BF115T4A048

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 160A, AC COIL 50/60HZ, 48VAC



Product designation			Power contactor
Product type designation			BF115
Contact characteristics			
Number of poles		Nr.	4
Rated insulation voltage Ui IEC/EN		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operational frequency			
	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current Ith		A	160
Operational current Ie			
	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 Ie 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 Ie 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 Ie 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 Ie 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

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	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)		mΩ	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

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Operating position			
	normal		Vertical plan
	allowable		±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 50/60Hz		V	48
AC operating voltage			
of 50/60Hz coil powered at 50Hz			
pick-up			
	min	%Us	80
	max	%Us	110
drop-out			
	min	%Us	20
	max	%Us	55
of 50/60Hz coil powered at 60Hz			
pick-up			
	min	%Us	85
	max	%Us	110
drop-out			
	min	%Us	40
	max	%Us	55
AC average coil consumption at 20°C			
of 50/60Hz coil powered at 50Hz			
	in-rush	VA	300
	holding	VA	20
of 50/60Hz coil powered at 60Hz			
	in-rush	VA	275
	holding	VA	17
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			
General USE			
Contactor			
	AC current	A	165

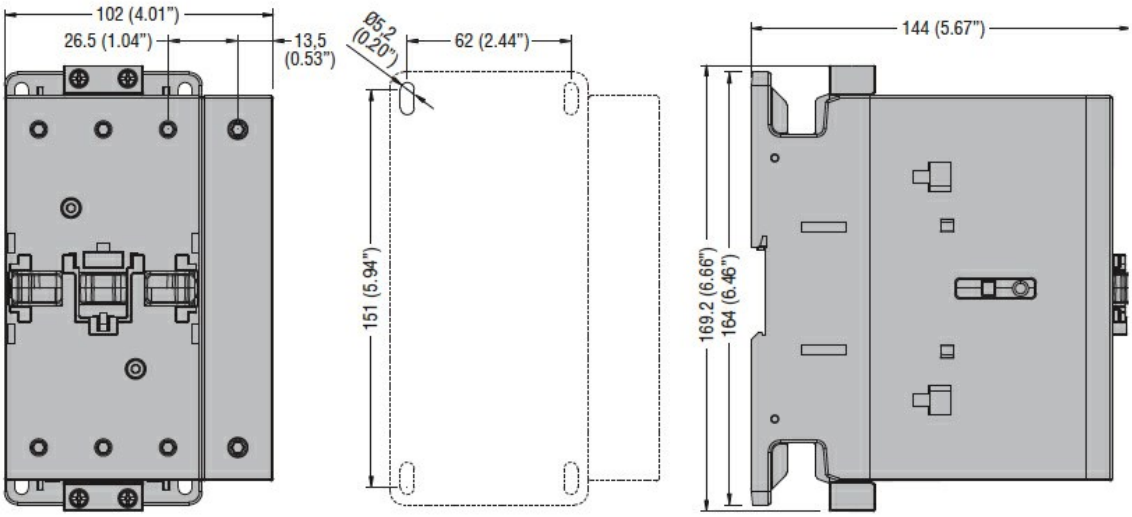
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Short-circuit protection fuse, 600V			
High fault			
	Short circuit current	kA	100
	Fuse rating	A	200
	Fuse class		J
Standard fault			
	Short circuit current	kA	10
	Fuse rating	A	250
	Fuse class		RK5

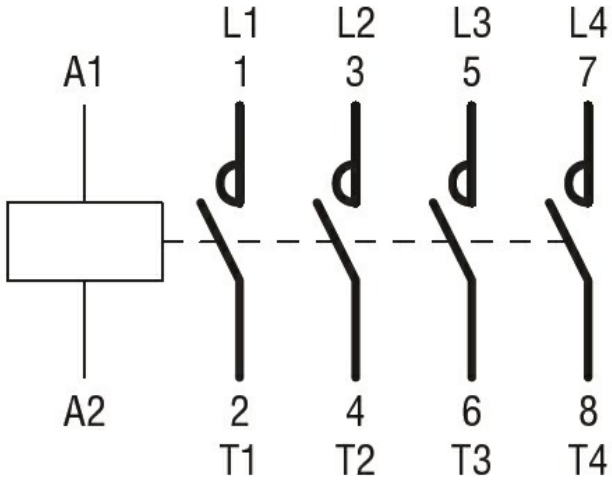
Ambient conditions

Temperature			
Operating temperature			
	min	°C	-50
	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

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	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

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