

DeltaSol® MX



rosenthal design 

The DeltaSol® MX is equipped with 14 relay outputs and 4 PWM outputs for the speed control of energy-saving highefficiency pumps. Additionally, the controller has one frequency input, three impulse inputs as well as a range of different sensor inputs. Up to five extension modules can be connected via the RESOLVBus®.

The integrated SD memory card slot enables an easy datalogging to an SD memory card and a quick, effortless transfer of logged data to a PC. Additionally, firmware updates can be run and controller adjustments can be saved on and reinstalled from an SD card. The large full graphic display allows the direct display of balance and progression diagrams.

Pre-defined functions allow easier parameterization of the system; functional additions such as a drainback option broaden the range of applications.

Unit °F and °C selectable!

RESOL DeltaSol® MX

System controller for solar and heating systems

Article no.: 115 992 07

RESOL DeltaSol® MX - Full kit

System controller for solar and heating systems
incl. 6 Pt1000 sensors (2 × FKP6, 4 × FRP6)

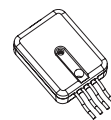
Article no.: 115 992 17

- Full graphic display
- 14 relay outputs
- 15 sensor inputs
- Inputs for Grundfos Direct Sensors™
- Speed control of standard and high-efficiency pumps
- Datalogging onto SD memory card
- Drainback option
- RESOLVBus®
- Energy-efficient switch-mode power supply

The controller can be branded with your own logo.
Please contact our sales team.



Accessories



RESOLVBus®/USB

PC connection kit for RESOL controllers with VBus® incl. RESOL ServiceCenter Software (see page 33)

Article no.: 180 008 50



RESOL AM1

Alarm module for signaling system failures (see page 45)

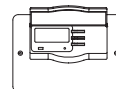
Article no.: 180 008 70



RESOL SP10

Sensor overvoltage protection (see page 45)

Article no.: 180 110 70



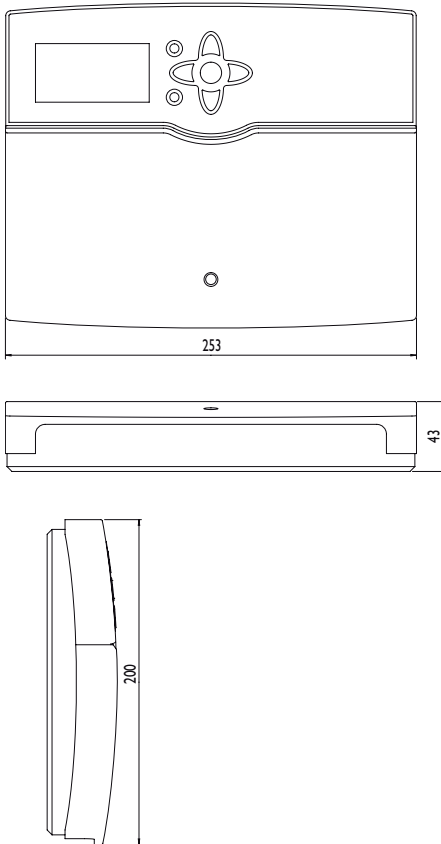
RESOL EM

Sensor and relay extension module with 5 outputs and 6 inputs

Article no.: 145 440 80

For an overview of accessories see page 46-47!

Technical data



Housing: plastic, PC-ABS and PMMA

Protection type: IP 20/EN 60529

Ambient temperature: 0 ... 40 °C/32 ... 104 °F

Dimensions: 253 × 200 × 43 mm / 10.1" × 7.9" × 1.7"

Installation: wall mounting, also suitable for mounting into patch panels

Display: full graphic display

Operation: 7 push buttons at the front

Functions: solar system controller for use in solar and heating systems. 7 integrated calorimeters and control of a weather-compensated heating circuit. Adjustable system parameters and add-on options (menu-driven), balance and diagnostics functions

Sensor inputs:

15 Pt1000 temperature sensor inputs, seven of them can optionally be used for RTA11-M remote controls, three of them can optionally be used for V40 flowmeters; 4 Grundfos Direct Sensors™ (2 × analog, 2 × digital), 1 CS10 solar cell

Relay outputs:

14 relay outputs, 13 of them are semiconductor relays for pump speed control, 1 dry contact relay and 4 PWM outputs (convertible to 0-10V signal outputs)

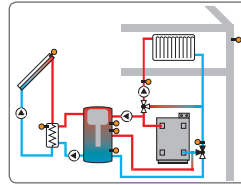
Bus: RESOLVBus®

Power consumption: < 1W (standby)

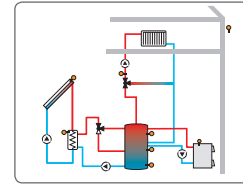
Power supply: 100 ... 240V~, 50-60 Hz

Total switching capacity: 6.3 A 100 ... 240 V~

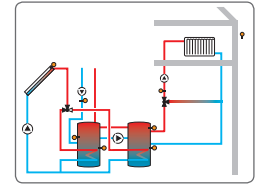
Examples



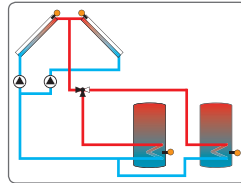
Solar system with combined tank, external heat exchanger, weather-compensated heating circuit, return preheating and backup heating



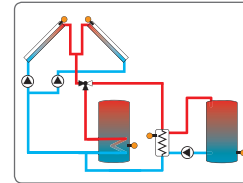
Solar system with external heat exchanger and backup heating by solid fuel boiler



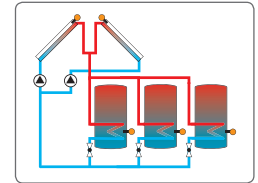
Solar system with 2 tanks, circulation pump control, heat exchange control and weather-compensated heating circuit



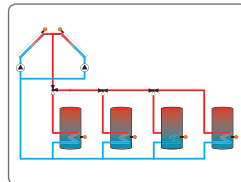
Solar system with east-west collectors and 2 tanks, pump-/3-way-valve control



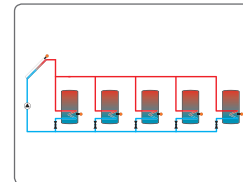
Solar system with east-west collectors, 2 tanks and external heat exchanger 3-way-valve control



Solar system with east-west collectors and 3 tanks, pump-/valve control

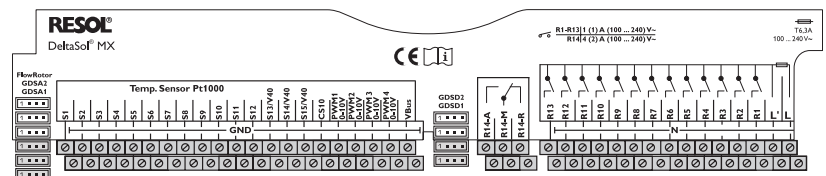


Solar system with east-west collectors and 4 tanks, pump-/3-way-valve control



Solar system with 5 tanks and 2-way-valve control

Electrical connection



EM extension module



Housing: plastic, PC-ABS and PMMA

Protection type: IP 20/EN 60529

Ambient temperature: 0 ... 40 °C/32 ... 104 °F

Dimensions: 144 × 208 × 43 mm / 5.66" × 8.18" × 1.69"

Installation: wall mounting

Display: LC display, 7-segment display

Inputs: for 6 Pt1000 temperature sensors

Outputs: 4 semiconductor relays and 1 dry contact relay

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

Operation: 3 push buttons and 1 slide switch at the front of the housing

Bus: RESOLVBus®

Power consumption: < 1W (standby)

Total switching capacity: 4 A 100 ... 240 V~

The EM extension module provides 5 additional relays and 6 additional sensor inputs for the DeltaSol® MX controller.

Up to 5 extension modules can be connected to the MX via the VBus®, so that a total of up to 39 outputs and 45 inputs can be made available for the control logic. The extension modules themselves do not require any adjustments,

they are simply connected and assigned to the controller. The inputs and outputs of the registered modules will then be available for all functions of the controller.

With 5 extension modules and its 2 internal heating circuits, for example, the DeltaSol® MX can manage no less than 7 heating circuits complete with individual room thermostats.