



Product designation

Power contactor

Product type designation

BF95

**Contact characteristics**

Number of poles	Nr.	3
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 power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW 30
	400V	kW 55
	415V	kW 55
	440V	kW 55
	500V	kW 75
	690V	kW 90
	1000V	kW 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 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)		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	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	mm²	1.5
	max	mm²	70
Flexible c/w lug conductor section			
	min	mm²	1.5
	max	mm²	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 2060
Conductor section			
AWG/kcmil conductor section		max	2/0
Auxiliary contact characteristics			
Thermal current I <sub>th</sub>		A	140
Operations			
Mechanical life		cycles	15000000
Electrical life		cycles	1400000
AC coil operating			
Rated AC voltage at 50/60Hz, 60Hz		min	V 100
		max	V 250
Rated AC voltage at 50/60Hz		V	230
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
DC coil operating			
DC rated control voltage			

		min	V	100
		max	V	250
DC rated control voltage			V	230
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

Yielded mechanical performance

for three-phase AC motor

200/208V	HP	30
220/230V	HP	30
460/480V	HP	60
575/600V	HP	75

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

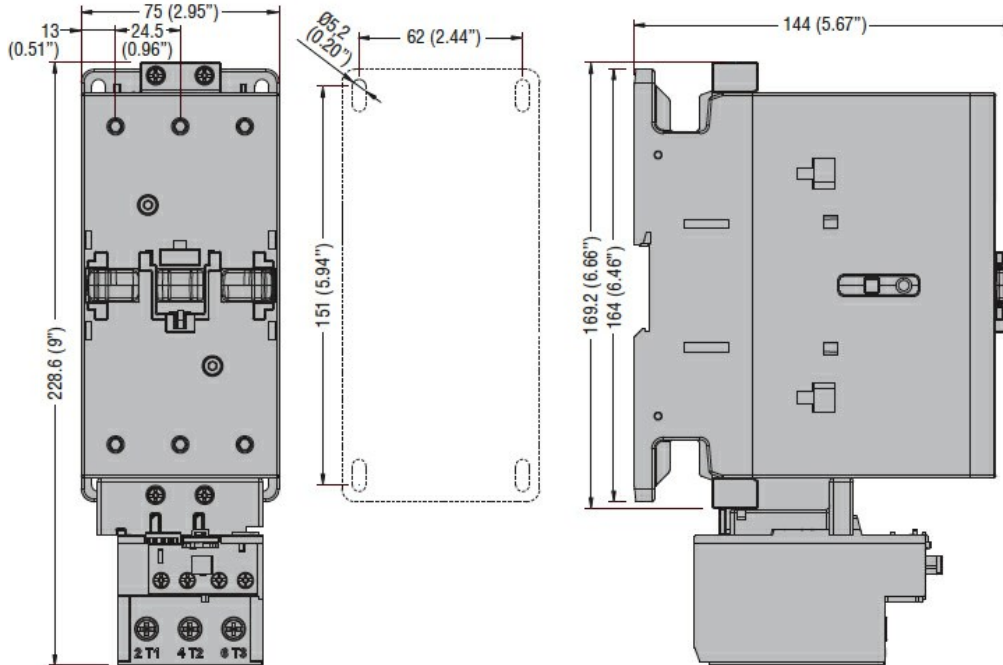
min	°C	-50
max	°C	70

Storage temperature

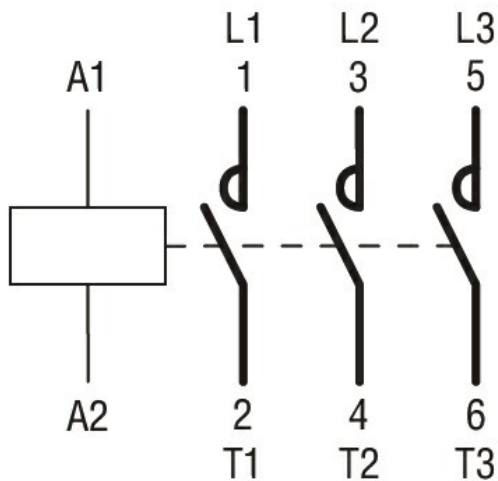
min	°C	-60
max	°C	+80
	m	3000

Max altitude

## 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

## ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching