

# FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 165A, AC COIL 60HZ, 220VAC



Product designation Power contactor
Product type designation BF150

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		Α	165
Operational current le			
	AC-1 (≤40°C)	Α	165
	AC-1 (≤55°C)	Α	135
	AC-1 (≤70°C)	Α	118
	AC-3 (≤440V ≤55°C)	Α	150
	AC-4 (400V)	Α	70
Rated operational current AC-3 (T≤55°C)			
	230V	Α	150
	400V	Α	150
	415V	Α	150
	440V	Α	150
	500V	Α	128
	690V	Α	113
	1000V	Α	51
IEC max current le in DC1 with L/R ≤ 1ms with 1 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	150
	110V	Α	10
	220V	Α	
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	150
	220V	A	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	Α	165
	48V	Α	165
	75V	Α	165
	110V	Α	160
	220V	Α	150
IEC max current le in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	165



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	75V	Α	165
	110V	Α	165
	220V	Α	165
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			_
·	≤24V	Α	165
	48V	Α	60
	75V	Α	44
	110V	Α	6
	220V	Α	_
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	Α	165
	48V	Α	82
	75V	Α	70
	110V	Α	80
	220V	Α	7
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
·	≤24V	Α	165
	48V	Α	195
	75V	Α	110
	110V	Α	120
	220V	Α	120
IEC max current le in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	Α	165
	48V	Α	130
	75V	Α	130
	110V	A	150
			.00
		Α	150
Short-time allowable current for 10s (IEC/EN60947-1)	220V	A A	150 1200
Short-time allowable current for 10s (IEC/EN60947-1) Protection fuse		A	150 1200
Short-time allowable current for 10s (IEC/EN60947-1)  Protection fuse	220V	Α	1200
	gG (IEC)	A	
Protection fuse	220V	Α	1200 250 160
Protection fuse  Making capacity (RMS value)	gG (IEC)	A A A	1200 250
Protection fuse	gG (IEC) aM (IEC)	A A A	1200 250 160 1500
Protection fuse  Making capacity (RMS value)	gG (IEC) aM (IEC)	A A A	1200 250 160 1500
Protection fuse  Making capacity (RMS value)	220V gG (IEC) aM (IEC) 440V 500V	A A A A	1200 250 160 1500 1200 1025
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage	gG (IEC) aM (IEC)	A A A A A	1200 250 160 1500 1200 1025 905
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)	220V gG (IEC) aM (IEC) 440V 500V	A A A A	1200 250 160 1500 1200 1025
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage	220V gG (IEC) aM (IEC) 440V 500V 690V	A A A A A A mΩ	1200 250 160 1500 1200 1025 905 0.45
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)	220V  gG (IEC) aM (IEC)  440V 500V 690V	A A A A MΩ	1200 250 160 1500 1200 1025 905 0.45
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)  Power dissipation per pole (average value)	220V gG (IEC) aM (IEC) 440V 500V 690V	A A A A A A mΩ	1200 250 160 1500 1200 1025 905 0.45
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)	220V  gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3	A A A A MΩ W	1200 250 160 1500 1200 1025 905 0.45 12 10.1
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)  Power dissipation per pole (average value)	220V  gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3	A A A A A MΩ W W W	1200 250 160 1500 1200 1025 905 0.45 12 10.1
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)  Power dissipation per pole (average value)	gG (IEC) aM (IEC) 440V 500V 690V Ith AC-3	A A A A A M Ω W W Nm Nm	1200 250 160 1500 1200 1025 905 0.45 12 10.1
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)  Power dissipation per pole (average value)	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min	A A A A A MΩ W W Nm Nm Ibin	1200 250 160 1500 1200 1025 905 0.45 12 10.1
Making capacity (RMS value) Breaking capacity at voltage  Resistance per pole (average value) Power dissipation per pole (average value)  Tightening torque for terminals	gG (IEC) aM (IEC) 440V 500V 690V Ith AC-3	A A A A A M Ω W W Nm Nm	1200 250 160 1500 1200 1025 905 0.45 12 10.1
Protection fuse  Making capacity (RMS value)  Breaking capacity at voltage  Resistance per pole (average value)  Power dissipation per pole (average value)	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min max	A A A A A M W W Nm Nm Ibin Ibin	1200 250 160 1500 1200 1025 905 0.45 12 10.1
Making capacity (RMS value) Breaking capacity at voltage  Resistance per pole (average value) Power dissipation per pole (average value)  Tightening torque for terminals	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min max	A A A A A MΩ W W Nm Nm Ibin Ibin	1200 250 160 1500 1200 1025 905 0.45 12 10.1 6 7 4.4 5.2
Making capacity (RMS value) Breaking capacity at voltage  Resistance per pole (average value) Power dissipation per pole (average value)  Tightening torque for terminals	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min max min max	A A A A A MΩ W W Nm Nm Ibin Ibin Nm	1200 250 160 1500 1200 1025 905 0.45 12 10.1 6 7 4.4 5.2
Making capacity (RMS value) Breaking capacity at voltage  Resistance per pole (average value) Power dissipation per pole (average value)  Tightening torque for terminals	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min max min max min max min	A A A A A A M W W V N M N I B I B I B I B I B I B I B I B I B I	1200 250 160 1500 1200 1025 905 0.45 12 10.1 6 7 4.4 5.2 0.8 1 0.59
Making capacity (RMS value) Breaking capacity at voltage  Resistance per pole (average value) Power dissipation per pole (average value)  Tightening torque for terminals  Tightening torque for coil terminal	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min max min max	A A A A A MΩ W W Nm Nm Ibin Ibin Nm	1200 250 160 1500 1200 1025 905 0.45 12 10.1 6 7 4.4 5.2
Making capacity (RMS value) Breaking capacity at voltage  Resistance per pole (average value) Power dissipation per pole (average value)  Tightening torque for terminals  Tightening torque for coil terminal	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min max min max min max min	A A A A A A M W W V N M N I B I B I B I B I B I B I B I B I B I	1200 250 160 1500 1200 1025 905 0.45 12 10.1 6 7 4.4 5.2 0.8 1 0.59
Making capacity (RMS value) Breaking capacity at voltage  Resistance per pole (average value) Power dissipation per pole (average value)  Tightening torque for terminals  Tightening torque for coil terminal	gG (IEC) aM (IEC)  440V 500V 690V  Ith AC-3  min max min max min max min max min	A A A A A A M W W V N M N I B I B I B I B I B I B I B I B I B I	1200 250 160 1500 1200 1025 905 0.45 12 10.1 6 7 4.4 5.2 0.8 1 0.59



