



Product designation	Power contactor		
Product type designation	BF150		
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	165
Operational current Ie			
	AC-1 ($\leq 40^{\circ}\text{C}$)	A	165
	AC-1 ($\leq 55^{\circ}\text{C}$)	A	135
	AC-1 ($\leq 70^{\circ}\text{C}$)	A	118
	AC-3 ($\leq 440\text{V} \leq 55^{\circ}\text{C}$)	A	150
	AC-4 (400V)	A	70
Rated operational power AC-1 ($T \leq 40^{\circ}\text{C}$)			
	230V	kW	62
	400V	kW	110
	500V	kW	136
	690V	kW	187
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series			
	$\leq 24\text{V}$	A	165
	48V	A	165
	75V	A	150
	110V	A	10
	220V	A	—
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series			
	$\leq 24\text{V}$	A	165
	48V	A	165
	75V	A	165
	110V	A	150
	220V	A	14
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series			
	$\leq 24\text{V}$	A	165
	48V	A	165
	75V	A	165
	110V	A	160
	220V	A	150
IEC max current Ie in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series			
	$\leq 24\text{V}$	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) 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	35.4
max	lbin	44.3

Tightening torque for coil terminal

min	Nm	0.8
max	Nm	1
min	lbin	0.59
max	lbin	0.74

Max number of wires simultaneously connectable Nr. 2

Conductor section

AWG/Kcmil	max	2/0
Flexible w/o lug conductor section	min	mm ² 1.5

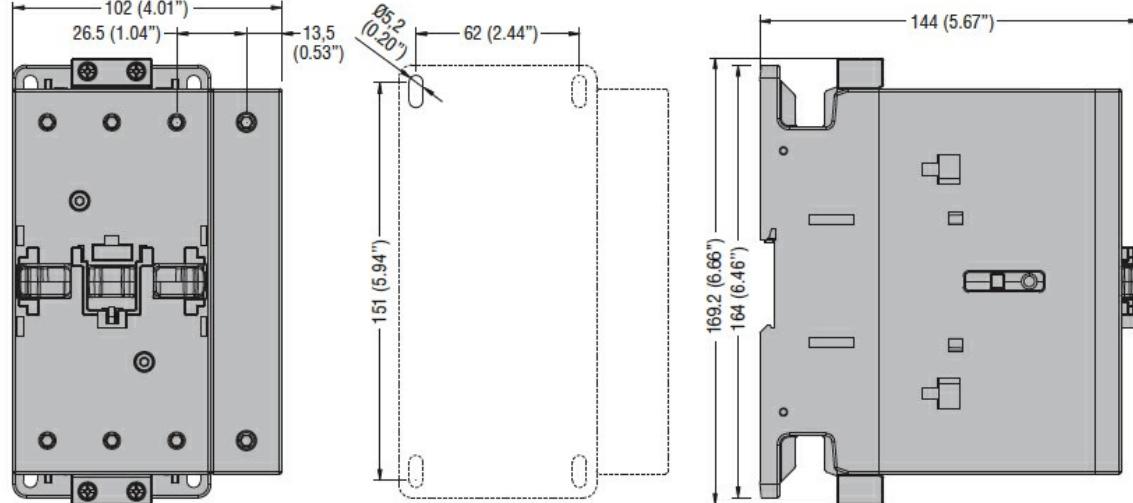
Flexible c/w lug conductor section	max	mm ²	70		
	min	mm ²	1.5		
	max	mm ²	70		
Power terminal protection according to IEC/EN 60529	IP20 front				
Mechanical features					
Operating position	normal	Vertical plan ±30°			
Fixing	Screw / DIN rail 35mm				
Weight	g	2460			
Conductor section					
AWG/kcmil conductor section	max	2/0			
Operations					
Mechanical life	cycles	15000000			
Electrical life	cycles	800000			
Safety related data					
Performance level B10d according to EN/ISO 13489-1	rated load	cycles	800000		
Mirror contacts according to IEC/EN 609474-4-1	yes				
EMC compatibility	yes				
AC coil operating					
Rated AC voltage at 50/60Hz, 60Hz	min	V	20		
	max	V	48		
AC operating voltage					
of 50/60Hz coil powered at 50Hz					
pick-up	min	%Us	80 Us min		
	max	%Us	110 Us max		
drop-out	max	%Us	≤70 Us min		
of 50/60Hz coil powered at 60Hz					
pick-up	min	%Us	80 Us min		
	max	%Us	110 Us max		
drop-out	max	%Us	≤70 Us min		
AC average coil consumption at 20°C					
of 50/60Hz coil powered at 50Hz	in-rush	VA	70...175		
	holding	VA	1.7...3.5		
of 50/60Hz coil powered at 60Hz	in-rush	VA	70...175		
	holding	VA	1.7...3.5		
of 60Hz coil powered at 60Hz	in-rush	VA	70...175		
	holding	VA	1.7...3.5		
Dissipation at holding ≤20°C 50Hz	W	1.3...1.5			
DC coil operating					
DC rated control voltage					

		min	V	20
		max	V	48
DC operating voltage				
	pick-up			
		min	%Us	85 Us min
		max	%Us	110 Us max
	drop-out			
		max	%Us	≤70 Us min
Average coil consumption ≤20°C				
		in-rush	W	70...80
		holding	W	1.3...1.5
Max cycles frequency				
Mechanical operation			cycles/h	2000
Operating times				
Average time for Us control				
	in AC			
		Closing NO		
			min	ms 45
			max	ms 90
		Opening NO		
			min	ms 24
			max	ms 60
	in DC			
		Closing NO		
			min	ms 45
			max	ms 90
		Opening NO		
			min	ms 24
			max	ms 60
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 -40
			max	°C 70
	Storage temperature			

	min	°C	-50
	max	°C	80
Max altitude		m	3000

Resistance & Protection	3
Pollution degree	

Dimensions	3
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Wiring diagrams	
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Certifications and compliance	
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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
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cULus	
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EAC	
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ETIM classification	EC000066 -
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ETIM 8.0	Power contactor, AC switching
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