

## District Heating Controller RT96AS

- ◆ Control of building heating and hot tap water temperature
- ◆ Controls motorized valves, solenoid operated valves and pumps
- ◆ Built in calendar clock with daily and weekly schedule
- ◆ Protection from tampering. Frost protection.
- ◆ Full set of self-testing capabilities and dedicated alarm relay
- ◆ Network communication by wire or wireless network.
- ◆ Communication with heat meter for remote reading through network

RT96-AS is used for control of building water-heating systems. The result is increased comfort plus **considerable energy saving** as a result of taking into account building heating properties and current external and internal temperature. Building and heating system parameters plus desired room temperature are conveniently entered to automatically define heat curve. The unit has a built-in maintenance-free real time clock. A lower room temperature - **economy mode** may be maintained at night and/or weekends for substantial cut down of heating costs. When required the clock **night/day/weekend program** may easily be overridden by externally mounted switch. No re-programming is necessary. Special control algorithms ensure that desired room temperature is maintained in situations of fast internal and external temperature transitions.



### Technical specifications

RT

#### Analog inputs From 2 to 8 inputs <sup>(1)</sup>

Pt100 (w=1.385); 2-wire	-99.9 to +199.9 °C
Pt500 (w=1.385); 2-wire	-99.9 to +199.9 °C
Pt1000 (w=1.385); 2-wire	-99.9 to +199.9 °C
Other thermoresistive	-99.9 to +199.9 °C
Linear current <sup>(2,3)</sup>	0(4) to 20 mA (0 to 40 Bar)
Custom linear current <sup>(2,3)</sup>	0 to max. 50 mA (0 to 40 Bar)
Input type selection	as ordered
Measurement error	0.1 % from span

#### Discrete inputs Up to 8 inputs <sup>(1)</sup>

Input type	Passive contact
Active input (optional)	NPN Open collector 40V/40mA or TTL

#### Outputs for Heating control Up to 4 outputs

Relay electromechanical	5A/250V with NO contact
Solid state relay (optional)	SSR - 1A/250 VAC
Analog output (up to 2) <sup>(4)</sup>	0(4)+20 mA or 0+max.10 V
Control algorithm	Special
Programmable parameters	Algorithm specific

#### Outputs for Hot tap water control Up to 3 outputs

Relay electromechanical	5A/250V with NO contact
Solid state relay (optional)	SSR - 1A/250 VAC
Analog output (up to 2) <sup>(4)</sup>	0(4)+20 mA or 0+max.10 V
Control algorithm	ON/OFF
Programmable parameters	Algorithm specific

#### Alarm output

Relay electromechanical	5A/250V with NO contact
Solid state relay (optional)	SSR - 1A/250 VAC

#### Digital interface (optional)

To PC	RS 232
Network	RS 485
Special	for heat meter remote reading

#### Power supply

Supply voltage	90 to 250 VAC/DC
Consumption	Max. 6 VA

#### Indication and keyboard

Digital display	2 x 4 LED-indicators 14mm
LEDs	9 LEDs for modes and relays
Keyboard	8 membrane keys

#### Operating conditions

Operating temperature	-10 to 65 °C
Operating humidity	0 to 85 %RH

#### Design and materials

Case material	Plastic
Mounting	In panel cut-out 93x93 mm
Wiring	Screw terminals
Dimensions	96 x 96 (front) x 120 mm
Weight	Max. 650 g
Protection front/terminals	IP-54 / IP-20

<sup>(1)</sup> Analog inputs: minimum 2 temperature resistive (RTD); up to 2 pressure transmitter inputs; the rest - resistive, may also be used as discrete inputs if more than 2 discrete inputs are needed.

<sup>(2)</sup> The correspondence between measured input value and actually displayed number as well as decimal point position is user programmable.

<sup>(3)</sup> Provides voltage for external transmitter power supply - 12VDC/30mA

<sup>(4)</sup> Instead of 2 of the relay outputs

### Ordering code



RT96AS - 8G5.8G6'6".G7G7.G9G9.G11G11 - #1

Code	Feature or option	Code values
G5	Relay output type	X - none, C - relay NO, D - SSR
G6'6"	Input signal type <sup>(1)</sup>	6G6'6" - - X - none, BD - Pt100, BF - Pt 500, BG - Pt 1000, BZ - other resistive (RTD) ----- 2G6'6" X - none, DC - 4...20 mA DC, DZ - other linear <sup>(5)</sup>
G7	Discrete inputs <sup>(1)</sup>	X - none, A - contact, E - NPN, G - TTL
G9	Interface	G9 - X - none, A - RS 232, B - RS 485 - G9 X - none, E - to heat meter
G11	Analog output type <sup>(4)</sup>	X - none, E - 0...20 mA, F - 4...20 mA, Z - other on request
#2	Auxiliary supply output	X - none, A - installed (12VDC/30mA)

<sup>(5)</sup> From pressure transducers

For detailed instructions on ordering coding see chapter "ORDERING CODES"!