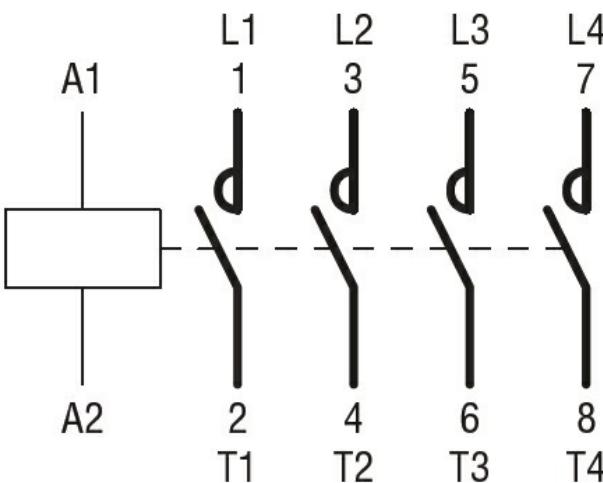
Max altitude

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