



RFN38  
Motor protection  
relay

Product designation

Product type designation

### General characteristics

Number of poles	Nr.	3
Overvoltage category		III
Pollution degree		3
Frontal IP degree		IP20
Type of release		Thermal
Protection fuse		
	gG (IEC)	A 63
	aM (IEC)	A 40
	RK5 (UL)	A 120
Phase failure detection		no
Reset mode		Manual or automatic

### Power circuit characteristics

Rated insulation voltage $U_i$ IEC/EN	V	690
Rated impulse withstand voltage $U_{imp}$	kV	6
Rated operational voltage	V	690
Operational frequency	min max	Hz Hz 0 400
Operational current $I_e$		
	Operational current min	A 24
	Operational current max	A 32
Tripping class		10A
Test Button		yes
Trip indicator		yes

Terminals

	type		screw and washer
	screw		M4
	width	mm	12.6
	tool		Phillips 2

Tightening torque for terminals

	min	Nm	2
	max	Nm	2.5
	min	lbin	1.5
	max	lbin	1.8

Conductor section

	AWG/kcmil max	8
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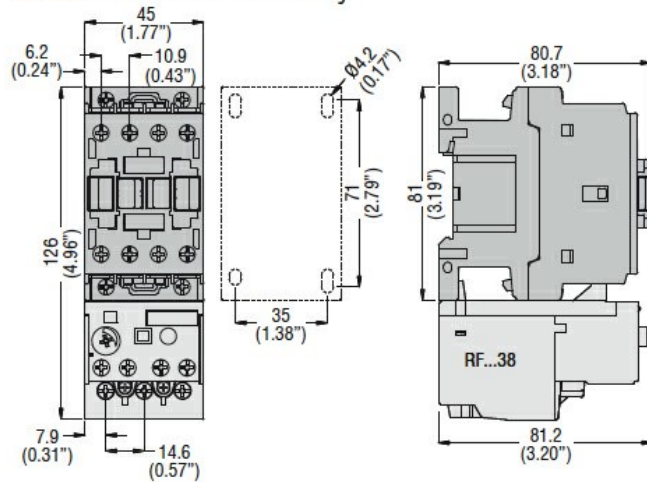
### Auxiliary circuit characteristics

Auxiliary contacts	NO	Nr.	1
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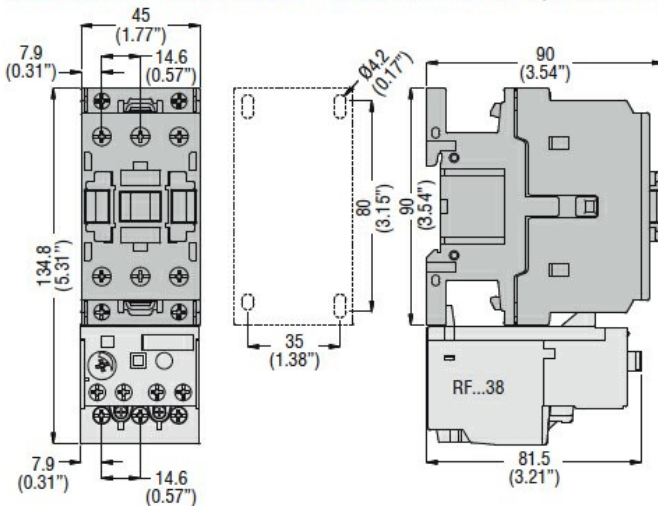
	NC	Nr.	1
Auxiliary Rated insulation voltage Ui IEC/EN		V	690
Auxiliary Rated impulse withstand voltage Uimp		kV	6
Auxiliary Rated operational voltage		V	690
Operating current AC15			
	24V	A	3
	120V	A	3
	240V	A	1.5
	380V	A	0.95
	480V	A	0.75
	500V	A	0.72
	600V	A	0.6
Operating current DC13			
	125V	A	0.11
	600V	A	0.22
IEC Conventional free air thermal current Ith		A	10
Terminals			
	Auxiliary circuit type		screw and washer
	Auxiliary circuit screw		M3,5
	Auxiliary circuit width	mm	8
	Auxiliary circuit tool		Phillips 2
Conductor section			
	Auxiliary circuit Flexible w/o lug max	mm <sup>2</sup>	2.5
	Auxiliary circuit Flexible c/w lug max	mm <sup>2</sup>	2.5
Tightening torque for terminals			
	Auxiliary circuit min	Nm	0.8
	Auxiliary circuit max	Nm	1
	Auxiliary circuit min	Ibin	0.59
	Auxiliary circuit max	Ibin	0.74
UL/CSA and IEC/EN 60947-5-1 designation			B600-R300
<b>Ambient conditions</b>			
Operating temperature			
	min	°C	-25
	max	°C	60
Storage temperature			
	min	°C	-50
	max	°C	70
Compensation temperature			
	min	°C	-20
	max	°C	60
Max altitude		m	3000
<b>Mechanical features</b>			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Direct mounting on BF09... BF38...
Weight		g	160
<b>UL technical data</b>			
Full-load current (FLA) for three-phase AC motor			
	at 480V	A	32
	at 600V	A	32

## Dimensions

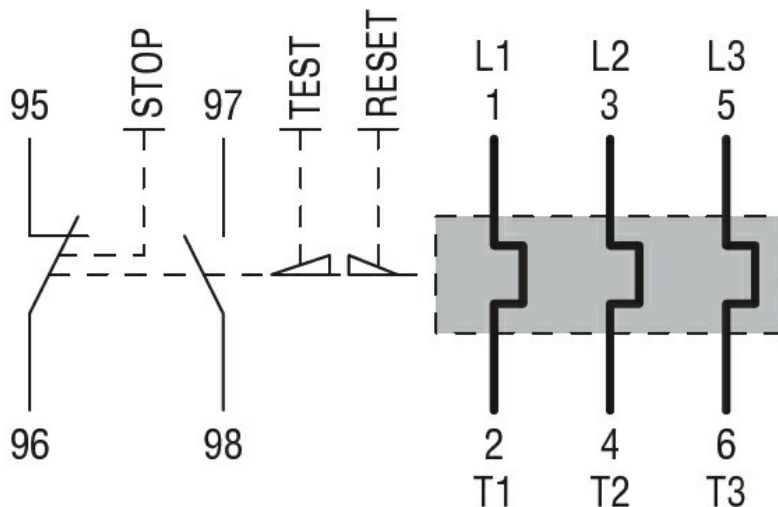
**BF00 A... BF09 A... - BF12 A... - BF18 A... - BF25 A...** three poles with  
**RF...38** thermal overload relay



**BF26 00A... - BF32 00A... - BF38 00A...** three poles with **RF...38** thermal overload relay



## Wiring diagrams



## Certifications and compliance

### Compliance

CSA C22.2 n° 14  
IEC/EN 60947-1

MOTOR PROTECTION RELAY, NON PHASE FAILURE/NON SINGLE-PHASE SENSITIVE.  
THREE-POLE (THREE-PHASE), MANUAL OR AUTOMATIC RESETTING. DIRECT MOUNTING  
ON BF09 - BF38 CONTACTORS, 24...32A

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IEC/EN 60947-4-1

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UL508

Certifications

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CCC

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cULus

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EAC

ETIM classification

ETIM 8.0

EC000106 -  
Thermal overload  
relay