



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	aM (IEC)	A 0.25
	RK5 (UL)	A 1
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	Hz 0
	max	Hz 400
Operational current $I_e$	Operational current min	A 0.1
	Operational current max	A 0.16
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	Ibin 1.5
	max	Ibin 1.8

Conductor section	AWG/kcmil max	8
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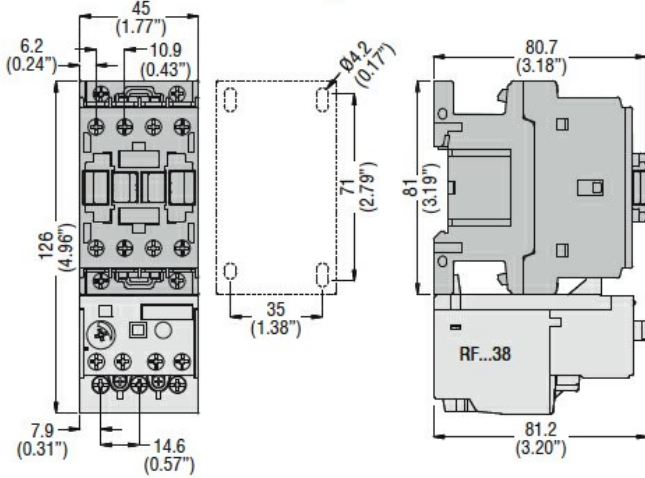
**Auxiliary circuit characteristics**

Auxiliary contacts	NO	Nr.	1
	NC	Nr.	1

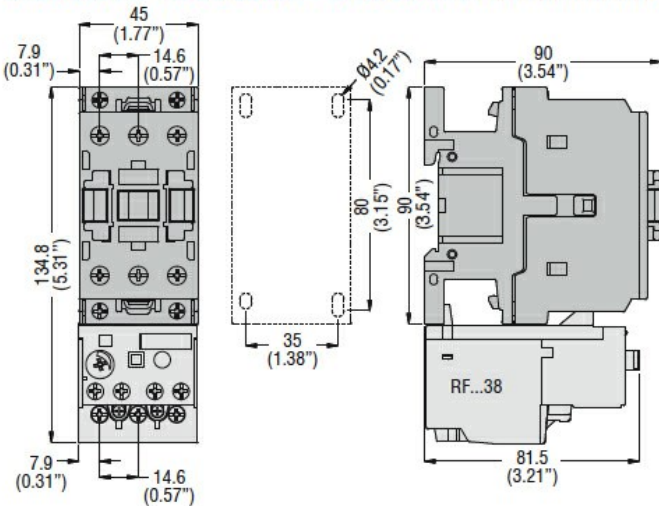
Auxiliary Rated insulation voltage Ui IEC/EN	V	690
Auxiliary Rated impulse withstand voltage Uimp	kV	6
Auxiliary Rated operational voltage	V	690
Operating current AC15		
	24V	A 3
	120V	A 3
	240V	A 1.5
	380V	A 0.95
	480V	A 0.75
	500V	A 0.72
	600V	A 0.6
Operating current DC13		
	125V	A 0.11
	600V	A 0.22
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 allowable	Vertical plan ±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 0.16
	at 600V	A 0.16
<b>Dimensions</b>		

MOTOR PROTECTION RELAY, NON PHASE FAILURE / NON SINGLE PHASE SENSITIVE.  
THREE POLE (THREE PHASE), MANUAL OR AUTOMATIC RESETTING. DIRECT MOUNTING  
ON BF09 - BF38 CONTACTORS, 0.10...0.16A

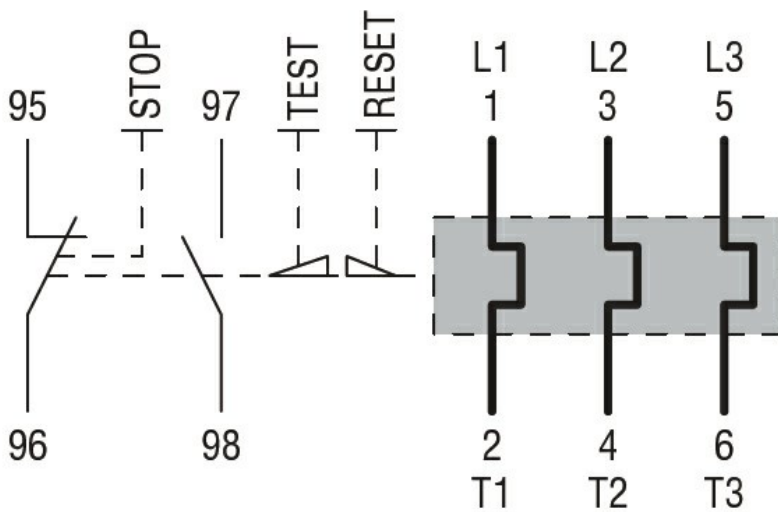
**BF00 A... BF09 A... - BF12 A... - BF18 A... - BF25 A...** three poles with  
**RF...38** thermal overload relay



**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

IEC/EN 60947-4-1

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ON BF09 - BF38 CONTACTORS, 0.10...0.16A

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UL508

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Certifications

CCC

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cULus

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EAC

**ETIM classification**

ETIM 8.0

EC000106 -  
Thermal overload  
relay