



Product designation

RFN82

Product type designation

Motor protection  
relay

**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 100
	aM (IEC)	A 50
	K5 (UL)	A 175
Phase failure detection		no
Reset mode		Manual

**Power circuit characteristics**

Rated insulation voltage $U_i$ IEC/EN	V	690
Rated impulse withstand voltage $U_{imp}$	kV	8
Rated operational voltage	V	690
Operational frequency		
	min	Hz 0
	max	Hz 400
Operational current $I_e$		
	Operational current min	A 35
	Operational current max	A 50
Tripping class		10A
Test Button		yes
Trip indicator		yes

Terminals

type	Yoke clamp
screw	M5
width	mm 9
tool	Phillips 2

Tightening torque for terminals

min	Nm	3.9
max	Nm	3.9
min	lbin	2.88
max	lbin	2.88

Conductor section

AWG/kcmil max	2
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**Auxiliary circuit characteristics**

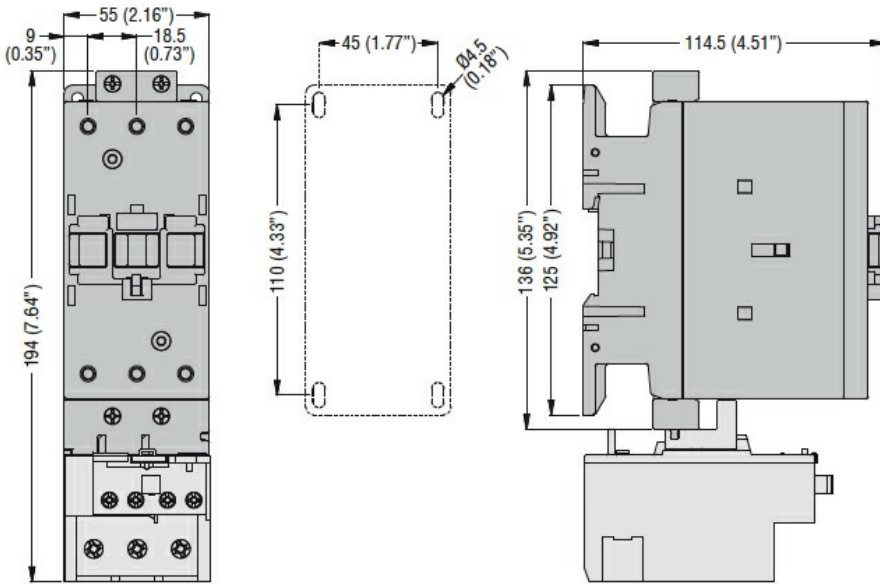
Auxiliary contacts

NO	Nr.	1
NC	Nr.	1

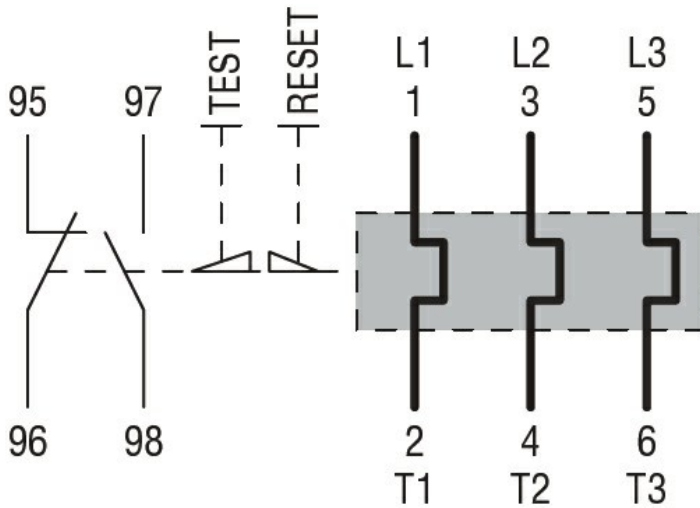
Auxiliary Rated insulation voltage  $U_i$  IEC/EN

V	690
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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
Operating current DC13	600V	A	0.6
	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 1
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	1
	Auxiliary circuit max	Nm	1
	Auxiliary circuit min	lbin	0.74
	Auxiliary circuit max	lbin	0.74
UL/CSA and IEC/EN 60947-5-1 designation			B600-P600
<b>Ambient conditions</b>			
Operating temperature	min	°C	-20
	max	°C	55
Storage temperature	min	°C	-55
	max	°C	80
Compensation temperature	min	°C	-15
	max	°C	55
Max altitude		m	3000
<b>Mechanical features</b>			
Operating position	normal		Vertical plan
	allowable		±30°
Fixing			Direct mounting on BF40... BF94...
Weight		g	365
<b>UL technical data</b>			
Full-load current (FLA) for three-phase AC motor	at 480V	A	50
	at 600V	A	50
<b>Dimensions</b>			



**Wiring diagrams**



**Certifications and compliance**

**Compliance**

CSA C22.2 n° 14  
IEC/EN 60947-1  
IEC/EN 60947-4-1  
UL508

**Certifications**

cULus

**ETIM classification**

ETIM 8.0

EC000106 -  
Thermal overload  
relay