



Product designation
Product type designation

Power contactor
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 (≤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
Rated operational power AC-3 (T≤55°C)	230V	kW 30
	400V	kW 55
	415V	kW 55
	440V	kW 55
	500V	kW 75
	690V	kW 90
	1000V	kW 45
Rated operational current AC-3 (T≤55°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 ≤ 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
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
<hr/>			
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
<hr/>			
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	–
<hr/>			
IEC max current I _e 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
<hr/>			
IEC max current I _e 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
<hr/>			
IEC max current I _e 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
<hr/>			
Short-time allowable current for 10s (IEC/EN60947-1)		A	760
<hr/>			
Protection fuse	gG (IEC)	A	160
	aM (IEC)	A	100
<hr/>			
Making capacity (RMS value)		A	1200
<hr/>			
Breaking capacity at voltage	440V	A	1100
	500V	A	775
	690V	A	745
<hr/>			
Resistance per pole (average value)		mΩ	0.45
<hr/>			
Power dissipation per pole (average value)	I _{th}	W	8.8
	AC-3	W	4.1
<hr/>			
Tightening torque for terminals	min	Nm	6
	max	Nm	7
	min	I _{bin}	4.4
	max	I _{bin}	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 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°
------------------	--------------------

Fixing

Screw / DIN rail 35mm

Weight

g 2060

Conductor section

AWG/kcmil conductor section

max		2/0
-----	--	-----

Auxiliary contact characteristics

Thermal current I_{th}

A 140

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

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

DC coil operating

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

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

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

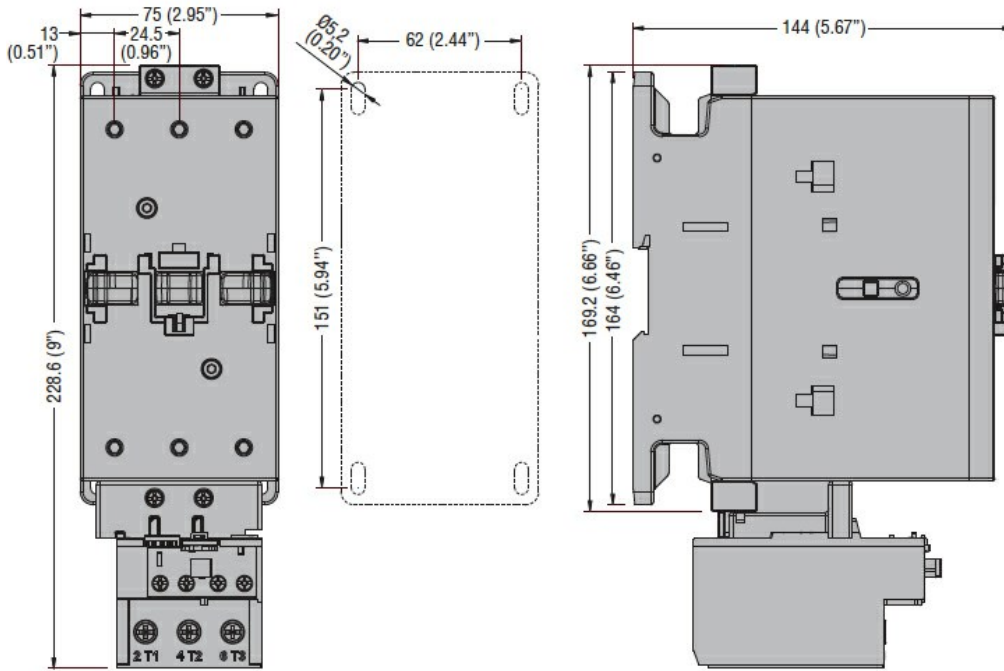
Storage temperature

min	°C	-60
max	°C	+80

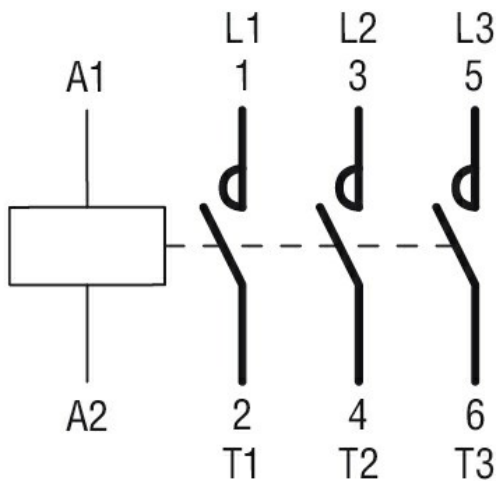
Max altitude

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

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching