



Product designation				Power contactor
Product type designation				BF95
<b>Contact characteristics</b>				
Number of poles	Nr.			4
Rated insulation voltage $U_i$ IEC/EN	V			1000
Rated impulse withstand voltage $U_{imp}$	kV			8
Operational frequency	min	Hz	25	
	max	Hz	400	
IEC Conventional free air thermal current $I_{th}$	A			140
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A	140	
	AC-1 ( $\leq 55^\circ\text{C}$ )	A	115	
	AC-1 ( $\leq 70^\circ\text{C}$ )	A	100	
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A	95	
	AC-4 (400V)	A	45	
Rated operational current AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	A	95	
	400V	A	95	
	415V	A	95	
	440V	A	95	
	500V	A	95	
	690V	A	93	
	1000V	A	33	
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	140	
	48V	A	140	
	75V	A	100	
	110V	A	10	
	220V	A	-	
	IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	140
48V		A	140	
75V		A	140	
110V		A	110	
220V		A	12	
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series		$\leq 24\text{V}$	A	140
	48V	A	140	
	75V	A	155	
	110V	A	120	
	220V	A	125	
	IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 4 poles in series	$\leq 24\text{V}$	A	140
48V		A	140	

	75V	A	155
	110V	A	140
	220V	A	140
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	140
	48V	A	44
	75V	A	36
	110V	A	6
	220V	A	–
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	140
	48V	A	63
	75V	A	60
	110V	A	55
	220V	A	7
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	140
	48V	A	115
	75V	A	90
	110V	A	85
	220V	A	76
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	140
	48V	A	110
	75V	A	110
	110V	A	105
	220V	A	95
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Short-time allowable current for 10s (IEC/EN60947-1)		A	760
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Protection fuse			
	gG (IEC)	A	160
	aM (IEC)	A	100
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Making capacity (RMS value)		A	1200
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Breaking capacity at voltage			
	440V	A	1100
	500V	A	775
	690V	A	745
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Resistance per pole (average value)		mΩ	0.45
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Power dissipation per pole (average value)			
	I <sub>th</sub>	W	8.8
	AC-3	W	4.1
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Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
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Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	0.74
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Conductor section			
	AWG/Kcmil		
	max		2/0

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 allowable		Vertical plan ±30°
Fixing			Screw / DIN rail 35mm
Weight		g	2460
Conductor section	AWG/kcmil conductor section		
	max		2/0
<b>Auxiliary contact characteristics</b>			
Thermal current I <sub>th</sub>		A	140
<b>Operations</b>			
Mechanical life		cycles	15000000
Electrical life		cycles	1400000
<b>AC coil operating</b>			
Rated AC voltage at 50/60Hz, 60Hz	min	V	20
	max	V	48
AC operating voltage	of 50/60Hz coil powered at 50Hz		
	pick-up		
	min	%Us	85 Us min
	max	%Us	110 Us max
	drop-out		
	max	%Us	≤70 Us min
	of 50/60Hz coil powered at 60Hz		
	pick-up		
	min	%Us	85 Us min
	max	%Us	110 Us max
	drop-out		
	max	%Us	≤70 Us min
AC average coil consumption at 20°C	of 50/60Hz coil powered at 50Hz		
	in-rush	VA	70...175
	holding	VA	1.7...3.5
	of 50/60Hz coil powered at 60Hz		
	in-rush	VA	70...175
	holding	VA	1.7...3.5
	of 60Hz coil powered at 60Hz		
	in-rush	VA	70...175
	holding	VA	1.7...3.5
Dissipation at holding ≤20°C 50Hz		W	1.3...1,5
<b>DC coil operating</b>			
DC rated control voltage	min	V	20
	max	V	48

DC operating voltage	pick-up	min	%Us	80 Us min
		max	%Us	110 Us max
	drop-out	max	%Us	≤70 Us min

Average coil consumption ≤20°C	in-rush	W	70...80
	holding	W	1.3...1.5

**Max cycles frequency**

Mechanical operation	cycles/h	1500
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**Operating times**

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	85	
Opening NO	min	ms	24	
	max	ms	60	

**UL technical data**

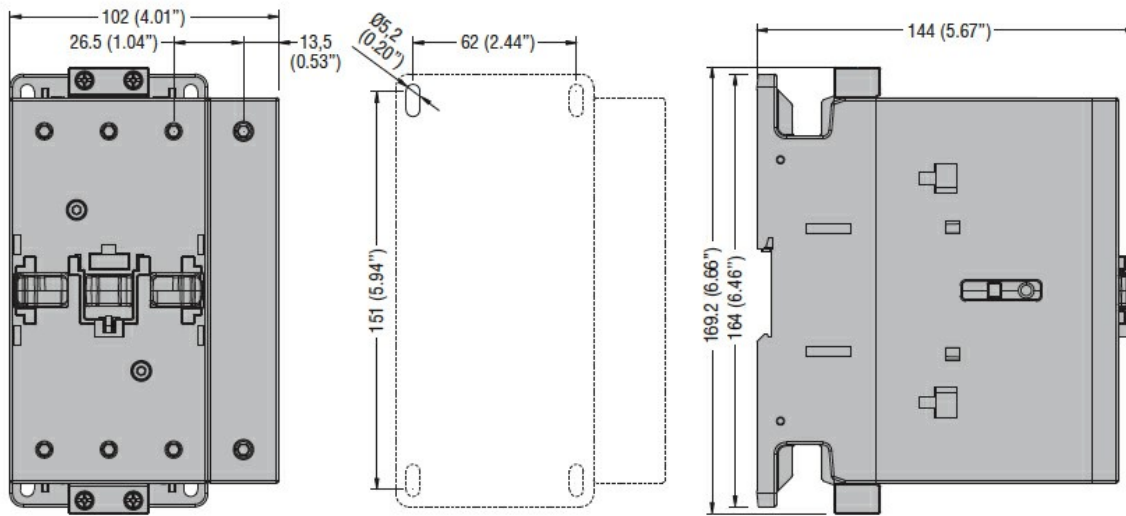
General USE				
Contactor	AC current	A	150	
	Short-circuit protection fuse, 600V			
High fault	Short circuit current	kA	100	
	Fuse rating	A	200	
	Fuse class		J	
Standard fault				
	Short circuit current	kA	10	
	Fuse rating	A	250	
	Fuse class		RK5	

**Ambient conditions**

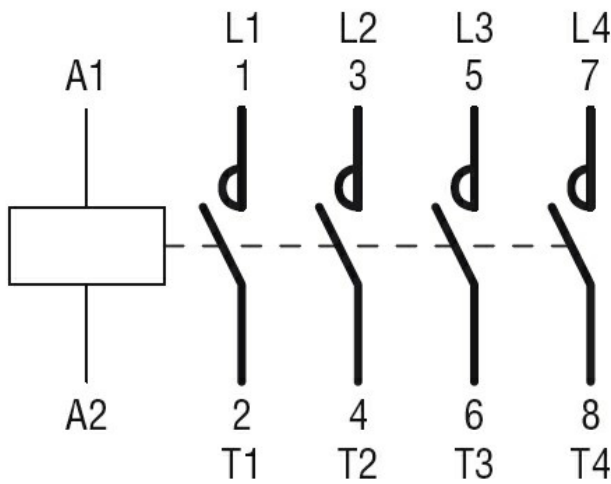
Temperature				
Operating temperature	min	°C	-50	
	max	°C	70	
Storage temperature				
	min	°C	-60	
	max	°C	+80	

Max altitude	m	3000
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**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  
EAC

### ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching