



Product designation Power contactor Product type designation BF150

Product type designation			BF150
Contact characteristics			
Number of poles		Nr.	3
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 power AC-3 (T≤55°C)			
	230V	kW	45
	400V	kW	75
	415V	kW	75
	440V	kW	75
	500V	kW	90
	690V	kW	110
	1000V	kW	55
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
Rated operational power AC-1 (T≤40°C)			
	230V	kW	62
	400V	kW	110
	500V	kW	136
	690V	kW	187
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	Α	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	220 V		
TEC max current le in DC i with E/N = ims with 3 poles in series	<04)/	۸	405
	≤24V	A	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
	75V	A	165
	110V	A	165
150	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			
120 max can six is in 200 200 man 2/10 = 10 ms man 2 person in conce	≤24V	Α	165
	48V	A	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	220 V		120
TEC max current le in DC3-DC3 with L/R \(\) 13ms with 4 poles in series	<04)/	۸	405
	≤24V	Α	165
	48V	Α	130
	75V	Α	130
	110V	Α	150
	220V	Α	150
Short-time allowable current for 10s (IEC/EN60947-1)		Α	1200
Protection fuse			
	gG (IEC)	Α	250
	aM (IEC)	Α	160
Making capacity (RMS value)	(/	A	1500
Breaking capacity (Nivio Value)		,,	
Distanting supposity at voltage	4401/	٨	1200
	440V	A	
	500V	Α	1025
-	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	12
	AC-3	W	10.1
Tightening torque for terminals			





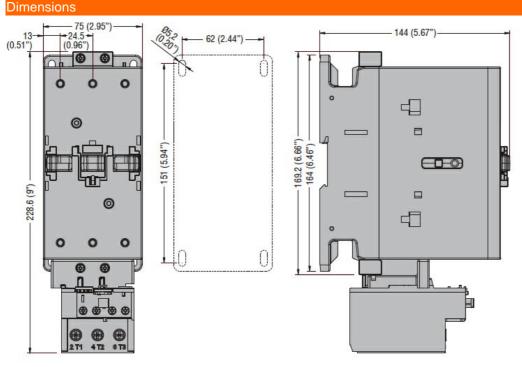
		min	Nm	6
		max	Nm	7
		min	lbin	35.4
		max	Ibin	44.3
Tightening torque for	coil terminal	max		1110
riginterning torque for	con terrinia		Nina	0.0
		min	Nm	0.8
		max	Nm	1
		min	lbin	0.59
		max	lbin	0.74
Conductor section				
	AWG/Kcmil			
	7 (max		2/0
	Clavible w/e lug conductor coetion	Пих		210
	Flexible w/o lug conductor section	•	•	4 =
		min	mm²	1.5
		max	mm²	70
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	70
Power terminal proto-	ction according to IEC/EN 60529	HUX		IP20 front
	CHOIT ACCURATING TO TEC/EN 00329			IFZU IIUIIL
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
				Screw / DIN rail
Fixing				35mm
Weight			α	2060
			g	2000
Conductor section				
	AWG/kcmil conductor section			
		max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
			Cyclcs	000000
Safety related data	10.1			
Performance level B1	10d according to EN/ISO 13489-1			
		rated load	cycles	800000
Mirror contats accord	ing to IEC/EN 609474-4-1			yes
EMC compatibility				yes
AC coil operating				
Rated AC voltage at 8	50/60Hz 60Hz			
Nateu Ao Voltage at t	JO/ JOI 12, JOI 12	•	17	60
		min	V	60
		max	V	110
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
	, 	min	%Us	80 Us min
			%Us	110 Us max
	du	max	/005	i io os iliax
	drop-out		0/11	470.11
		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	HIGA	,003	. To Go max
	drop-out			



