

### Application

Freely programmable plants and applications for heating, ventilation and air-conditioning systems

Modbus master interface for communication with other Modbus instruments (e.g. TROVIS 5576, 5579).

Inputs and outputs extendable using expansion module (accessories)



### Features

- Freely programmable according to IEC 61131 using ISaGRAF®
- Six programming languages
  - Ladder Diagram (LD)
  - Function Block Diagram (FBD)
  - Structured Text (ST)
  - Instruction List (IL)
  - Flow Chart (FC)
  - Sequential Function Chart (SFC)
- Fully graphic, illuminated display with user-friendly operation and plain text display
- Default applications:
  - Boiler control (Kes71)
  - Ventilation control (Luff71)
  - Heat exchanger sequence control (WT71)
- Default functions/function modules (see ISaGRAF® documentation)
- Over 50 special functions/function modules for extensive program generation in HVAC applications
  - Boiler plants
  - Heat exchanger sequence control
  - Ventilation systems
  - Hot water generation
  - Heating circuits, etc.
- Simple operation in various levels
  - Operating level:  
Application from ISaGRAF® (user configurable)
  - Information level:  
Analog inputs, binary inputs, analog outputs, binary outputs and meter bus
  - Setting level:  
Date/time levels, Modbus slave, Modbus master, meter bus and universal input type
- Universal inputs individually configurable
- Sensor calibration for each sensor input
- Binary inputs can be added to the error status register
- Modbus communication over Modbus master function and Modbus slave function
- Modbus slave connection, also over modem (RS-232)
- Fax or text message alarms configurable



Fig. 1 · TROVIS 5571 Programmable Logic Controller (PLC)

- Meter bus communication with maximum three meters
- Flash EPROM (operating system can be updated over RS-232)

## Technical data

Inputs	17 universal inputs, individually configurable as – Resistance input (Pt 100, Pt 500, Pt 1000, Pt 2000, Ni 200, Ni 1000, Ni 2000, PTC, NTC, 1–2 k $\Omega$ ) – Current input (0/4 to 20 mA) with 50 $\Omega$ parallel resistor – Voltage input 0–10 V – Binary input, floating
Outputs	10 binary relay outputs, non-floating in pairs, 2 A/250 V AC 2 low-voltage binary outputs, 100 mA/50 V AC 4 analog outputs (0 to 10 V), max. load > 4.7 k $\Omega$
Interfaces	
Modbus slave interface	RS-232 for modem or point-to-point communication with PC (RJ-12 jack at the back) Optional: Modbus interface RS-485 over cable converter 1400-7308
Modbus master interface	RS-485 for communication with other Modbus instruments (connected over terminals 1/2)
Meter bus	Connected over terminals 48/49/50
Programming interface	For installing an application created in ISaGRAF <sup>®</sup> and data logging (RJ-45 jack at the front)
Power supply	230 V AC, 48 to 62 Hz
Power consumption	8 VA
Temperature	Ambient: 0 to 40 °C · Storage: –20 to 60 °C
Degree of protection	IP 40
Class of protection	II
Degree of contamination	2
Overvoltage category	II
Humidity rating	F
Noise emission	According to EN 61000-6-3
Noise immunity	According to EN 61000-6-1
Noise suppression	According to DIN VDE 0875
Weight	Approx. 0.6 kg

## Electrical connection and installation

The device consists of the housing and the back panel. The electronics are integrated into the housing. The back panel contains the terminal block. Two cores with 0.75 mm<sup>2</sup> each can be connected to each terminal. For wall mounting, fasten the back panel with the terminal block to the wall. After installing the connecting lines, plug on the housing.

For panel mounting, insert the housing into the prepared panel cut-out and secure it. After installing the connecting lines, plug on the back panel.

## Ordering text

Programmable Logic Controller (PLC) TROVIS 5571

## Accessories

### Default application

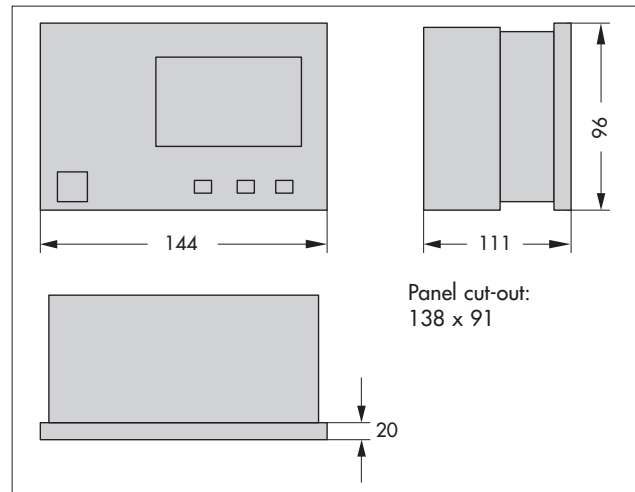
Boiler control (Kes71)	1402-0048
Ventilation control (Luff71)	1402-0035
Heat exchanger sequence control (WT71)	1402-0049

ISaGRAF <sup>®</sup> programming environment	1400-7621
Programming cable	1400-7620
Communication cable RS-232	1400-7419
Cable converter RS-232 to RS-485	1400-7308
Expansion module	1400-9386

The communication cable is connected to the RS-232 interface to download the operating system.

The programming cable is connected to the RJ-45 interface integrated into the front panel to download the application.

