



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
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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	–
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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
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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
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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
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Short-time allowable current for 10s (IEC/EN60947-1)		A	920
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Protection fuse	gG (IEC)	A	200
	aM (IEC)	A	125
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Making capacity (RMS value)		A	1500
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Breaking capacity at voltage	440V	A	1200
	500V	A	850
	690V	A	905
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Resistance per pole (average value)		m?	0.45
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Power dissipation per pole (average value)	Ith	W	11.5
	AC3	W	6.0
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Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	Ibin	4.4
	max	Ibin	5.2
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Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	0.74
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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 2020
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 120
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 holding	VA	300
		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			
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

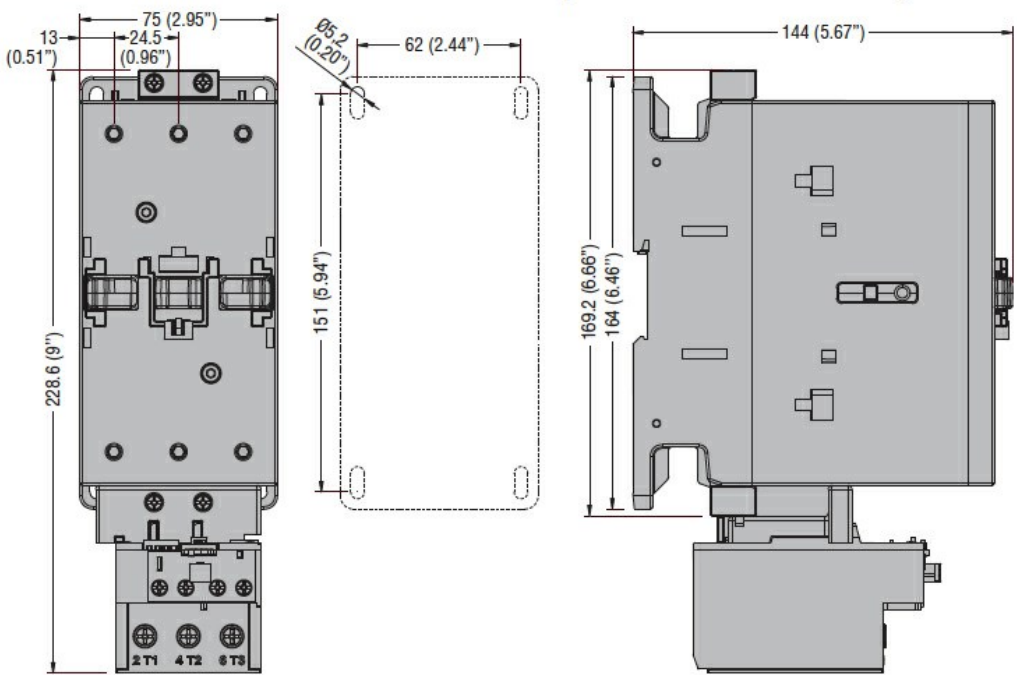
Ambient conditions

Temperature	Operating temperature	min	°C	-50
		max	°C	70

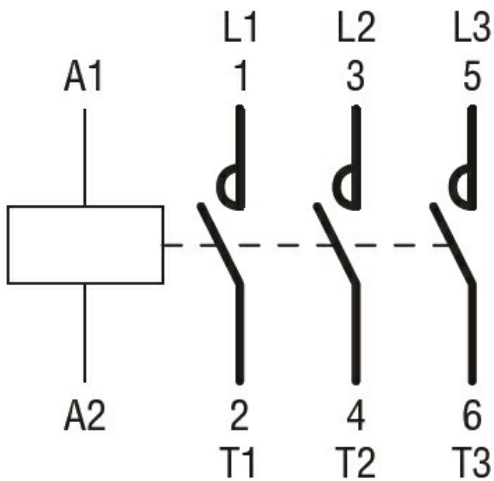
Storage temperature	min	°C	-60
	max	°C	+80

Max altitude	m	3000
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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