



Product designation

Power contactor

Product type designation

BF95

**Contact characteristics**

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
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
IEC max current $I_e$ in DC3-DC5 with $L/R \leq 15\text{ms}$ with 1 poles in series		
	$\leq 24\text{V}$	A 140
	48V	A 44
	75V	A 36
	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	140
	48V	A	63
	75V	A	60
	110V	A	55
	220V	A	7
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
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
Short-time allowable current for 10s (IEC/EN60947-1)		A	760
Protection fuse			
	gG (IEC)	A	160
	aM (IEC)	A	100
Making capacity (RMS value)		A	1200
Breaking capacity at voltage			
	440V	A	1100
	500V	A	775
	690V	A	745
Resistance per pole (average value)		m?	0.45
Power dissipation per pole (average value)			
	I <sub>th</sub>	W	8.8
	AC3	W	4.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	lbin	4.4
	max	lbin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	lbin	0.59
	max	lbin	0.74
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

### Mechanical features

## Operating position

	normal allowable	Vertical plan ±30°
Fixing		Screw / DIN rail 35mm
Weight	g	2460

## Conductor section

AWG/kcmil conductor section

max 2/0

## Auxiliary contact characteristics

Thermal current Ith	A	140
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## Operations

Mechanical life	cycles	15000000
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Electrical life	cycles	1400000
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## AC coil operating

Rated AC voltage at 50/60Hz, 60Hz

min	V	20
max	V	48

Rated AC voltage at 50/60Hz	V	24
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## AC operating voltage

of 50/60Hz coil powered at 50Hz  
pick-up

min	%Us	80 Us min
max	%Us	110 Us max

drop-out

max	%Us	≤70 Us min
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of 50/60Hz coil powered at 60Hz  
pick-up

min	%Us	80 Us min
max	%Us	110 Us max

drop-out

max	%Us	≤70 Us min
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## 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
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## DC coil operating

DC rated control voltage

min	V	20
max	V	48

DC rated control voltage	V	24
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## DC operating voltage

pick-up

min	%Us	85 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
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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

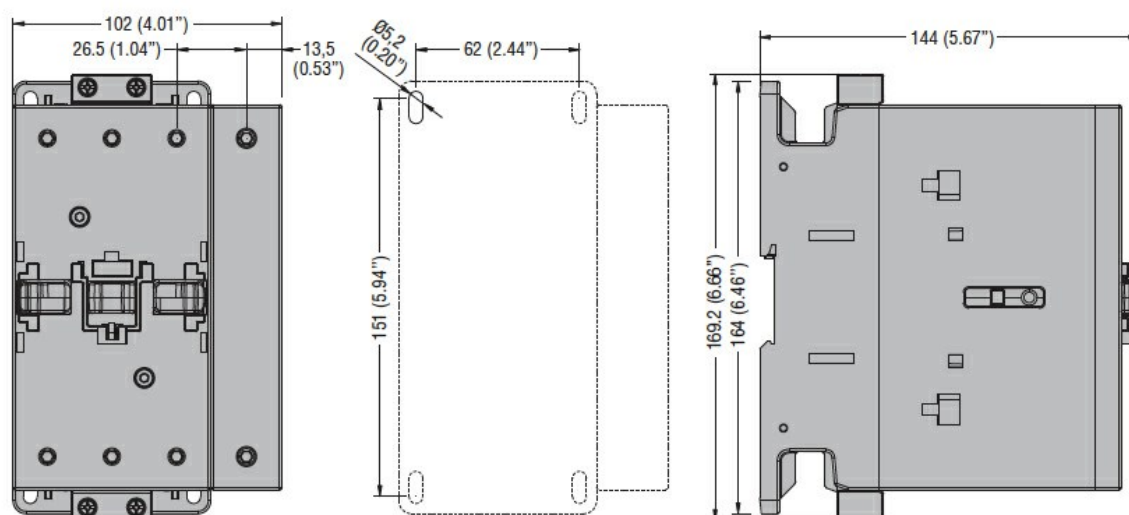
Storage temperature

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 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