## Dimensions in mm



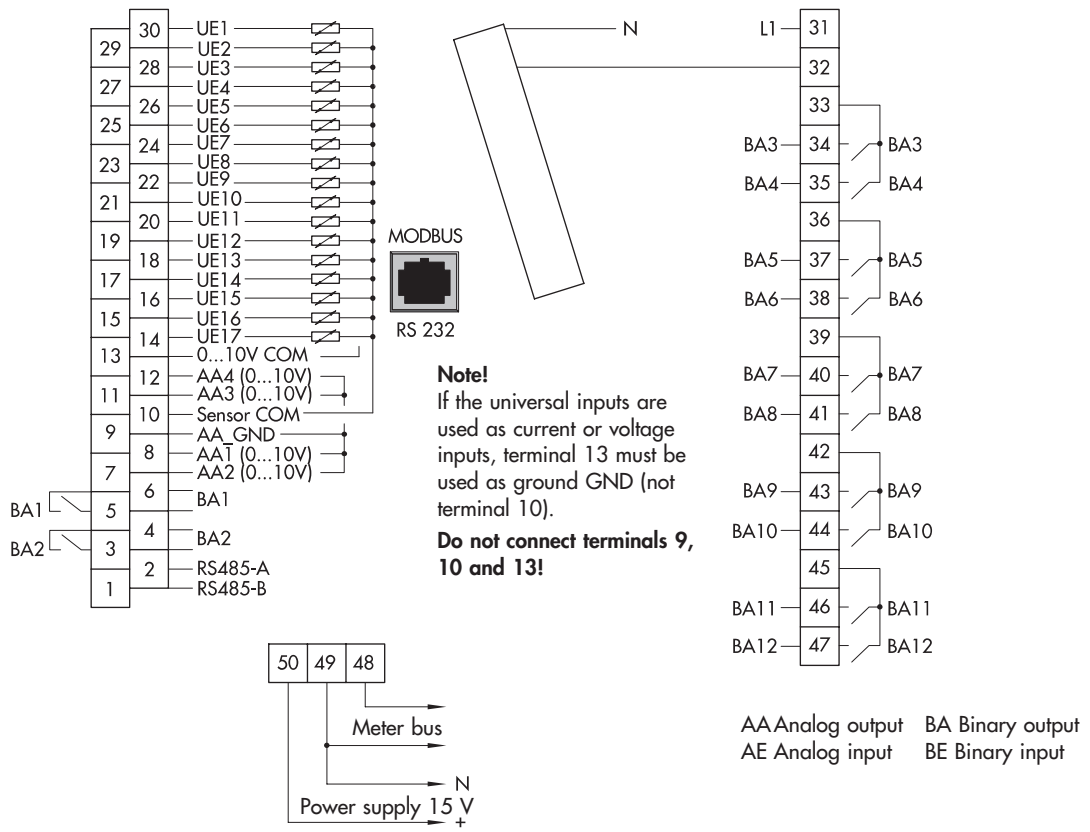


Fig. 2 · Terminal assignment of TROVIS 5571 Programmable Logic Controller (PLC)

## Expansion module 1400-9386

Extension of inputs and outputs at the programmable logic control (PLC)

Technical data	
Inputs	
Binary inputs	6 · Optionally can be used as: - 0 to 10 V input (inputs 1, 2, 5, 6) - Pt 1000 input (inputs 3, 4) - 0 to 1000 Ω input (inputs 3, 4) - Counter input, max. 1 kHz (inputs 1, 2) - 0 to 10 V <b>outputs</b> (inputs 5, 6)
Outputs	
Binary outputs	4 · 230 V/2 A (relay)
Interface	Modbus RS-485
Operating voltage	24 V AC <sup>1)</sup>
Dimensions [mm]	
Width	140
Height	93
Depth	30

1) **Note!**  
 The expansion module 1400-9386 (power supply 24 V AC) can be used in conjunction with TROVIS 5571 PLC (power supply 230 V AC) or with TROVIS 5572 Room Controllers (power supply 24 V AC).

**A 230 V AC/24 V AC transformer is required for the expansion module when it is used in conjunction with the TROVIS 5571 Programmable Logic Controller!**

Terminal assignment			
1	BA1	Binary output 1	230 V/2 A
2	BA2	Binary output 2	230 V/2 A
3	COM 1/2	COM Binary output 1/2	
4	BA3	Binary output 3	230 V/2 A
5	BA4	Binary output 4	230 V/2 A
6	COM 3/4	COM Binary output 3/4	
7	AC1 24V	Power supply 24 V AC	AC 1
8	AC2 24V		AC 2 has GND reference
9	BE1	Binary input 1 or 0 to 10 V input 1	Or counter input
10	BE2	Binary input 2 or 0 to 10 V input 2	Or counter input
11	(	GND input 1/2	
12	BE3	Binary input 3 or Pt 1000 or 0 to 1000 Ω	
13	BE4	Binary input 4 or Pt 1000 or 0 to 1000 Ω	
14	(	GND input 3/4	
15	BE5	Binary input 5 or 0 to 10 V input 5	Or 0 to 10 V output
16	BE6	Binary input 6 or 0 to 10 V input 6	Or 0 to 10 V output
17	(	GND input/output 5/6	
18	A1	RS-485/Modbus (slave)	Connection to TROVIS 5571, 5572 or expansion module(s)
19	B1		
20	A2	RS-485/Modbus	
21	B2		

Specifications subject to change without notice