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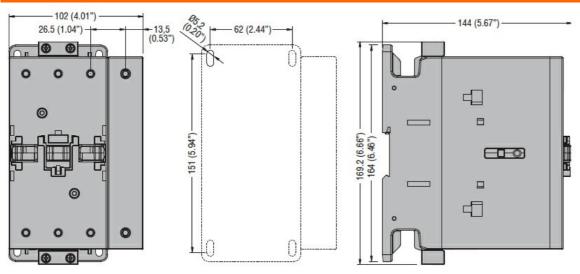
	Flexible w/o lug conductor section			
	· ·	min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
Power terminal protect	ction according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fiving				Screw / DIN rail
Fixing				35mm
Weight			g	2420
Conductor section			<del>_</del>	
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			2,5.23	
EMC compatibility				yes
AC coil operating				yee
Rated AC voltage at 6	60Hz		V	220
AC operating voltage	701 IL		•	
to operating vertage	of 50/60Hz coil powered at 50Hz			
	drop-out			
	drop-out	max	%Us	55
	of 60Hz coil powered at 60Hz	IIIdx	/003	33
	pick-up			
	pick-up	min	%Us	80
		max	%Us	110
	drop out	IIIdx	/005	110
	drop-out	min	%Us	20
		min	%Us	
<u> </u>		max	%08	55
AC average coil cons	•			
	of 60Hz coil powered at 60Hz			000
		in-rush	VA	300
	10000 5011	holding	VA	20
Dissipation at holding			W	6.5
Max cycles frequency				1500
Mechanical operation			cycles/h	1500
Operating times				
Average time for Us c				
	in AC			
	Closing NO			
		min	ms	45
		max	ms	32
	Opening NO			
		min	ms	9
		max	ms	24
UL technical data				
OE tooririidai data				

Contactor

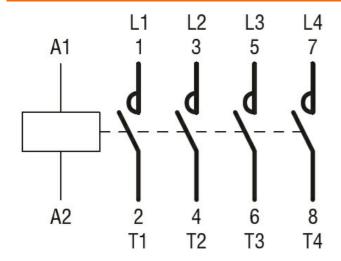
## FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 165A, AC COIL 60HZ,

		AC current	Α	165
Short-circuit protecti	ion fuse, 600V	AO CUITEIR		100
Short-circuit protecti	High fault			
	riigiriauit	Short circuit current	LΛ	100
			kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	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
Dimensions				

#### **Dimensions**



#### Wiring diagrams



### Certifications and compliance

Compliance



#### BF150T4A22060

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 165A, AC COIL 60HZ, 220VAC

	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