



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 50
	aM (IEC)	A 25
	RK5 (UL)	A 90
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 17
	Operational current max	A 23
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**

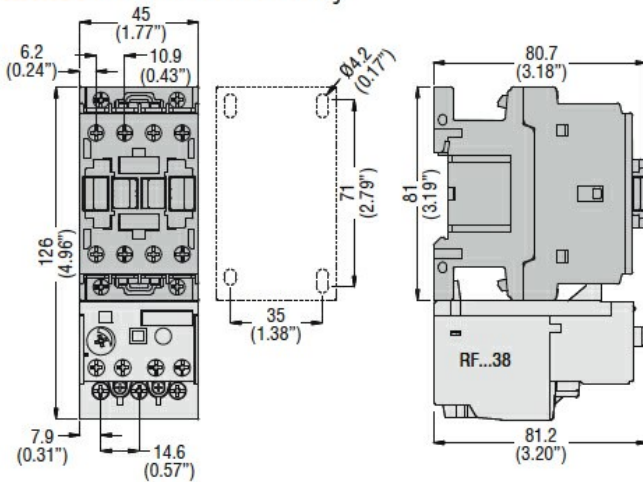
Auxiliary contacts

NO	Nr.	1
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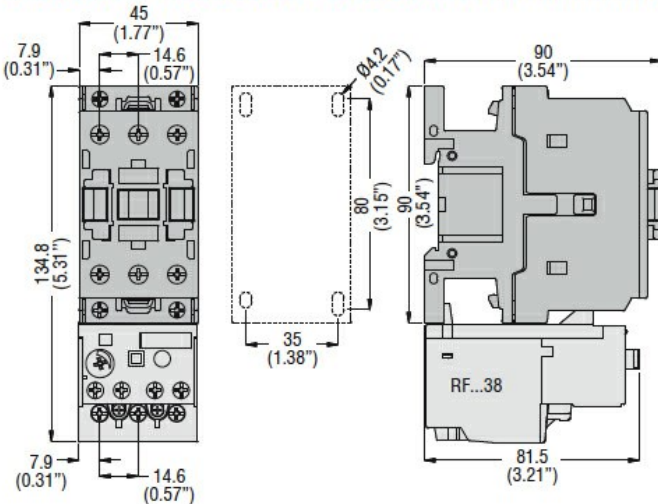
	NC	Nr.	1
Auxiliary Rated insulation voltage $U_i$ IEC/EN		V	690
Auxiliary Rated impulse withstand voltage $U_{imp}$		kV	6
Auxiliary Rated operational voltage		V	690
Operating current AC15			
	24V	A	3
	120V	A	3
	240V	A	1.5
	380V	A	0.95
	480V	A	0.75
	500V	A	0.72
	600V	A	0.6
Operating current DC13			
	125V	A	0.11
	600V	A	0.22
IEC Conventional free air thermal current $I_{th}$		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	lbin	0.59
	Auxiliary circuit max	lbin	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	23
	at 600V	A	23

**Dimensions**

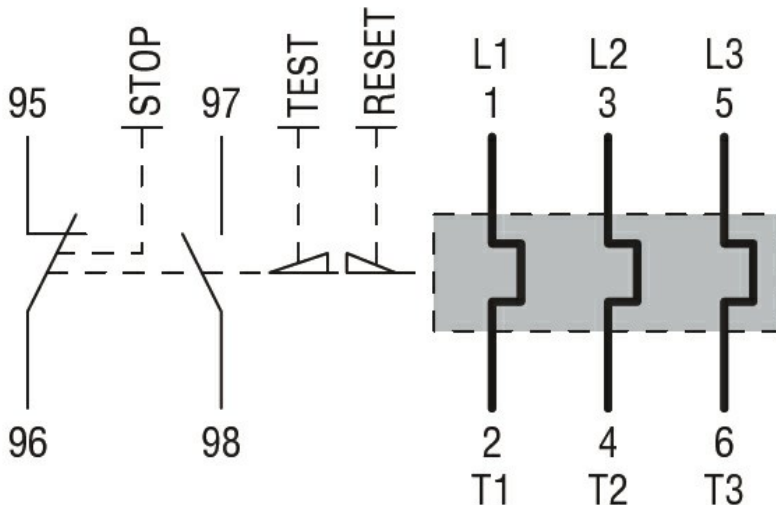
**BF00 A... BF09 A... - BF12 A... - BF18 A... - BF25 A...** three poles with **RF...38** thermal overload relay



**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, 17...23A

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IEC/EN 60947-4-1  
UL508

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Certifications

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CCC  
cULus  
EAC

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ETIM classification

ETIM 8.0

EC000106 -  
Thermal overload  
relay