



Product designation Power contactor
Product type designation BF150

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	165
Operational current I_e	AC-1 (=40°C)	A 165
	AC-1 (=55°C)	A 135
	AC-1 (=70°C)	A 118
	AC-3 (=440V =55°C)	A 150
	AC-4 (400V)	A 70
Rated operational power AC-3 (T=55°C)	230V	kW 45
	400V	kW 75
	415V	kW 75
	440V	kW 75
	500V	kW 90
	690V	kW 110
	1000V	kW 55
IEC max current I_e in DC1 with L/R = 1ms with 1 poles in series	=24V	A 165
	48V	A 165
	75V	A 150
	110V	A 10
	220V	A -
	IEC max current I_e in DC1 with L/R = 1ms with 2 poles in series	=24V
48V		A 165
75V		A 165
110V		A 150
220V		A 14
IEC max current I_e in DC1 with L/R = 1ms with 3 poles in series		=24V
	48V	A 165
	75V	A 165
	110V	A 160
	220V	A 150
	IEC max current I_e in DC1 with L/R = 1ms with 4 poles in series	=24V
48V		A 165

	75V	A	165
	110V	A	165
	220V	A	165
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IEC max current Ie in DC3-DC5 with L/R = 15ms with 1 poles in series			
	=24V	A	165
	48V	A	60
	75V	A	44
	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	165
	48V	A	82
	75V	A	70
	110V	A	80
	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	165
	48V	A	195
	75V	A	110
	110V	A	120
	220V	A	120
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IEC max current Ie in DC3-DC5 with L/R = 15ms with 4 poles in series			
	=24V	A	165
	48V	A	130
	75V	A	130
	110V	A	150
	220V	A	150
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Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
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Protection fuse			
	gG (IEC)	A	250
	aM (IEC)	A	160
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Making capacity (RMS value)		A	1500
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Breaking capacity at voltage			
	440V	A	1200
	500V	A	1025
	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	12
	AC3	W	10.1
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Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
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Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	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 800000
Safety related data			
EMC compatibility			yes
AC coil operating			
Rated AC voltage at 60Hz			V 24
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
Dissipation at holding =20°C 50Hz			W 6.5
Max cycles frequency			
Mechanical operation			cycles/h 1500
Operating times			
Average time for Us control in AC			
Closing NO			
	min	ms	45
	max	ms	32
Opening NO			
	min	ms	9
	max	ms	24
UL technical data			
Yielded mechanical performance for three-phase AC motor			
	200/208V	HP	50
	220/230V	HP	50
	460/480V	HP	100

		575/600V	HP	125
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

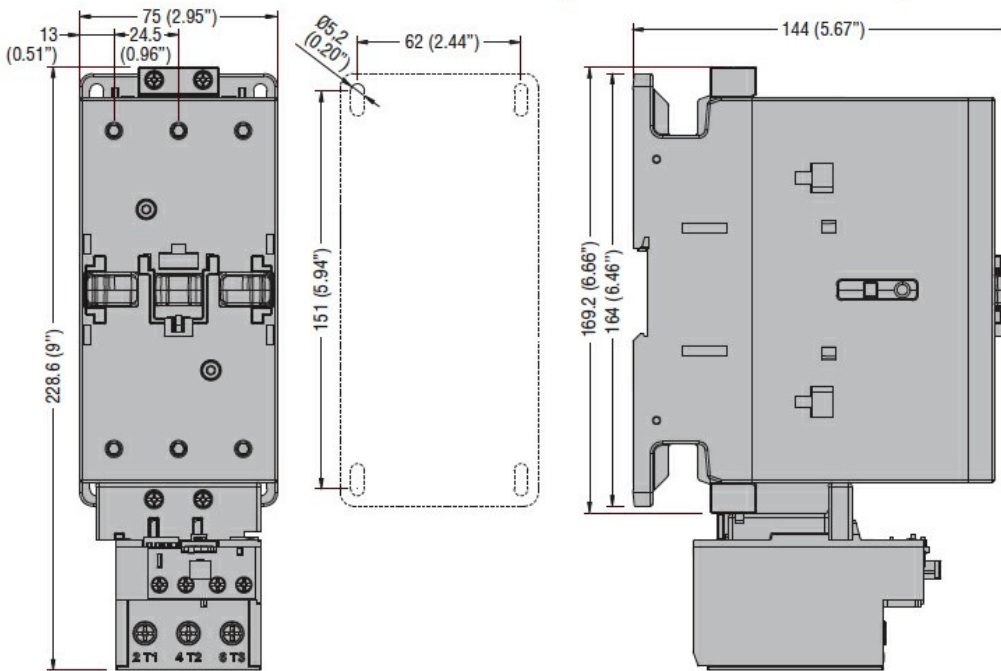
Storage temperature

min	°C	-60
max	°C	80

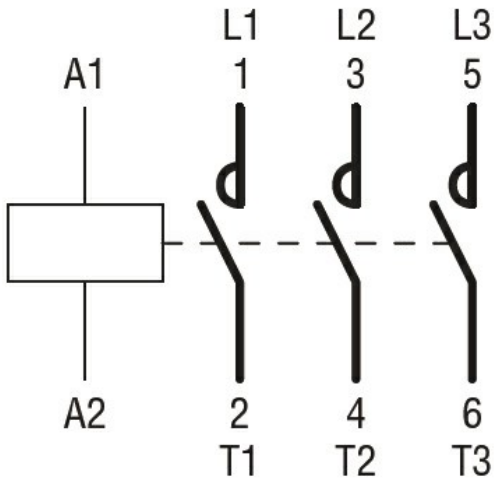
Max altitude

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