



Product designation

RF420

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 630
	aM (IEC)	A 500
	K5 (UL)	A 800
Phase failure detection		yes
Reset mode		Manual or automatic

**Power circuit characteristics**

Rated insulation voltage $U_i$ IEC/EN	V	1000
Rated impulse withstand voltage $U_{imp}$	kV	6
Rated operational voltage	V	690
Operational frequency		
	min	Hz 50
	max	Hz 60
Operational current $I_e$		
	Operational current min	A 250
	Operational current max	A 420
Tripping class		10A
Test Button		yes
Trip indicator		yes

Terminals

type	screw and flat washer
screw	M10
width	mm 25
tool	Bar 18mm

Tightening torque for terminals

min	Nm	35
max	Nm	35
min	lbin	25.9
max	lbin	25.9

**Auxiliary circuit characteristics**

Auxiliary contacts

NO	Nr.	1
NC	Nr.	1

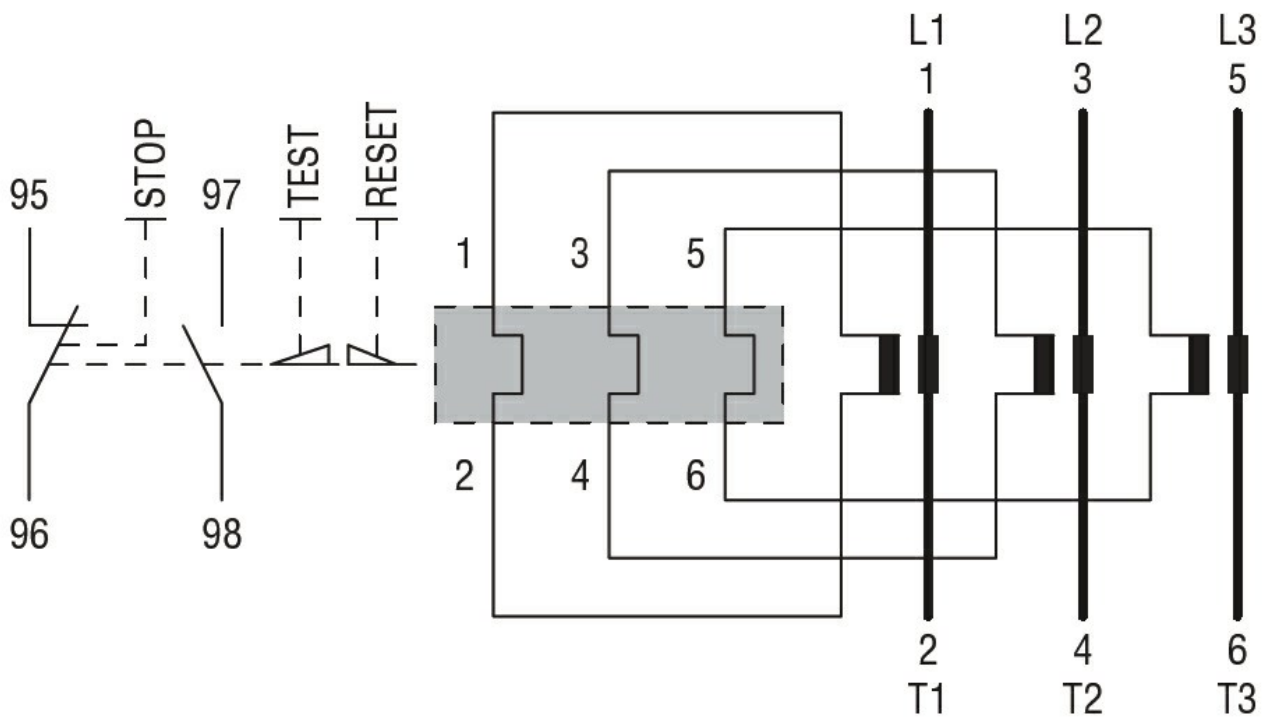
Auxiliary Rated insulation voltage  $U_i$  IEC/EN

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
Operating current DC13	600V	A	0.6
	125V	A	0.11
	600V	A	0.22
IEC Conventional free air thermal current Ith		A	10
<b>Terminals</b>			
	Auxiliary circuit type		screw and washer
	Auxiliary circuit screw		M3,5
	Auxiliary circuit width	mm	8
	Auxiliary circuit tool		Phillips 2
<b>Conductor section</b>			
	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
<b>Tightening torque for terminals</b>			
	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>			
<b>Operating temperature</b>			
	min	°C	-25
	max	°C	60
<b>Storage temperature</b>			
	min	°C	-50
	max	°C	70
<b>Compensation temperature</b>			
	min	°C	-20
	max	°C	60
Max altitude		m	3000
<b>Mechanical features</b>			
<b>Operating position</b>			
	normal allowable		Vertical plan ±30°
Fixing			Screw
Weight		g	2460
<b>UL technical data</b>			
<b>Full-load current (FLA) for three-phase AC motor</b>			
	at 480V	A	420
	at 600V	A	420

**Dimensions [mm (in)]**

**Wiring diagrams**



### Certifications and compliance

#### Compliance

CSA C22.2 n° 14

IEC/EN 60947-1

IEC/EN 60947-4-1

UL508

#### Certifications

cULus

EAC

### ETIM classification

ETIM 8.0

EC000106 -  
Thermal overload  
relay