



Product designation	Power contactor		
Product type designation	BF115		
Contact characteristics			
Number of poles	Nr.	3	
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 power AC-3 ($T \leq 55^\circ C$)	230V	kW	37
	400V	kW	55
	415V	kW	55
	440V	kW	55
	500V	kW	75
	690V	kW	110
	1000V	kW	55
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			

	≤24V	A	160
	48V	A	160
	75V	A	160
	110V	A	140
	220V	A	145
IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ 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 $L/R \leq 15\text{ms}$ with 1 poles in series	≤24V	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	≤24V	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	≤24V	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	≤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)		$\text{m}\Omega$	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	lbin	0.59
max	lbin	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	Vertical plan
allowable	±30°

Fixing

Screw / DIN rail
35mm

Weight

g 2020

Operations

Mechanical life cycles 15000000

Electrical life cycles 1200000

Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	1200000
mechanical load	cycles	15000000

AC coil operating

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

Max cycles frequency

Mechanical operation cycles/h 1500

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

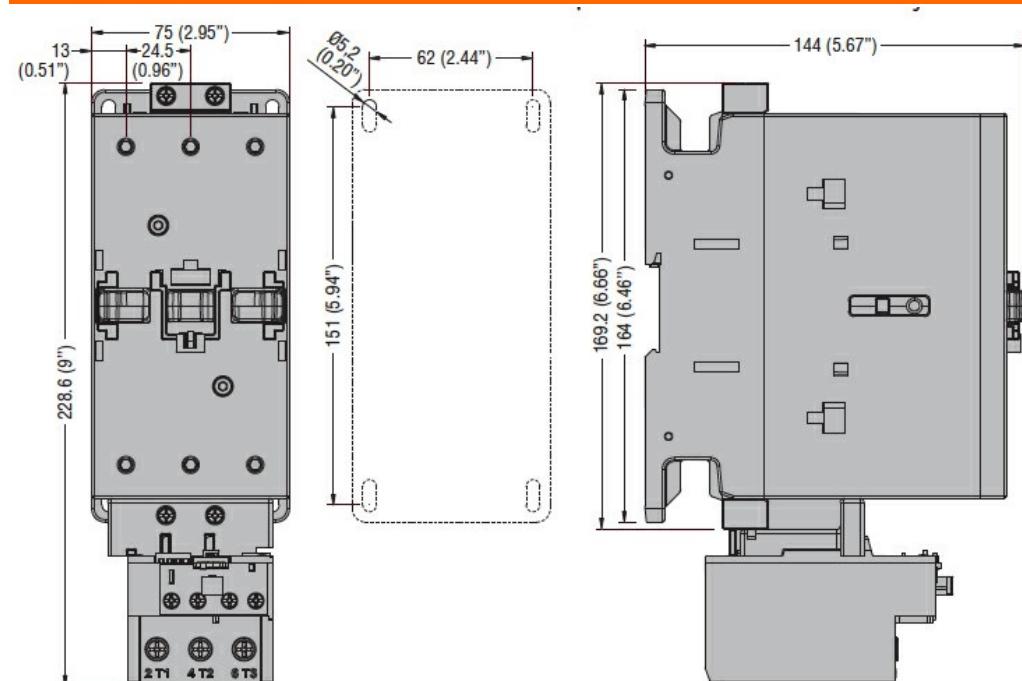
UL technical data

Rated operational voltage AC (UL)	V	600
Yielded mechanical performance for three-phase AC motor		
200/208V	HP	40
220/230V	HP	40
460/480V	HP	75
575/600V	HP	100
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

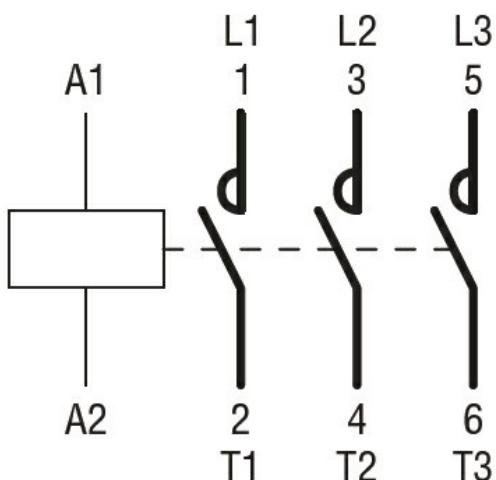
Ambient conditions

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