



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 ($\leq 40^\circ C$)	A	165
	AC-1 ($\leq 55^\circ C$)	A	135
	AC-1 ($\leq 70^\circ C$)	A	118
	AC-3 ($\leq 440V \leq 55^\circ C$)	A	150
	AC-4 (400V)	A	70
Rated operational power AC-3 ($T \leq 55^\circ C$)			
	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 $L/R \leq 1ms$ with 1 poles in series			
	$\leq 24V$	A	165
	48V	A	165
	75V	A	150
	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	165
	48V	A	165
	75V	A	165
	110V	A	150
	220V	A	14
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series			
	$\leq 24V$	A	165
	48V	A	165
	75V	A	165
	110V	A	160
	220V	A	150
IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series			
	$\leq 24V$	A	165
	48V	A	165

	75V	A	165
	110V	A	165
	220V	A	165
IEC max current le 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	—
IEC max current le 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
IEC max current le 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
IEC max current le 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
Short-time allowable current for 10s (IEC/EN60947-1)			A 1200
Protection fuse			
	gG (IEC)	A	250
	aM (IEC)	A	160
Making capacity (RMS value)			A 1500
Breaking capacity at voltage			
	440V	A	1200
	500V	A	1025
	690V	A	905
Resistance per pole (average value)			m? 0.45
Power dissipation per pole (average value)			
	I _{th}	W	12
	AC3	W	10.1
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	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 50/60Hz	V		110
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
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
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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

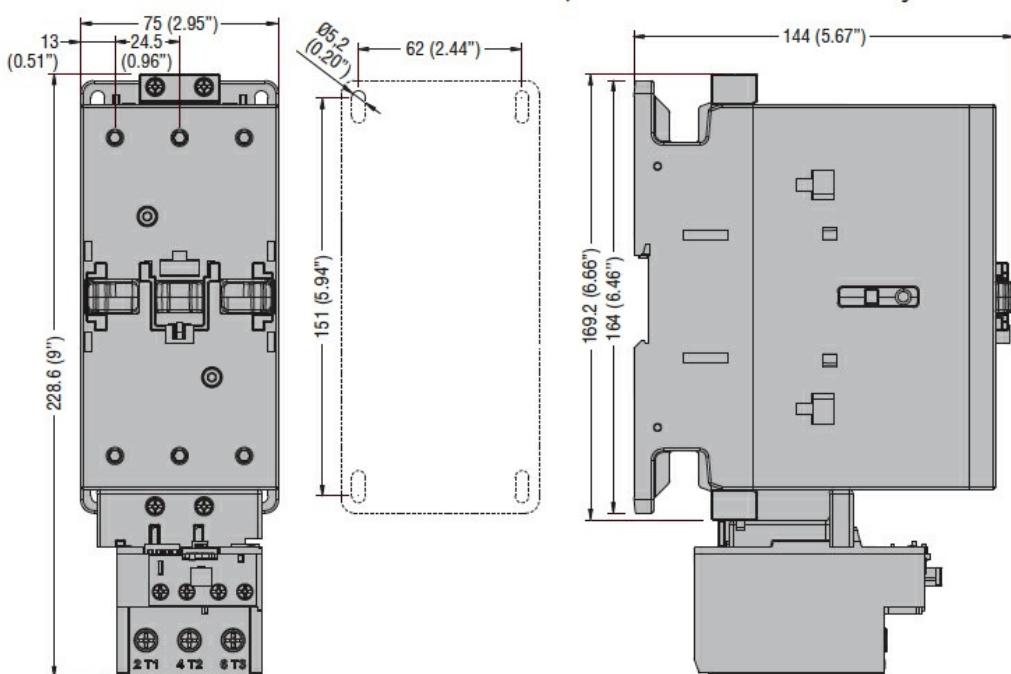
Storage temperature

min	°C	-60
max	°C	80

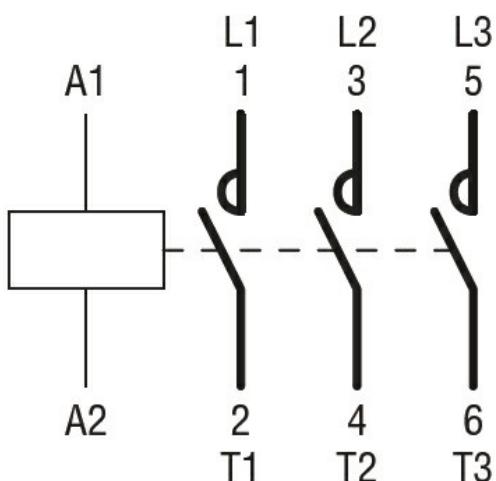
Max altitude

m	3000
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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 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