

## Universal PID-Controller UR3274

- PID-Controller in 32 x 74 mm format
- Universal power supply
- Universal input für process signals, thermocouple, RTD
- 2-line LED display
- Easy programming via software or push buttons
- Two setpoints as relay or relay/SSR



UR3274Ux

This small universal controller is a compact all-rounder. With the universal input for the most common temperature sensors and process signals combined with the universal power supply and the newest programming and control technologies, this small PID-controller is the best solution for sophisticated applications. Beside the excellent price/performance-ratio, this controller convinces with his robust housing and brilliant display.

### Display: 2-line LED-Display

Upper line: Process value, 4-digit, green with 10.2 mm digits  
 Lower line: Setpoint, 4-digit, red with 7,6 mm digits

**Indicators:** Six red indicators for relays outputs, alarm status, serial communication and tuning.

- |      |  |
|------|--|
| 1    | ON, when output active. For electronic valves.           |
|      | ON, when the valve opens and blinking when valve closes. |
| 2, 3 | ON, when alarm is active                                 |
| M    | ON, when the function "manual" is switched on            |
| T    | ON, when controller is in "autotune" mode                |
| R    | ON when serial communication is active                   |

**Buttons:** 4 push buttons for programming and setting up the setpoints.

**Input ranges:** Configuration of the input signal via software or push buttons.

Thermocouples type K, S, R, J; internal cold junction (from 0 °C to 50 °C; accuracy of cold junction 0,1 °C/°C)  
 RTD: Pt100, Pt500, Pt1000, Ni100, PTC1K, NTC10K  
 Linear inputs: 0 V to 10 V, 0/4 mA to 20 mA, 0 mV to 40 mV  
 Potentiometer: 1 kOhm to 6/150 kOhm

**Accuracy:** Tolerance at 25 °C +/-0.2 % ± 1 digit for thermocouple input, RTD input and analogue input signal.

**Measuring rate:** Programmable up to 4,1 msec. (242 Hz).

**User input:** (only available for thermocouple or process signal input) switchable via contact input signal.  
 Alternative usable functions: Hold/freeze values, selecting setpoint 1 to 2.

**Relay output:** 1 change over relay with 8A @ 250 VAC and 1 closing contact (UR3274U5) with 5 A @ 250 VAC. Programmable as controller output for heating/cooling and/or alarm.

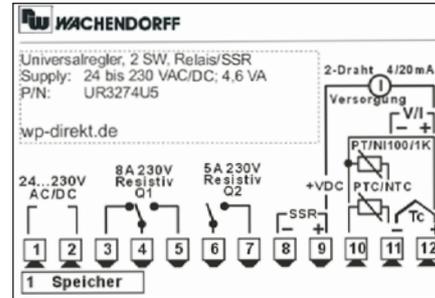
**SSR output:** SSR output 12 VDC @ 30 mA.  
 Programmable as controller output for heating/cooling and/or alarm.

**Communication port (only UR3274U6):** RS485 with Modbus RTU as slave.

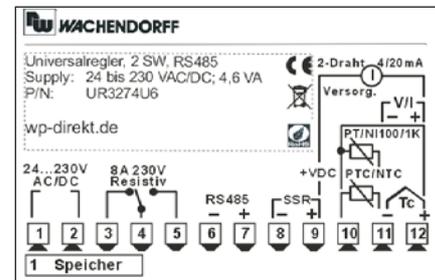
### Supply:

24VAC/DC to 230 VAC/DC +/-15 %, 50/60Hz; 4,65 VA

### Wiring plan:



UR3274U5



UR3274U6

**Protection class:** IP65 from the front (with rubber sealing), back plane IP20.

**Housing:** Black and robust plastic case. The electronics can be pulled out of the front.

**Dimensions:** W 77 mm x H 35 mm x D 53 mm. Panel cut out 28,5 mm x 70,5 mm.

**Connection:** Via terminal block.

**Ambient conditions:** Operating temperature: 0 °C to +45 °C; relative humidity 35 % to 95 % rF, non condensing.

**Weight:** 112 gramms.

**Scope of delivery:** Controller, mounting clamp, sealing, manual.

### Functionality:

Control algorithms: ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned, dead band. Additionally open / close logic for motorized valves.

### Tuning:

Manual or automatic tuning selectable.

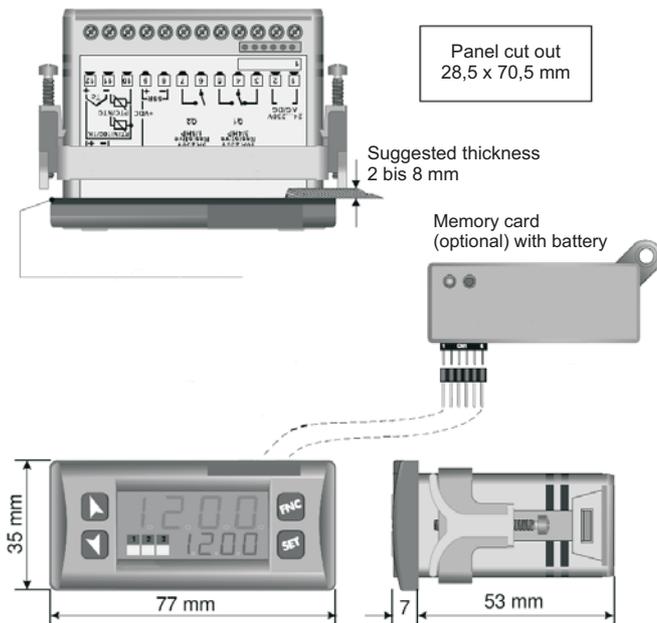
**Alarm modes:** Absolute / Threshold, band, High / Low deviation. Alarm with optional manual reset.

**Second controller output (cooling):** Programmable instead of alarm output with P., P.I., P.I.D., P.D. time proportioned with dead band.

**Timer function:** Controller function + single / double Timer.

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**Data protection:** Lock of command / alarm setpoint - Access to parameters by password.



Dimensions

**Programming:** The controller will be programmed via push buttons or Windows™-software. The memory card is battery powered. With this technology you can programm the controller without powering it up (up to 1000 programm cycles with one battery).

### Order codes

Type	Order-No.
Universal controller, 32 x 74, 24 to 230VAC/VDC	
2 set points, 2 relay, SSR	UR3274U5
2 set points, 1 relay, SSR, RS 485	UR3274U6
<b>Accessories</b>	
Programming module with USB cable	SFUR0KIT
Software download under: <a href="http://www.wachendorff.de/wp/dpc_dow_epg_sof.html">http://www.wachendorff.de/wp/dpc_dow_epg_sof.html</a>	
Din rail power supply, 24 VDC, 3 A	PS24V03AA