



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
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	A	10
150	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	.0.43.4		
	≤24V	Α	165
	48V	A	165
	75V	A	165
	110V	A	150
IFO was a summer to be DOA with 1/D 4.4 and 1/1 Oct 1/2	220V	A	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	20.01	Δ.	405
	≤24V	A	165
	48V	A	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	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	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)	u (:=0)	A	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	A	1025
	690V	A	905
Resistance per pole (average value)	000 7	mΩ	0.45
Power dissipation per pole (average value)		11132	5.10
1 oner alsoipation per pero (average value)			
	lth	۱۸/	12
	lth △C-3	W	12 10 1
Tightaning targue for terminals	Ith AC-3	W	12 10.1
Tightening torque for terminals	AC-3	W	10.1
Tightening torque for terminals	AC-3	W Nm	6
Tightening torque for terminals	AC-3 min max	W Nm Nm	10.1 6 7
Tightening torque for terminals	AC-3 min max min	Nm Nm Ibin	10.1 6 7 35.4
	AC-3 min max	W Nm Nm	10.1 6 7
	min max min max	Nm Nm Ibin Ibin	10.1 6 7 35.4 44.3
Tightening torque for terminals Tightening torque for coil terminal	AC-3 min max min	Nm Nm Ibin	10.1 6 7 35.4





		min	Ibin	0.59
		max	Ibin	0.74
	simultaneously connectable		Nr.	2
Conductor section	A)A(O///			
	AWG/Kcmil			0/0
	Clavible w/e lug conductor equipm	max		2/0
	Flexible w/o lug conductor section		· 2	4 5
		min	mm²	1.5
	Clavible a/w lug conductor coetion	max	mm²	70
	Flexible c/w lug conductor section	min	mm²	1.5
		min max	mm² mm²	70
Power terminal protect	tion according to IEC/EN 60529	IIIax	111111	IP20 front
Mechanical features	tion according to IEC/EN 00329			1F 20 11011t
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			g	2460
Conductor section			9	2.00
	AWG/kcmil conductor section			
	7 TO CARGAMA CONTROL C	max		2/0
Operations		Пах		2,0
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			-,	
Daicty I clated data				
•	0d according to EN/ISO 13489-1			
•	0d according to EN/ISO 13489-1	rated load	cycles	800000
Performance level B1		rated load	cycles	
Performance level B1	0d according to EN/ISO 13489-1 ng to IEC/EN 609474-4-1	rated load	cycles	yes
Performance level B1 Mirror contats accordi		rated load	cycles	
Performance level B1 Mirror contats according EMC compatibility AC coil operating	ng to IEC/EN 609474-4-1	rated load	cycles	yes
Performance level B1 Mirror contats accordi EMC compatibility	ng to IEC/EN 609474-4-1	rated load	cycles	yes
Performance level B1 Mirror contats according EMC compatibility AC coil operating	ng to IEC/EN 609474-4-1			yes yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	ng to IEC/EN 609474-4-1	min	V	yes yes
Performance level B1 Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	ng to IEC/EN 609474-4-1 0/60Hz, 60Hz	min	V	yes yes
Performance level B1 Mirror contats according EMC compatibility AC coil operating	ng to IEC/EN 609474-4-1	min	V	yes yes
Performance level B1 Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	ng to IEC/EN 609474-4-1 0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min	V	yes yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	ng to IEC/EN 609474-4-1 0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min max	V	yes yes 60 110
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	ng to IEC/EN 609474-4-1 0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min max min	V V	yes yes 60 110
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	min max min	V V	yes yes 60 110
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	min max min max	V V WUs %Us	yes yes 60 110 80 Us min 110 Us max
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	min max min max	V V WUs %Us	yes yes 60 110 80 Us min 110 Us max
Performance level B1 Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max	V V WUs %Us	yes yes 60 110 80 Us min 110 Us max
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max max	V V WUs %Us %Us	yes yes 60 110 80 Us min 110 Us max ≤70 Us min
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz	min max min max max	V V V %Us %Us	yes yes 60 110 80 Us min 110 Us max ≤70 Us min 80 Us min
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up of 50/60Hz coil powered at 60Hz pick-up	min max min max max	V V V %Us %Us	yes yes 60 110 80 Us min 110 Us max ≤70 Us min 80 Us min
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max max	V V V %Us %Us %Us	yes yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max max	V V V %Us %Us %Us	yes yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max max	V V V %Us %Us %Us	yes yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5 AC operating voltage	of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out drop-out	min max min max max min max	V V V %Us %Us %Us %Us	yes yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min



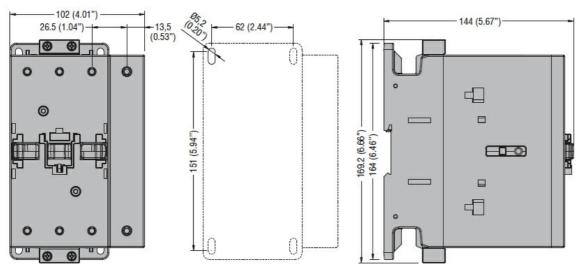


			in-rush	VA	70175
			holding	VA	1.73.5
	of 60Hz coil powere	ed at 60Hz			
	·		in-rush	VA	70175
			holding	VA	1.73.5
Dissipation at holding ≤	:20°C 50Hz			W	1.31.5
DC coil operating	20 0 00112			**	1.0
DC rated control voltag	0				
DC rated control voltag	E			\ /	00
			min	V	60
			max	V	110
DC operating voltage					
	pick-up				
			min	%Us	80 Us min
			max	%Us	110 Us max
	drop-out				
			max	%Us	≤70 Us min
Average coil consumpt	ion ≤20°C				
5			in-rush	W	7080
			holding	W	1.31.5
Max cycles frequency			Tioiding	V V	
Mechanical operation				cycles/h	2000
				Cycles/II	2000
Operating times					
Average time for Us co					
	in AC				
		Closing NO			
			min	ms	45
			max	ms	90
		Opening NO			
			min	ms	24
			max	ms	60
	in DC				
		Closing NO			
		3 -	min	ms	45
			max	ms	90
		Opening NO	max		
		Opening NO	min	me	24
				ms	
III to obvioul data			max	ms	60
UL technical data					
Yielded mechanical per					
	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	Α	165
Short-circuit protection	fuse 600V				
Chort offour protoction					
	High fault		Chart singuit sums at	I.Λ	100
			Short circuit current	kA	100
			Fuse rating	Α	200
			Fuse class		J
	Standard fault				
			Short circuit current	kA	10

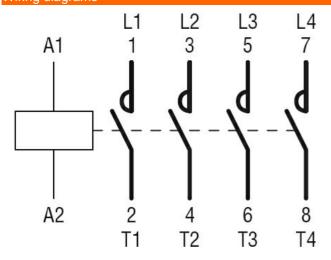


		Fuse rating Fuse class	Α	250 RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protecti	on			
Pollution degree				3

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



BF150T4E110

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 160A, AC/DC COIL, 110VAC/DC

Certificates			
	CCC		
	cULus		
	EAC		

ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching