

Product designation				Power contactor
Product type designation				BF150
<b>Contact characteristics</b>				
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 ( $\leq 40^\circ\text{C}$ )	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	
IEC max current $I_e$ 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 $I_e$ 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 $I_e$ 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 $I_e$ 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				

	≤24V	A	165
	48V	A	195
	75V	A	110
	110V	A	120
	220V	A	120
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IEC max current I <sub>e</sub> 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)		mΩ	0.45
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Power dissipation per pole (average value)			
	I <sub>th</sub>	W	12
	AC3	W	10.1
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Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	I <sub>bin</sub>	4.4
	max	I <sub>bin</sub>	5.2
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Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	I <sub>bin</sub>	Prodotti finiti
	max	I <sub>bin</sub>	Prodotti finiti
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Conductor section			
Flexible w/o lug conductor section			
	min	mm <sup>2</sup>	1.5
	max	mm <sup>2</sup>	70
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Flexible c/w lug conductor section			
	min	mm <sup>2</sup>	1.5
	max	mm <sup>2</sup>	70
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Power terminal protection according to IEC/EN 60529			IP20 front
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<b>Mechanical features</b>			
Operating position			
	normal		Vertical plan
	allowable		±30°
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Fixing			Screw / DIN rail 35mm
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Weight		g	2420
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<b>Operations</b>			
Mechanical life		cycles	15000000
Electrical life		cycles	800000
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<b>Safety related data</b>			

EMC compatibility				Yes
Rated AC voltage at 60Hz		V		24
<b>AC coil operating</b>				
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
<b>AC average coil consumption at 20°C</b>				
	of 50/60Hz coil powered at 50Hz			
		in-rush	VA	300
		holding	VA	20
	of 50/60Hz coil powered at 60Hz			
		in-rush	VA	300
		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
<b>Max cycles frequency</b>				
Mechanical operation			cycles/h	1500
<b>Operating times</b>				
Average time for Us control	in AC			
	Closing NO	min	ms	45
		max	ms	32
	Opening NO	min	ms	9
		max	ms	24
<b>UL technical data</b>				
<b>General USE</b>				
	Contactor		AC current	A 165
<b>Short-circuit protection fuse, 600V</b>				
	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
<b>Ambient conditions</b>				
<b>Temperature</b>				
	Operating temperature	min	°C	-50
		max	°C	70
	Storage temperature	min	°C	-60
		max	°C	80

Max altitude	m	3000
<b>Dimensions</b>		
<b>Wiring diagrams</b>		
<b>Certifications and compliance</b>		
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 EAC	
<b>ETIM classification</b>		
ETIM 8.0	EC000066 - Power contactor, AC switching	