



Product designation Power contactor Product type designation BF150

1 Toddet type designation			DI 100
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 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			
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	Α	165
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V 48V	A A	165 165



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 20...48VAC/DC

	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	<u>A</u>	150
Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
Protection fuse	0 (150)		
	gG (IEC)	Α	250
M.I. (DMO. I.)	aM (IEC)	Α	160
Making capacity (RMS value)		Α	1500
Breaking capacity at voltage	4.401.4		4000
	440V	A	1200
	500V	A	1025
Building and the control of	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)	1.1	147	4.0
	Ith	W	12
Tinhtonia a tanana faa tanainala	AC3	W	10.1
Tightening torque for terminals			•
	min	Nm	6
	max	Nm	7
	min	Ibin	35.4
Tightoning toward for call towards	max	Ibin	44.3
Tightening torque for coil terminal		N.I.	0.0
	min	Nm Næ	0.8
	max	Nm	1





THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 20...48VAC/DC

		_		
		min	lbin	0.59
01		max	Ibin	0.74
Conductor section	ANA(O/IZ			
	AWG/Kcmil			2/0
	Fig. 71. Leaves Later and Co.	max		2/0
	Flexible w/o lug conductor section	ma!m	mm²	1 5
		min	mm²	1.5
	Elevible c/w lug conductor costion	max	mm²	70
	Flexible c/w lug conductor section	min	mm²	1.5
		min	mm²	70
Power terminal protec	tion according to IEC/EN 60529	max	1111111	IP20 front
Mechanical features	tion according to IEC/EN 60329			IP20 HOHL
Operating position				
Operating position		normal		Vertical plan
		allowable		±30°
		allOwable		Screw / DIN rail
Fixing				35mm
Weight			g	2060
Conductor section			<u> </u>	
	AWG/kcmil conductor section			
	7 TO GARAGIAN CONTRACTOR COCKERN	max		2/0
Operations				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			, , , , ,	
	0d according to EN/ISO 13489-1			
	3		مماميم	800000
		rated load	cycles	000000
Mirror contats accordi	ng to IEC/EN 609474-4-1	rated load	cycles	yes
	ng to IEC/EN 609474-4-1	rated load	cycles	yes
EMC compatibility	ng to IEC/EN 609474-4-1	rated load	cycles	
EMC compatibility AC coil operating		rated load	cycles	yes
EMC compatibility		rated load	V	yes
EMC compatibility AC coil operating				yes yes
EMC compatibility AC coil operating		min	V	yes yes
EMC compatibility AC coil operating Rated AC voltage at 5		min	V	yes yes
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz	min	V	yes yes
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min	V	yes yes
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min max	V	yes yes 20 48
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min max min	V V	yes yes 20 48
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up	min max min	V V	yes yes 20 48
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up	min max min max	V V WUs %Us	yes yes 20 48 85 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	min max min max	V V WUs %Us	yes yes 20 48 85 Us min 110 Us max
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 20 48 85 Us min 110 Us max
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 20 48 85 Us min 110 Us max ≤70 Us min
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 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max
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	min max min max max	V V V %Us %Us	yes yes 20 48 85 Us min 110 Us max ≤70 Us min
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	min max min max max	V V V %Us %Us %Us	yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max
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	min max min max max	V V V %Us %Us %Us	yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max
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 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max
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 max	V V V %Us %Us %Us %Us	yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
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 in-rush	V V V %Us %Us %Us %Us	yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 70175
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 in-rush	V V V %Us %Us %Us %Us	yes yes 20 48 85 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 70175



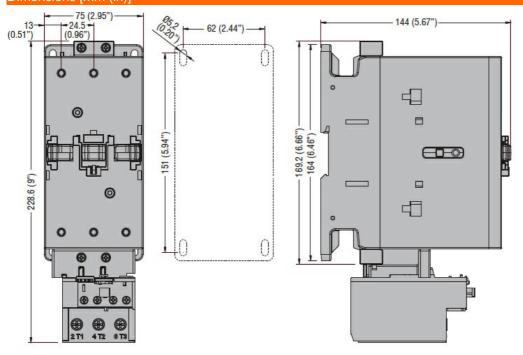
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 20...48VAC/DC

			holding	VA	1.73.5
	of 60Hz coil powered a	t 60Hz	<u></u>		
	·		in-rush	VA	70175
			holding	VA	1.73.5
Dissipation at holding :	≤20°C 50Hz			W	1.31.5
DC coil operating					
DC rated control voltage	je				
			min	V	20
			max	V	48
DC operating voltage					
	pick-up			0/11	
			min	%Us	80 Us min
	duan and		max	%Us	110 Us max
	drop-out		200 0	0/116	<70 He min
Average seil consumn	tion <00°C		max	%Us	≤70 Us min
Average coil consump	lion ≤20 C		in ruch	14/	7080
			in-rush	W	
Max cycles frequency			holding	W	1.31.5
Mechanical operation				cycles/h	2000
Operating times				Cycles/II	
Average time for Us co	ontrol				
Average time for 03 cc	in AC				
	11710	Closing NO			
		Gloomig 110	min	ms	45
			max	ms	90
		Opening NO			
		1 0	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 pe					
	for three-phase AC mo	tor	000/0001/		50
			200/208V	HP	50
			220/230V 460/480V	HP HP	50 100
			575/600V	HP HP	125
General USE			37 3/000 V	1 11	120
Conoral OOL	Contactor				
	Contactor		AC current	Α	165
Short-circuit protection	fuse 600V		710 Guildit	/ \	
Short should protocilon	High fault				
	9.1 14411		Short circuit current	kA	100
			Fuse rating	A	200
			Fuse class		J
	Standard fault		. 300 0.000		
			Short circuit current	kA	10
			Fuse rating	Α	250
			9		

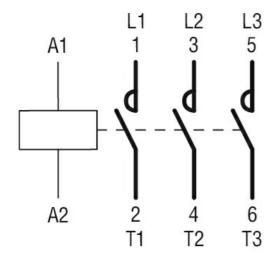


		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protect	tion			
Pollution degree				3
Dimensions [mm (in)]				

Dimensions [mm (in)]



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1 CSA C22.2 n° 60947-4-1



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 20...48VAC/DC

	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





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 power AC-1 (T≤40°C)			
1 1 - ()	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	A	165
	75V	Α	150
	110V	Α	10
	220V	Α	_
IEC max current le in DC1 with L/R ≤ 1ms with 2 poles in series	2201		
1.20 max danoncio in 201 with Lift = 1mb with 2 polos in selles	≤24V	Α	165
	48V	A	165
	75V	A	165
	110V	A	150
	220V	A	14
IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series	ZZUV		17
			405
TEC max current le in DCT with L/N 3 mis with 3 poles in series	<21/1	Λ.	
TEC max current le in DCT with E/N 3 mis with 3 poles in series	≤24V	A	165 165
TEC max current le in DCT with L/K 3 mis with 3 poles in series	≤24V 48V 75V	A A A	165 165 165



	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	<u>A</u>	150
Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
Protection fuse	0 (150)		
	gG (IEC)	Α	250
M.I. (DMO. I.)	aM (IEC)	Α	160
Making capacity (RMS value)		Α	1500
Breaking capacity at voltage	4.401.4		4000
	440V	A	1200
	500V	A	1025
Building and the control of	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)	1.1	147	4.0
	Ith	W	12
Tinhtonia a tanana faa tanainala	AC3	W	10.1
Tightening torque for terminals			•
	min	Nm	6
	max	Nm	7
	min	Ibin	35.4
Tightoning toward for call towards	max	Ibin	44.3
Tightening torque for coil terminal		N.I.	0.0
	min	Nm Næ	0.8
	max	Nm	1





		min	lbin	0.59
		max	Ibin	0.74
Conductor section				
	AWG/Kcmil			
		max		2/0
	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
	tion according to IEC/EN 60529			IP20 front
Mechanical features				
Operating position				
		normal		Vertical plan
		allowable		±30°
Fixing				Screw / DIN rail
\/\a:abt				35mm
Weight			g	2060
Conductor section	AVAIC/homail agus de stant a satir e			
	AWG/kcmil conductor section			2/0
Operations		max		2/0
Operations Mechanical life			ovelee.	4500000
			cycles	15000000
Electrical life			cycles	800000
Safety related data	Od according to ENVISO 12490 1			
renormance level bit	0d according to EN/ISO 13489-1	rated load	cycles	800000
		Taleu luau	Cycles	000000
Mirror contate accordi	ng to IEC/EN 600/7/1-/1-1			VOC
	ng to IEC/EN 609474-4-1		,	yes
EMC compatibility	ng to IEC/EN 609474-4-1			yes yes
EMC compatibility AC coil operating				_*
EMC compatibility				yes
EMC compatibility AC coil operating		min	V	yes 60
EMC compatibility AC coil operating Rated AC voltage at 5				yes
EMC compatibility AC coil operating	0/60Hz, 60Hz	min	V	yes 60
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min	V	yes 60
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz	min max	V	yes 60 110
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min max min	V V	yes 60 110 80 Us min
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up	min max	V	yes 60 110
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz	min max min max	V V WUs %Us	yes 60 110 80 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	min max min	V V	yes 60 110 80 Us min
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 60 110 80 Us min 110 Us max
EMC compatibility AC coil operating Rated AC voltage at 5	0/60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out	min max min max max	V V WUs %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min
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 60 110 80 Us min 110 Us max ≤70 Us min 80 Us min
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	min max min max max	V V WUs %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min
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 %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max
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	min max min max max	V V V %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 80 Us min
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	min max min max max	V V V %Us %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max
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	min max min max max min max max	V V V %Us %Us %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max
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	min max min max max in-rush	V V V %Us %Us %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min
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 max	V V V %Us %Us %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max
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	min max min max max in-rush holding	V V V %Us %Us %Us %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min
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 in-rush	V V V %Us %Us %Us %Us	yes 60 110 80 Us min 110 Us max ≤70 Us min 80 Us min 110 Us max ≤70 Us min



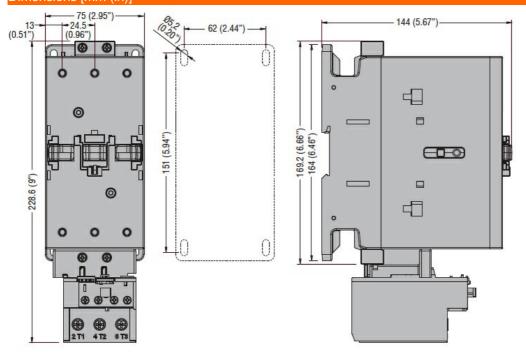


			holding	VA	1.73.5
	of 60Hz coil powere	ed at 60Hz			
			in-rush	VA	70175
B: : :: (1 11:	10000 5011		holding	VA	1.73.5
Dissipation at holding	≤20°C 50Hz			W	1.31.5
DC coil operating					
DC rated control volta	ge				00
			min	V	60
DO			max	V	110
DC operating voltage					
	pick-up		min	0/116	80 Us min
			min	%Us	
	dram and		max	%Us	110 Us max
	drop-out		****	0/116	<70 Ha main
A.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-ti <00°C		max	%Us	≤70 Us min
Average coil consump	olion ≤20 C		مام س ما	147	70 00
			in-rush	W	7080
Max cycles frequency			holding	۷V	1.31.5
Mechanical operation				cycles/h	2000
Operating times				Cycles/II	2000
Average time for Us o	ontrol				
Average unite for US C	in AC				
	III AC	Closing NO			
		Closing NO	min	ms	45
			max	ms	90
		Opening NO	παλ	1113	50
		Opening 140	min	ms	24
			max	ms	60
	in DC				
	2 0	Closing NO			
		3 - 2	min	ms	45
			max	ms	90
		Opening NO			
			min	ms	24
			max	ms	60
UL technical data					
Yielded mechanical p	erformance				
	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 protectio	n fuse, 600V				
Short-circuit protectio	n fuse, 600V High fault				
Short-circuit protectio			Short circuit current	kA	100
Short-circuit protectio			Fuse rating	kA A	200
Short-circuit protectio	High fault				
Short-circuit protectio			Fuse rating Fuse class		200 J
Short-circuit protectio	High fault		Fuse rating		200

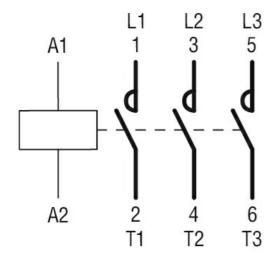


Fuse class		RK5
min	°C	-40
max	°C	70
min	°C	-50
max	°C	80
	m	3000
		3
	min max min	min °C max °C min °C max °C

Dimensions [mm (in)]



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 60...110VAC/DC

	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





Product designation Power contactor Product type designation BF150

		BF150
	Nr.	3
	V	1000
	kV	8
min	Hz	25
max	Hz	400
	Α	165
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
230V	kW	45
400V	kW	75
415V	kW	75
440V	kW	75
500V	kW	90
690V	kW	110
1000V	kW	55
230V	kW	62
400V	kW	110
500V	kW	136
690V	kW	187
≤24V	Α	165
48V	Α	165
75V	Α	150
110V	Α	10
220V	Α	_
≤24V	Α	165
48V	Α	165
75V	Α	165
110V	Α	150
220V	Α	14
≤24V	Α	165
	_	
48V	Α	165
	max AC-1 (≤40°C) AC-1 (≤55°C) AC-1 (≤70°C) AC-3 (≤440V ≤55°C) AC-4 (400V) 230V 400V 415V 440V 500V 690V 1000V 230V 400V 500V 690V 110V 220V ≤24V 48V 75V 110V 220V	V KV KV KV KV KV KV KV KV KV KV K



