



Product designation	Power contactor		
Product type designation	BF150		
Contact characteristics			
Number of poles	Nr.	4	
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 current AC-3 ($T \leq 55^\circ C$)			
	230V	A	150
	400V	A	150
	415V	A	150
	440V	A	150
	500V	A	128
	690V	A	113
	1000V	A	51
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 I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series			
	$\leq 24\text{V}$	A	165
	48V	A	60
	75V	A	44
	110V	A	6
	220V	A	—
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 2 poles in series			
	$\leq 24\text{V}$	A	165
	48V	A	82
	75V	A	70
	110V	A	80
	220V	A	7
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 3 poles in series			
	$\leq 24\text{V}$	A	165
	48V	A	195
	75V	A	110
	110V	A	120
	220V	A	120
IEC max current I_e in DC3-DC5 with $L/R \leq 15\text{ms}$ with 4 poles in series			
	$\leq 24\text{V}$	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)			$\text{m}\Omega$ 0.45
Power dissipation per pole (average value)			
	I _{th}	W	12
	AC-3	W	10.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I _{bin}	0.59
	max	I _{bin}	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	2420			
Operations					
Mechanical life	cycles	15000000			
Electrical life	cycles	800000			
Safety related data					
Performance level B10d according to EN/ISO 13489-1	rated load mechanical load	cycles	800000 15000000		
EMC compatibility	yes				
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 VA	300 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					
Rated operational voltage AC (UL)	V	600			
General USE					
Contactor	AC current	A	165		

Short-circuit protection fuse, 600V
High fault

Standard fault	Short circuit current Fuse rating Fuse class	kA A J	100 200 10 250 RK5
	Short circuit current Fuse rating Fuse class		

Ambient conditions

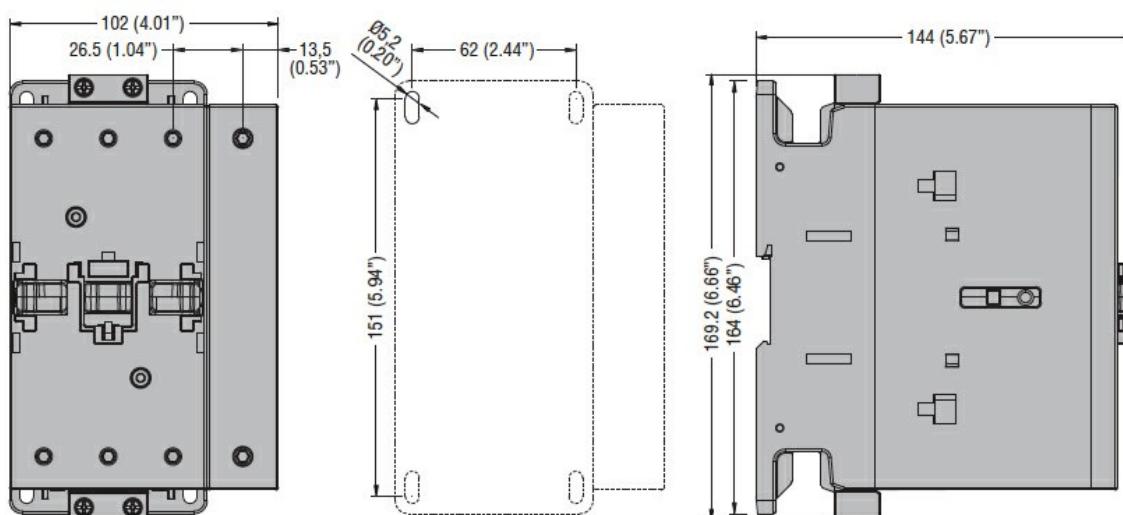
Temperature

Operating temperature	min max	°C °C	-50 70
Storage temperature	min max	°C °C	-60 80

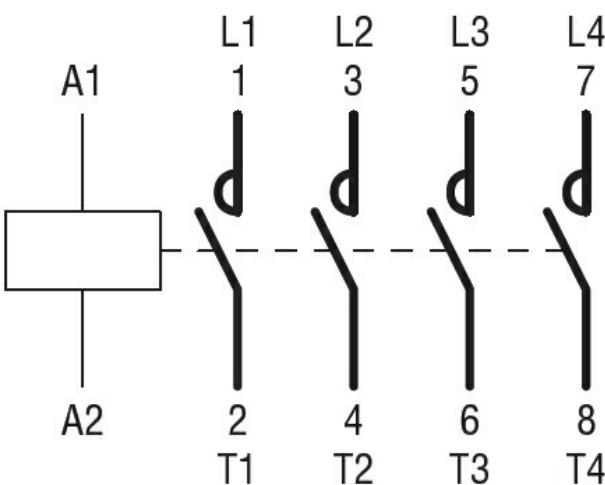
Max altitude

m 3000

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/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