



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
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
IEC max current Ie 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)		mΩ	0.45
Power dissipation per pole (average value)			
	Ith	W	8.8
	AC-3	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 ²	1.5
max	mm ²	70

Flexible c/w lug conductor section

min	mm ²	1.5
max	mm ²	70

Power terminal protection according to IEC/EN 60529

IP20 front

Mechanical features

Operating position

normal allowable	Vertical plan ±30°
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Fixing

Screw / DIN rail
35mm

Weight

g	2460
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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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Safety related data

Performance level B10d according to EN/ISO 13489-1

rated load	cycles	1400000
mechanical load	cycles	15000000

AC coil operating

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
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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
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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

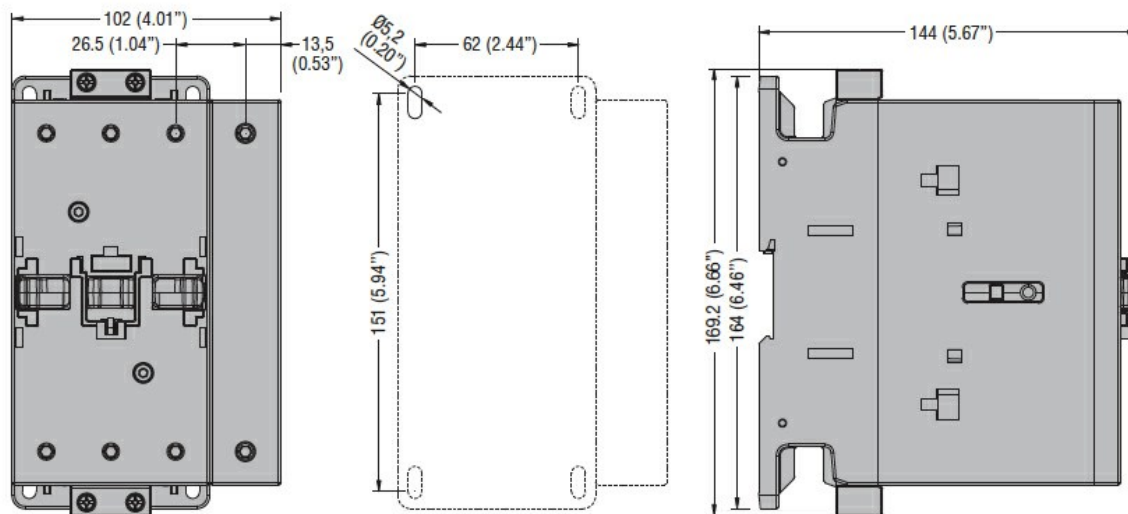
W	1.3...1,5
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DC coil operating

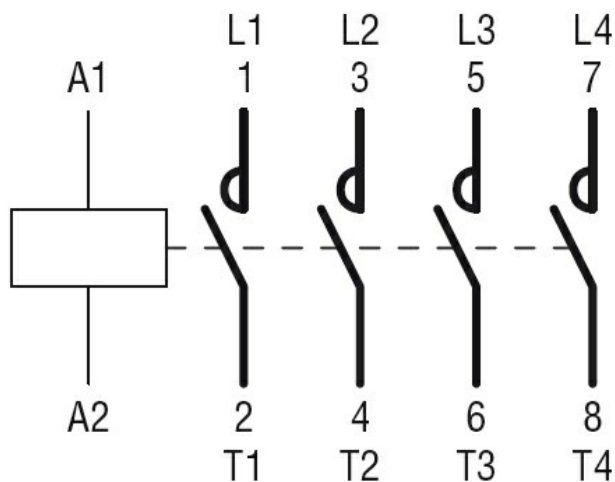
DC rated control voltage

min	V	20
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		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		
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			
			Rated operational voltage AC (UL)			V
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			
		°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