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 100...250VAC/DC

	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)	· /	Α	1500
Breaking capacity at voltage			
	440V	Α	1200
	500V	Α	1025
	690V	Α	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)			
1 1 1 3 3 3 3 3 7	lth	W	12
	AC3	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			-
0 0 4	min	Nm	0.8
	max	Nm	1
	max	. •	•





THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 100...250VAC/DC

		min	lbin	0.59
01		max	lbin	0.74
Conductor section	ANNO #4			
	AWG/Kcmil			0/0
		max		2/0
	Flexible w/o lug conductor section	·•	no no ?	1 E
		min	mm²	1.5
	Clavible also less applications and the	max	mm²	70
	Flexible c/w lug conductor section		mm²	1 5
		min	mm²	1.5 70
Dower terminal protec	ation appording to IEC/EN 60520	max	mm²	IP20 front
Mechanical features	ction according to IEC/EN 60529			1F20 11011L
Operating position		normal		Vertical plan
		normal allowable		Vertical plan ±30°
		allowable		Screw / DIN rail
Fixing				35mm
Weight			g	2060
Conductor section			У	2000
CONTRACTOR SECTION	AWG/kcmil conductor section			
	AVVG/KCITIII COTIQUCIOI SECTION	max		2/0
Operations		IIIdX		
Mechanical life			cycles	15000000
Electrical life			cycles	800000
Safety related data			Cycles	300000
	al III i militara i a cara i			
Pellolliance ievel e i	Od according to FN/ISO 13489-1			
Performance level bi	0d according to EN/ISO 13489-1	rated load	cycles	800000
		rated load	cycles	800000 ves
Mirror contats accordi	od according to EN/ISO 13489-1 ing to IEC/EN 609474-4-1	rated load	cycles	yes
Mirror contats accordi		rated load	cycles	
Mirror contats according EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1	rated load	cycles	yes
Mirror contats accordi	ing to IEC/EN 609474-4-1			yes yes
Mirror contats according EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1	min	V	yes yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1			yes yes
Mirror contats according EMC compatibility AC coil operating	ing to IEC/EN 609474-4-1 50/60Hz, 60Hz	min	V	yes yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	min	V	yes yes
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	ing to IEC/EN 609474-4-1 50/60Hz, 60Hz	min max	V	yes yes 100 250
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	min max min	V V	yes yes 100 250
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz pick-up	min max	V	yes yes 100 250
Mirror contats according EMC compatibility AC coil operating Rated AC voltage at 5	of 50/60Hz coil powered at 50Hz	min max min max	V V WUs %Us	yes yes 100 250 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	V V	yes yes 100 250
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 100 250 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 max	V V WUs %Us %Us	yes yes 100 250 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 100 250 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 WUs %Us %Us	yes yes 100 250 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 %Us	yes yes 100 250 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	min max min max max	V V V %Us %Us	yes yes 100 250 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 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 100 250 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	min max min max max min max max	V V V %Us %Us %Us %Us	yes yes 100 250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 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 in-rush	V V V %Us %Us %Us %Us	yes yes 100 250 80 Us min 110 Us max ≤70 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 drop-out	min max min max max min max max	V V V %Us %Us %Us %Us	yes yes 100 250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 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 in-rush	V V V %Us %Us %Us %Us	yes yes 100 250 80 Us min 110 Us max ≤70 Us min 110 Us max ≤70 Us min 110 Us max



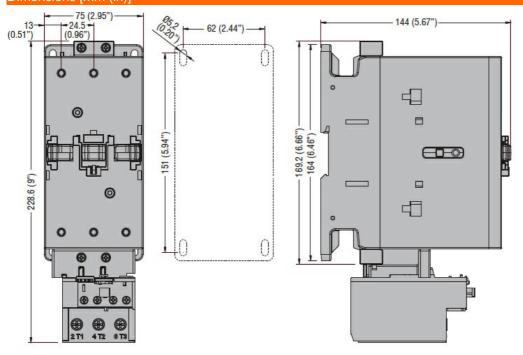
THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 100...250VAC/DC

Minima			holding	١/٨	17 25
in-rush NA 70.175 No.175 holding		of 60Hz coil powered at 60Hz	holding	VA	1.73.5
Molding \$20°C 50Hz W 1.31.5 DC coil operating DC rated control voltage min V 100 max V 250 DC operating voltage pick-up min max %Us 110 Us max drop-out max %Us 110 Us max drop-out max %Us 110 Us max drop-out max %Us 110 Us max Average coil consumption ≤20°C min-rush W 7080 Average coil consumption ≤20°C min-rush W 7080 Average coil consumption ≤20°C min-rush W 7080 Average time for Us control min C Closing NO min ms 45 max ms 90 Operating times max ms 90 Operating NO min ms 45 max ms 90 Opening NO		o. son iz son poworod at son iz	in-rush	VA	70175
Dissipation at holding ≤20°C 50Hz W 1.31.5					
DC rated control voltage	Dissipation at holding ≤	20°C 50Hz	Ū		
DC operating voltage pick-up min max v 250 25	DC coil operating				
DC operating voltage pick-up pick-up min %us 80 Us min max dus min dus min min min min min min min min dus min min min min min min min dus min min min min min dus dus min min min min dus dus min min min dus du	DC rated control voltag	e			
DC operating voltage pick-up min max %Us 110 Us max drop-out max %Us 570 Us min max 6Us 110 Us max max			min	V	100
Pick-up			max	V	250
Minimax Min	DC operating voltage				
Max Mus Mus		pick-up			
Average coil consumption ≤20°C in-rush W 7080 holding W 131.5					
Max overage coil consumption ≤20°C In-rush W 7080 holding W 131.5			max	%Us	110 Us max
Average coil consumption ≤20°C In-rush holding W 7080 holding W 1315 Max cycles frequency Mechanical operation Cycles/h 2000 Operating times		drop-out			
In-rush holding			max	%Us	≤70 Us min
Max cycles frequency Mechanical operation cycles/h 2000 Operating times Average time for Us control in AC Closing NO min ms 45 Opening NO min ms 45 Mode and the process of the	Average coil consumpt	ion ≤20°C		147	-
Mack cycles frequency Mechanical operating times cycles/h 2000 Average time for Us control Closing NO min ms 45 max ms 90 Opening NO min ms 24 in DC Closing NO min ms 45 Copening NO min ms 45 max ms 90 Opening NO min ms 45 max ms 90 Opening 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 50 460/480V HP 50 <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
Mechanical operation	May avalog from poor		nolaing	VV	1.31.5
Operating times				ovoloo/b	2000
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 45 max ms 90 Opening NO min ms 45 max ms 90 Opening NO min ms 24 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	-			cycles/n	2000
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 45 max ms 90 Opening NO min ms 45 max ms 90 Opening NO min ms 24 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		ntrol			
Closing NO	Average time for US CO				
Min					
Opening NO		Closhing IVC	min	ms	45
Opening NO					
Min		Openina NO			
Closing NO Min Ms 45 Max Ms 90		3 -		ms	24
Closing NO			max	ms	60
Min ms 45 max ms 90		in DC			
Opening NO		Closing NO			
Opening NO			min	ms	45
min ms 24 max ms 60				ms	90
Max		Opening NO			
Vielded mechanical performance 200/208V			min	ms	
Yielded mechanical performance 200/208V HP 50 220/230V HP 50 220/230V 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			max	ms	60
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					
200/208V HP 50	Yielded mechanical pei				
220/230V		for three-phase AC motor	200/2001	LID	50
460/480V HP 100 575/600V HP 125					
Short-circuit protection fuse, 600V HP 125					
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					
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	General USF		27.0,000.1		120
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	23.10.0.00	Contactor			
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			AC current	Α	165
High fault Short circuit current kA 100 Fuse rating A 200 Fuse class J Standard fault Short circuit current kA 10	Short-circuit protection	fuse, 600V	710 04110111	<u> </u>	
Short circuit current kA 100 Fuse rating A 200 Fuse class J Standard fault Short circuit current kA 10					
Fuse rating A 200 Fuse class J Standard fault Short circuit current kA 10			Short circuit current	kA	100
Fuse class J Standard fault Short circuit current kA 10					
Short circuit current kA 10					
		Standard fault			
Fuse rating A 250			Short circuit current	kA	10
			Fuse rating	Α	250

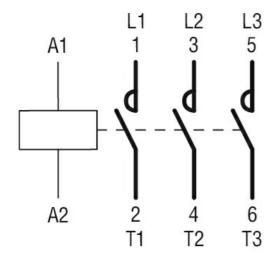


		Fuse class		RK5
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Resistance & Protec	tion			
Pollution degree				3
Dimensions Imm (in)	1			

Dimensions [mm (in)]



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1 CSA C22.2 n° 60947-4-1



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 100...250VAC/DC

	IEC/EN/BS 60947-1
	IEC/EN/BS 60947-4-1
	UL 60947-1
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Certificates	
	CCC
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ETIM classification

ETIM 8.0

EC000066 -Power contactor, AC switching