



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 (=40°C)	A		140
	AC-1 (=55°C)	A		115
	AC-1 (=70°C)	A		100
	AC-3 (=440V =55°C)	A		95
	AC-4 (400V)	A		45
IEC max current $I_e$ in DC1 with L/R = 1ms with 1 poles in series	=24V	A		140
	48V	A		140
	75V	A		100
	110V	A		10
	220V	A		–
IEC max current $I_e$ in DC1 with L/R = 1ms with 2 poles in series	=24V	A		140
	48V	A		140
	75V	A		140
	110V	A		110
	220V	A		12
IEC max current $I_e$ in DC1 with L/R = 1ms with 3 poles in series	=24V	A		140
	48V	A		140
	75V	A		155
	110V	A		120
	220V	A		125
IEC max current $I_e$ in DC1 with L/R = 1ms with 4 poles in series	=24V	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 = 15ms with 1 poles in series	=24V	A		140
	48V	A		44
	75V	A		36
	110V	A		6

	220V	A	–
IEC max current Ie 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 Ie 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 Ie 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)			
	Ith	W	8.8
	AC3	W	4.1
Tightening torque for terminals			
	min	Nm	6
	max	Nm	7
	min	Ibin	4.4
	max	Ibin	5.2
Tightening torque for coil terminal			
	min	Nm	0.8
	max	Nm	1
	min	Ibin	0.59
	max	Ibin	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
Electrical life	cycles	1400000

**AC coil operating**

Rated AC voltage at 50/60Hz, 60Hz	min	V	20
	max	V	48
Rated AC voltage at 50/60Hz		V	24

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
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

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

DC operating voltage			
pick-up	min	%Us	85 Us min
	max	%Us	110 Us max
drop-out			

Average coil consumption =20°C	max	%Us	=70 Us min
	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

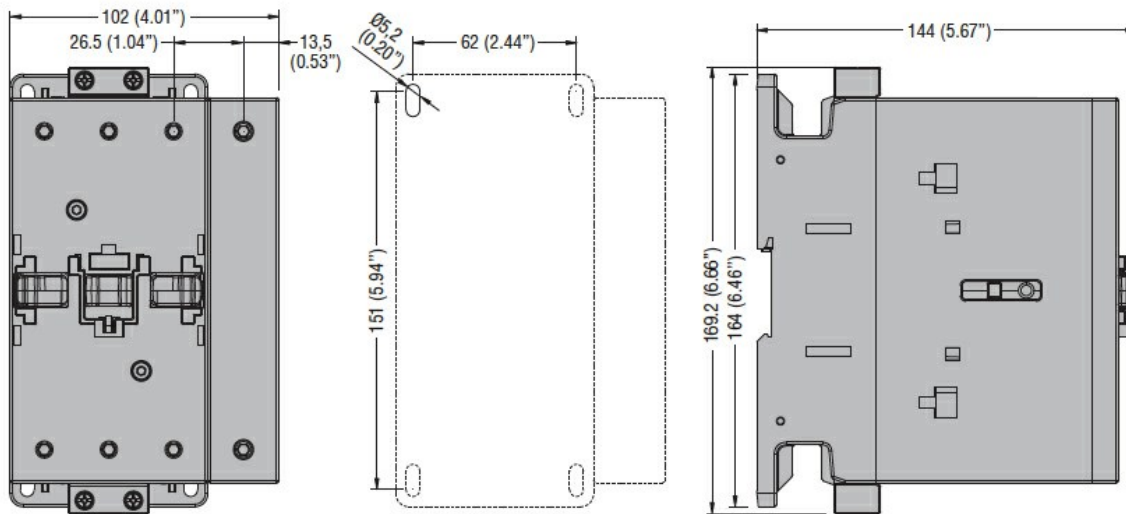
**UL technical data**

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

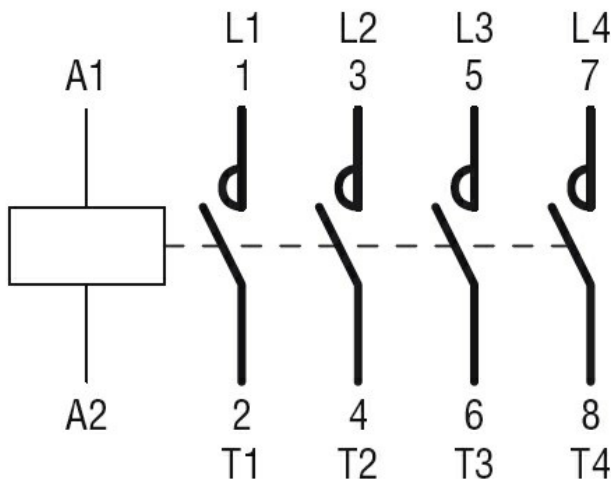
**Ambient conditions**

Temperature			
Operating temperature			
	min	°C	-50
	max	°C	70
Storage temperature			
	min	°C	-60
	max	°C	+80
Max altitude		m	3000

**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