

DeltaSol® AL E HE

The DeltaSol® AL E HE controller is especially designed for standard solar systems with a high-efficiency pump and an electric backup heating.

It is equipped with a PWM output and two high-current relays to which an electric immersion heater of up to 3 kW (230 V~) can be connected. The heater can be directly connected to the controller without the need of auxiliary relays.

For data communication, the controller has a RESOL VBus®.

Customised and OEM versions are available on request. Please contact our sales team.



For electric immersion heaters!



The simple solution for your DHW supply!

- Direct connection of an electric immersion heater up to 3 kW (230V~)
- DHW heating with rapid heat-up and thermal disinfection
- Time and temperature control of the electric backup heating
- Solar backup heating suppression
- Heat quantity measurement via VFD Grundfos Direct Sensor™
- PWM output for the speed control of a high-efficiency pump
- Quick access to the holiday and the manual modes
- Status display for a bidirectional HE pump
- Drainback option and tube collector function
- Commissioning menu

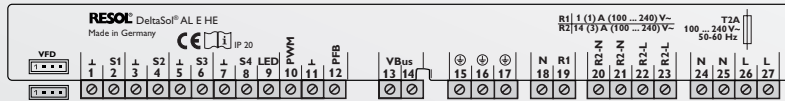
RESOL DeltaSol® AL E HE
Price bracket A | Article no.: 115 325 93

RESOL DeltaSol® AL E HE – Full kit
Incl. 3 Pt1000 sensors (1 x FKP6, 2 x FRP6)
Price bracket A | Article no.: 115 326 03

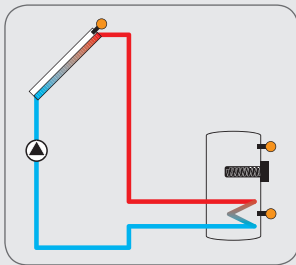
Manuals available:



ELECTRICAL CONNECTION

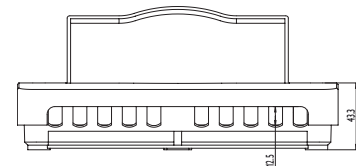
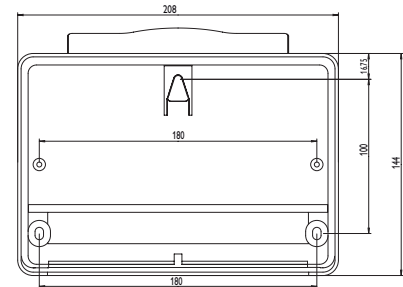
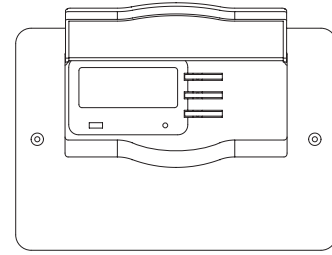


EXAMPLE



Solar system with electric backup heating
(application example)

TECHNICAL DATA



Inputs:

for 4 Pt1000 temperature sensors, thereof 1 x RCTT,
1 x Grundfos Direct Sensor™ VFD, 1 x PWM feedback

Outputs: 1 semiconductor relay, 2 high-current
relays for electric immersion heater, 1 PWM output

PWM frequency: 512 Hz

PWM voltage: 10 V

Switching capacity:

1 (1) A 240 V~ (semiconductor relay)

14 (3) A 240 V~/24 V==

(potential-free high-current relay)

Power supply: 100 ... 240 V~ (50 ... 60 Hz)

Supply connection: type Y attachment

Standby: 0.67 W

Temperature controls class: I

Energy efficiency contribution: 1 %

Mode of operation: type 1.B.Y action

Rated impulse voltage: 2.5 kV

Data interface: RESOL VBus®

VBus® current supply: 35 mA

Functions: function control, operating hours counter,
tube collector function, heat quantity measurement,
time-controlled thermostat function, DHW heating
with rapid heat-up, thermal disinfection, holiday mode
and backup heating suppression

Housing: plastic, PC-ABS and PMMA

Mounting: wall mounting, mounting into patch
panels is possible

Indication/Display: System-Monitoring-Display for
visualisation, 16-segment display, 7-segment display,
8 symbols for system states, background illumination
and operating control LED

Operation: 3 push buttons and 1 slide switch

Ingress protection: IP 20 / EN 60529

Protection class: I

Ambient temperature: 0 ... 40 °C

Pollution degree: 2

Dimensions: 144 x 208 x 43 mm

ACCESSORIES

RESOL KM2 Communication module



Incl. RESOL service CD,
network cable and mains
adapter, VBus® cable
pre-connected

Price bracket A | Article no.: **180 012 10**

RESOL SD3 Smart Display



Display module with 3 displays for
collector and store temperature as
well as for heat quantity

Price bracket A | Article no.: **180 004 90**

VFD Grundfos Direct Sensor™



Digital sensors in
different versions

RESOL AM1



Alarm module for signaling
system failures

Price bracket B | Article no.:
180 008 70

RESOL SP10



Sensor overvoltage protection

Price bracket A | Article no.:
180 110 70

RESOL RCTT Remote control



Activating the rapid heat-up
function without accessing the
controller menu

Price bracket A | Article no.: **136 000 60**