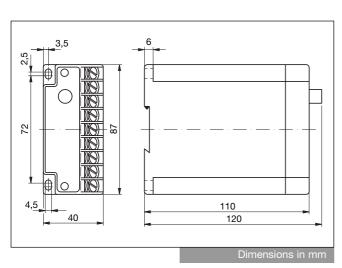
# INT69/69F® Protection Module





INT69/69F Protection Module

# Relay 1 Relay 2 trip L N 14 11 24 21 1 2 3 PTC-sensors trip PTC-sensors external



### **Application:**

The INT 69/69F is specially designed for monitoring drives with supplementary external cooling.

# **Functional description:**

Two PTC measuring circuits (to DIN 44 081/082) are connected to the protection module. The first measuring circuit activates an output relay (1) with 10 Acontacts, which is usually used to bring in an external cooling fan. Single-phase fan motors can be connected directly to terminal 11/14, providing the switching capacity of the output

Typical applications are elevator drives and other motors with a high switching frequency.

relay is not exceeded. The hysteresis of the measuring circuit is set at approx. 10K to provide sufficent running time of the external cooling before reset. The second measuring circuit monitors the upper limit temperature of the motor windings. Relay (2) trips when this temperature is exceeded.

## Function of the 3-colored-indication lamp:

indication lamp: green  $\rightarrow$  o.k

green  $\rightarrow$  o.k. yellow  $\rightarrow$  adv

advance warning (external fan cooling)

red  $\rightarrow$  fault (trip)

glow lamp: on  $\rightarrow$  mains on

### **Test button:**

Pressing the test button checks the function of the switching

The unit must be connected by trained electrical personnel. All valid standards for connecting electrical equip-

circuits, the relays and the 3-coloured-indication lamp.

ment must be observed. Limit values for the supply voltage of the unit may not be exceeded.

# **Technical data**

Technical data	
Supply voltage	AC 50/60Hz 230V ± 10%
Power consumption	5VA
Amb. temperature range	-20+60°C
Measuring circuit	two
- Type of sensors	PTC acc. to DIN 44081/082
- Number of sensors	19 in series, $R_{25 \text{ tot}} < 1.8 k\Omega$
Relay 1 (external fan cooling)	energized as long as the limit temperature is exceeded
- PTC-sensor	terminal 2-3
- Switching points	relay on: approx. $35k\Omega$ relay off: approx. $2,3k\Omega$
- Relay output (11/14)	AC 250V, max. 10A, 900VA ind.
Relay 2 (thermal trip)	energized as long as the limit temperature is not exceeded
- PTC-sensor	terminal 1-3
- Switching points	relay on: approx. $2,75k\Omega$ relay off: approx. $4,5k\Omega$
- Relay output (21/24)	AC 250V, max. 5A, 300VA ind.
Mech. service life	approx. 1 mio. switching cycles
Housing	PA6 GF30
Protection class	with terminal cover: IP20
acc. to EN 60529	without terminal cover: IP00
Mounting	35mm standard rail, acc. to
	DIN EN 50022 or screw-mounted
Dimensions	87 x 40 x 120mm
Weight	approx. 345g
Part-No.	52 A 173

Subject to technical modifications without notice