



ISO9001  
CE



RWF40... complete with housing

## Compact Universal Controllers

## RWF40...

The RWF40... is a universal digital boiler temperature / pressure controller with functions designed specifically for the control of heat generating plant.

The RWF40... and this Data Sheet are intended for use by OEMs which integrate the controller in their products!

### Mechanical design

The controller is supplied complete with a housing for flush panel mounting. The RWF40... is matched to the controlled variable and the required setpoint range by making parameter settings. The control parameters can be set and optimized while the burner is running. All settings are made with 4 buttons located on the unit front and are directly displayed.

LEDs on the front indicate the following operating states:

- Control ON / OFF
- Positioning pulses ON or OFF for driving the burner's air damper when using modulating burner control, or Stage I / stage II when using 2-stage burner control
- «2-stage» operating mode
- Position of the configurable contact «K6»
- Manual control ON / OFF

During operation, the digital displays above the LEDs show the setpoint (green), the actual value (red) and – when making parameter settings – the relevant parameters.

## Warning notes

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**To avoid injury to persons, damage to property or the environment, the following warning notes should be observed!**

**Do not open, interfere with or modify the controller!**

- When selecting the cables, when making the installation and the electrical connections, observe the regulations of VDE 0100 «Erection of power installations with rated voltages below AC 1000 V» and the relevant national regulations
- The electrical connections may only be made by authorized staff
- Provide double-pole isolation of the controller from the mains supply if there is a risk of touching live parts while work is carried out
- Check to ensure that wiring is in an orderly state and that the wires are firmly connected

## Mounting notes

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- Ensure that the relevant national safety regulations are complied with

## Installation notes

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- Installation work must be carried out by qualified staff
- Please observe the notes given in the user documentation CC1B7865E

## Commissioning notes

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- Commissioning work must be carried out by qualified staff

## Standards

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Conformity to EEC directives	
- Electromagnetic compatibility EMC (immunity)	89 / 336 EEC
- Electromagnetic compatibility EMC	NE21, EN 50 081 part 1 und
NAMUR recommendation	EN 50 082 part 2

## Service notes

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- Maintenance work must be carried out by qualified staff
- For service purposes, the controller can be removed from its housing with no need for tools
- The electrical connections are made via the screw terminals located at the rear of the housing
- Each time a unit has been replaced, check to ensure that wiring is in an orderly state and that the wires are firmly connected

## Disposal notes

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The unit contains electrical and electronic components and may not be disposed of together with household waste.

Local and currently valid legislation must be observed.

## Type summary

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**Controller with** **RWF40.000A97**  
- 3-position output  
- housing  
- fixing material and seal

**Controller with** **RWF40.001A97**  
- 3-position output  
- analog output  
- housing  
- fixing material and seal

**Controller with** **RWF40.002B97**  
- 3-position output  
- analog output  
- RS-485 port  
- housing  
- fixing material and seal

**Packaging variants** **RWF40.010A97**  
**RWF40.011A97**  
**RWF40.012B97**

Accessories



**Adapter frame** for replacing the RWF32... **ARG40**



**Bracket** **ARG41**  
For mounting the RWF40... on 35 mm DIN rails to DIN 46277



**Dummy cover** **AVA10.200/109**  
For covering a panel cutout for the RWF40...

## Technical data

General controller data	Mains voltage	AC 100...240 V $\pm$ 10 %
	Mains frequency	50...60 Hz
	Safety class	II to DIN 0631
	Mounting position	optional
	Terminals for	2 x 1.5 mm <sup>2</sup> or 1 x 2.5 mm <sup>2</sup>
	Power consumption	approx. 8 VA
	Safety extra low-voltage	DC 24 V
	Contact rating of the control outputs (relays «K1...K3»)	
	- Up to 2 x 10 <sup>5</sup> switching cycles	2 A / AC 24...240 V
	- Up to 10 <sup>7</sup> switching cycles	0.1 A / AC 24...240 V
	Weight complete with housing	approx. 760 g
	Recommended actuator running time	15...60 s
	Degree of protection of housing	
	- Front	IP 65, EN 60529
	- Base	IP 20, EN 60529
Environmental conditions	<b>Transport</b>	
	Temperature range	-40...+70 °C
	Humidity	< 75 % r.h.
	<b>Operation</b>	
	Temperature range	-20...+50 °C
	Humidity	< 75 % r.h.



**Condensation, formation of ice and ingress of water are not permitted!**