			max	%Us	≤70 Us min
AC average coil consu					
	of 50/60Hz coil p	owered at 50Hz			
			in-rush	VA	70175
	of 50/60Hz coil p	oward at 60Uz	holding	VA	1.73.5
	oi su/ounz coii p	owered at 60HZ	in-rush	VA	70175
			holding	VA	1.73.5
	of 60Hz coil pow	ered at 60Hz	nolaling	V/ (1.7
	0. 00. 12 00.1 po.1.	0.00 0.00.12	in-rush	VA	70175
			holding	VA	1.73.5
Dissipation at holding	≤20°C 50Hz		<u> </u>	W	1.31.5
DC coil operating					
DC rated control volta	ge				
			min	V	60
			max	V	110
DC operating voltage				_	
	pick-up				
			min	%Us	80 Us min
			max	%Us	110 Us max
	drop-out			0/11	.70.11
	1: 10000		max	%Us	≤70 Us min
Average coil consump	otion ≤20°C			147	70 00
			in-rush	W	7080
Max cycles frequency			holding	W	1.31.5
Mechanical operation				cycles/h	2000
Operating times				Cycles/II	2000
Operating times					
Average time for Usic	ontrol				
Average time for Us c					
Average time for Us c	ontrol in AC	Closing NO			
Average time for Us c		Closing NO	min	ms	45
Average time for Us c		Closing NO	min max	ms ms	45 90
Average time for Us c		Closing NO Opening NO			
Average time for Us c		-			
Average time for Us c	in AC	-	max	ms	90
Average time for Us c		Opening NO	max min	ms ms	90
Average time for Us c	in AC	-	max min max	ms ms ms	90 24 60
Average time for Us c	in AC	Opening NO	max min max min	ms ms ms	90 24 60 45
Average time for Us c	in AC	Opening NO Closing NO	max min max	ms ms ms	90 24 60
Average time for Us c	in AC	Opening NO	max min max min max	ms ms ms	90 24 60 45 90
Average time for Us c	in AC	Opening NO Closing NO	max min max min max min max min	ms ms ms	90 24 60 45 90 24
	in AC	Opening NO Closing NO	max min max min max	ms ms ms	90 24 60 45 90
UL technical data	in AC	Opening NO Closing NO	max min max min max min max min	ms ms ms	90 24 60 45 90 24
	in AC in DC erformance	Opening NO Closing NO Opening NO	max min max min max min max min	ms ms ms	90 24 60 45 90 24
UL technical data	in AC	Opening NO Closing NO Opening NO	max min max min max min max	ms ms ms ms ms	90 24 60 45 90 24 60
UL technical data	in AC in DC erformance	Opening NO Closing NO Opening NO	max min max min max min max 200/208V	ms ms ms	90 24 60 45 90 24 60
UL technical data	in AC in DC erformance	Opening NO Closing NO Opening NO	max min max min max min max	ms ms ms ms ms ms	90 24 60 45 90 24 60
UL technical data	in AC in DC erformance	Opening NO Closing NO Opening NO	max min max min max min max 200/208V 220/230V	ms ms ms ms ms ms	90 24 60 45 90 24 60
UL technical data	in AC in DC erformance	Opening NO Closing NO Opening NO	max min max min max min max 200/208V 220/230V 460/480V	ms ms ms ms ms ms HP HP	90 24 60 45 90 24 60
UL technical data Yielded mechanical pe	in AC in DC erformance	Opening NO Closing NO Opening NO	max min max min max min max 200/208V 220/230V 460/480V	ms ms ms ms ms ms HP HP	90 24 60 45 90 24 60
UL technical data Yielded mechanical pe	in AC in DC erformance for three-phase	Opening NO Closing NO Opening NO	max min max min max min max 200/208V 220/230V 460/480V	ms ms ms ms ms ms HP HP	90 24 60 45 90 24 60

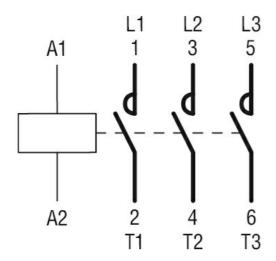


	High fault			
		Short circuit current	kA	100
		Fuse rating	Α	200
		Fuse class		J
	Standard fault			
		Short circuit current	kA	10
		Fuse rating	Α	250
		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude	<u> </u>		m	3000
Resistance & Protecti	on			
Pollution degree				3
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

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching