



Product designation				Power contactor
Product type designation				BF150
<b>Contact characteristics</b>				
Number of poles	nr.			4
Rated insulation voltage U <sub>i</sub> IEC/EN	V			1000
Rated impulse withstand voltage U <sub>imp</sub>	kV			8
Operational frequency	min	Hz		25
	max	Hz		400
IEC Conventional free air thermal current I <sub>th</sub>	A			165
Operational current I <sub>e</sub>	AC-1 (≤40°C)	A		165
	AC-1 (≤55°C)	A		135
	AC-1 (≤70°C)	A		118
	AC-3 (≤440V ≤55°C)	A		150
	AC-4 (400V)	A		70
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 1 poles in series	≤24V	A		165
	48V	A		165
	75V	A		150
	110V	A		10
	220V	A		–
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 2 poles in series	≤24V	A		165
	48V	A		165
	75V	A		165
	110V	A		150
	220V	A		14
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series	≤24V	A		165
	48V	A		165
	75V	A		165
	110V	A		160
	220V	A		150
IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series	≤24V	A		165
	48V	A		165
	75V	A		165
	110V	A		165
	220V	A		165
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series	≤24V	A		165
	48V	A		60
	75V	A		44
	110V	A		6

	220V	A	–
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series	≤24V	A	165
	48V	A	82
	75V	A	70
	110V	A	80
	220V	A	7
IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series	≤24V	A	165
	48V	A	195
	75V	A	110
	110V	A	120
	220V	A	120
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
Short-time allowable current for 10s (IEC/EN60947-1)		A	1200
Protection fuse	gG (IEC)	A	250
	aM (IEC)	A	160
Making capacity (RMS value)		A	1500
Breaking capacity at voltage	440V	A	1200
	500V	A	1025
	690V	A	905
Resistance per pole (average value)		mΩ	0.45
Power dissipation per pole (average value)	I <sub>th</sub>	W	12
	AC3	W	10.1
Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	I <sub>bin</sub>	4.4
	max	I <sub>bin</sub>	5.2
Tightening torque for coil terminal	min	Nm	0.8
	max	Nm	1
	min	I <sub>bft</sub>	0.59
	max	I <sub>bft</sub>	0.74
Conductor section	Flexible w/o lug conductor section		
	min	mm <sup>2</sup>	1.5
	max	mm <sup>2</sup>	70
	Flexible c/w lug conductor section		
	min	mm <sup>2</sup>	1.5
	max	mm <sup>2</sup>	70
Power terminal protection according to IEC/EN 60529	IP20 front		
<b>Mechanical features</b>			
Operating position	normal		Vertical plan

		allowable		±30°
Fixing				Screw / DIN rail 35mm
Weight			g	2420
<b>Operations</b>				
Mechanical life			cycles	15000000
Electrical life			cycles	800000
<b>Safety related data</b>				
EMC compatibility				yes
<b>AC coil operating</b>				
Rated AC voltage at 50/60Hz			V	230
AC operating voltage				
	of 50/60Hz coil powered at 50Hz			
	pick-up			
		max	%Us	110
	drop-out			
		min	%Us	20
		max	%Us	55
	of 50/60Hz coil powered at 60Hz			
	pick-up			
		min	%Us	85
		max	%Us	110
	drop-out			
		min	%Us	40
		max	%Us	55
AC operating voltage at 20°C				
	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 U <sub>s</sub> control				
	in AC			
	Closing NO			
		min	ms	45
		max	ms	32
	Opening NO			
		min	ms	9
		max	ms	24
<b>UL technical data</b>				
General USE				
	Contactor			
		AC current	A	165
<b>Ambient conditions</b>				
Temperature				
	Operating temperature			

min	°C	-50
max	°C	70

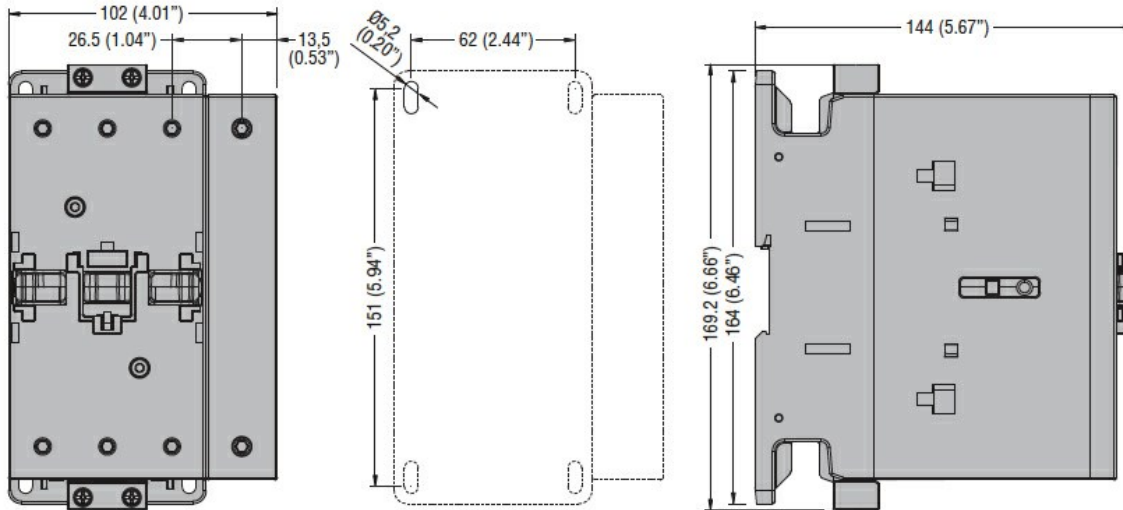
Storage temperature

min	°C	-60
max	°C	80

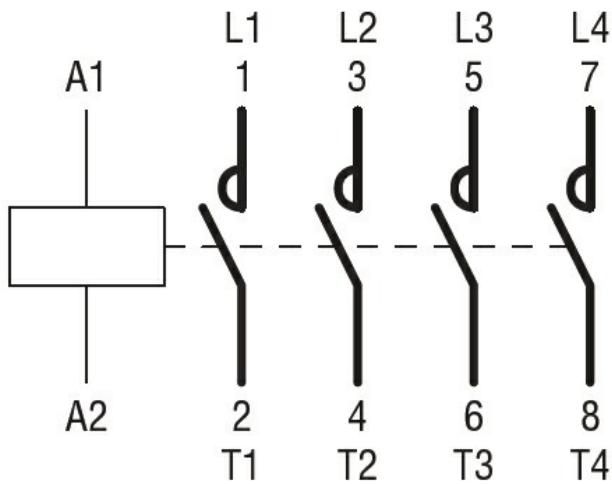
Max altitude

m 3000

### Dimensions



### Wiring diagrams



### Certifications and compliance

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

### ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching