



Product designation

Power contactor

Product type designation

BF115

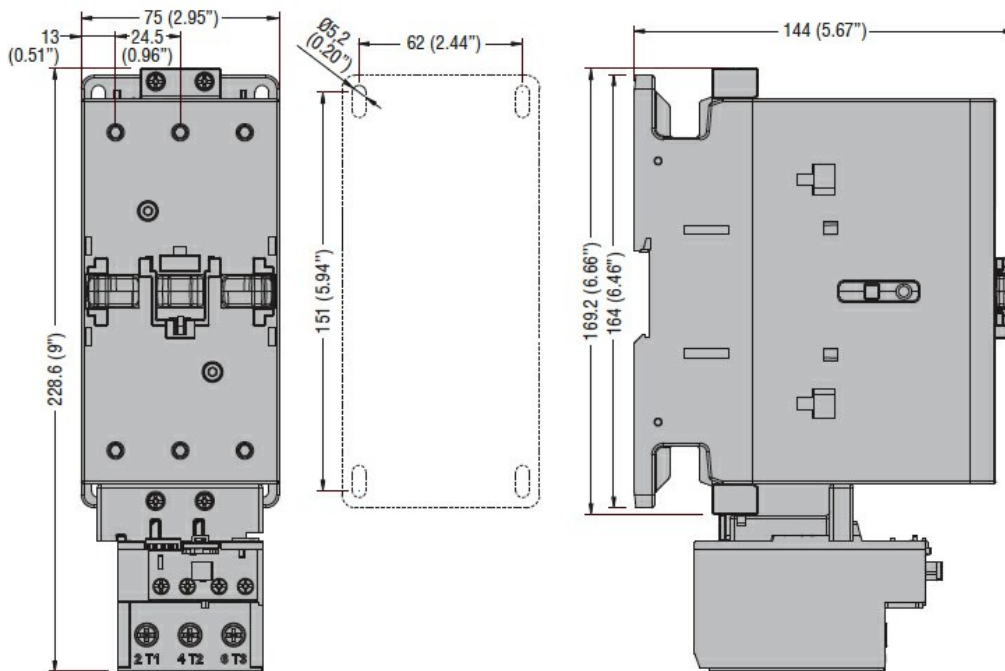
Contact characteristics

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 (=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 power AC-3 (T=55°C)	230V	kW 37
	400V	kW 55
	415V	kW 55
	440V	kW 55
	500V	kW 75
	690V	kW 110
	1000V	kW 55
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

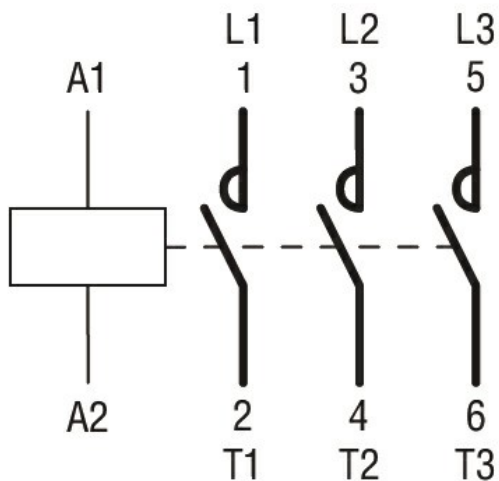
	75V	A	160
	110V	A	160
	220V	A	160
IEC max current Ie in DC3-DC5 with L/R = 15ms with 1 poles in series			
	=24V	A	160
	48V	A	50
	75V	A	40
	110V	A	6
	220V	A	–
IEC max current Ie in DC3-DC5 with L/R = 15ms with 2 poles in series			
	=24V	A	160
	48V	A	72
	75V	A	65
	110V	A	65
	220V	A	7
IEC max current Ie 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	lbin	4.4
	max	lbin	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	mm²	1.5
	max	mm²	70
Flexible c/w lug conductor section			
	min	mm²	1.5
	max	mm²	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 2060
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 50/60Hz, 60Hz		min	V 20
		max	V 48
Rated AC voltage at 50/60Hz			V 24
AC operating voltage			
of 50/60Hz coil powered at 50Hz pick-up		min	%Us 80
		max	%Us 110
drop-out		max	%Us =70 Us min
of 50/60Hz coil powered at 60Hz pick-up		min	%Us 80 Us min
		max	%Us 110 Us max
drop-out		max	%Us =70 Us min
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz		in-rush holding	VA 70...175
			VA 1.7...3.5
of 50/60Hz coil powered at 60Hz		in-rush holding	VA 70...175
			VA 1.7...3.5
of 60Hz coil powered at 60Hz		in-rush holding	VA 70...175
			VA 1.7...3.5
Dissipation at holding =20°C 50Hz			W 1.3...1,5
DC coil operating			
DC rated control voltage		min	V 20
		max	V 48

DC rated control voltage		V	24
DC operating voltage			
pick-up	min	%Us	85 Us min
	max	%Us	110 Us max
drop-out	max	%Us	=70 Us min
Average coil consumption =20°C			
	in-rush	W	70...80
	holding	W	1.3...1.5
Max cycles frequency			
Mechanical operation		cycles/h	1500
Operating times			
Average time for Us control			
in AC	Closing NO	min	ms 45
		max	ms 90
	Opening NO	min	ms 24
		max	ms 60
UL technical data			
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 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

CCC

cULus

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching