



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
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		

	≤24V	A	140
	48V	A	140
	75V	A	155
	110V	A	120
	220V	A	125
IEC max current Ie 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 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)			
	I _{th}	W	8.8
	AC-3	W	4.1
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	lbin	0.59
max	lbin	0.74

Conductor section

AWG/Kcmil

max	2/0
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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 2060

Auxiliary contact characteristics

Thermal current I_{th}

A 140

Operations

Mechanical life

cycles 15000000

Electrical life

cycles 1400000

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
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		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				
Rated operational voltage AC (UL)			V	600
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

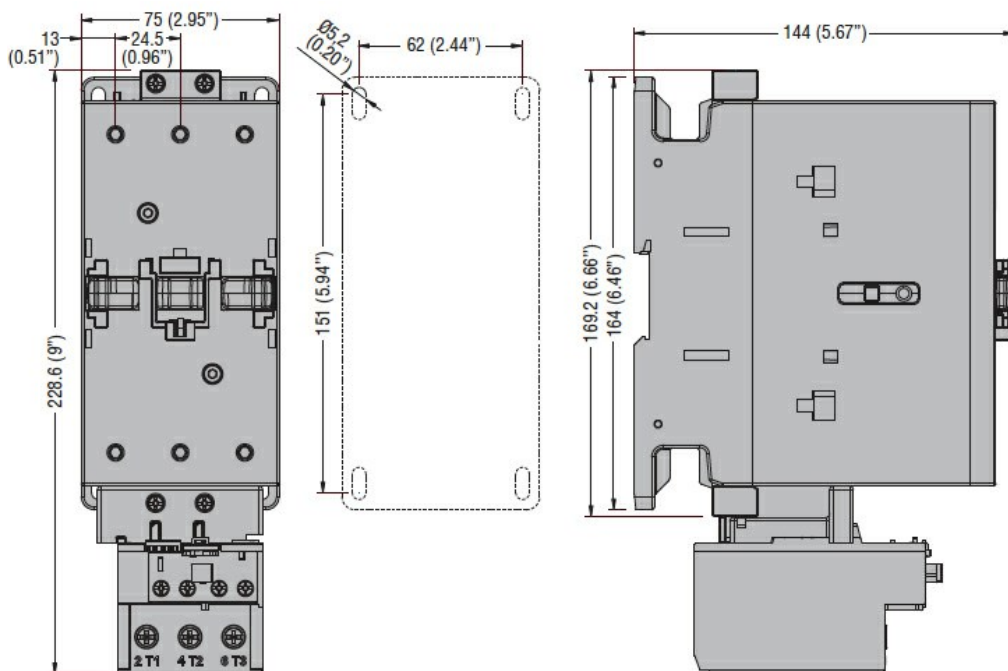
Storage temperature

min	°C	-60
max	°C	+80

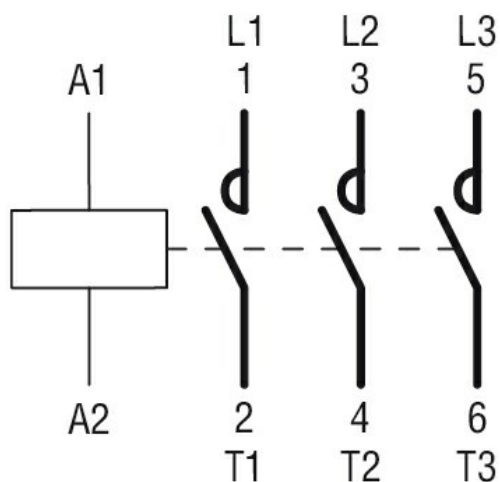
Max altitude

m	3000
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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/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