



Product information  
**Solar controllers**

DeltaSol BS, BS Pro, ES and M

Switch to the sunny side  
for your heating system

# Solar controller DeltaSol BS

The solar controller for use in simple solar heating systems. Illuminated system monitoring display with stored system layout, pictogram and multi-character displays. Precise push-buttons for operation and rule setup. Activatable options such as cooling functions, safety shutdown, special function for evacuated tube collectors, heat quantity statistics, frost protection function, functional control compliant with BAFA regulations, switchable display languages English/German.



## Advantages DeltaSol BS

- Illuminated system monitoring display with integrated system layout and pictogram
- Displays temperature, control parameters and settings via 4-character 16- and 7-segment alpha-numerical displays
- Special function for evacuated tube collectors
- Cooling and frost protection functions
- Safety shutdown
- Heat quantity statistics
- Functional control compliant with BAFA regulations

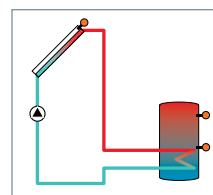
## Functions DeltaSol BS

Standard solar controller with adjustable settings: minimum/maximum temperature limits, switch-on/switch-off temperature difference, frost protection/cooling functions, safety shutdown, special function for evacuated tube collectors, heat quantity statistics, functional control compliant with BAFA regulations and solar operating hours counter

## Technical data DeltaSol BS

DeltaSol BS	
Dimensions W x H x D	172 x 110 x 46 mm
Housing	Plastic, PC/ABS and PMMA
Display	System monitoring with system visualisation, 16-segment and 7-segment display, 8 symbols for system status and two-colour indicator lamp
Operation	via 3 push-buttons on the front of the unit
Inputs	4 temperature sensors Pt1000
Output	1 standard relay output
Power supply	210 ... 250 V ~, 50 ... 60 Hz
Total switching capacity	1.6 A 250 V~
Ambient temperature	0 ... 40 °C
Protection class	IP 20 / DIN 40050
Installation	Wall-mounted, can be installed in a switch panel

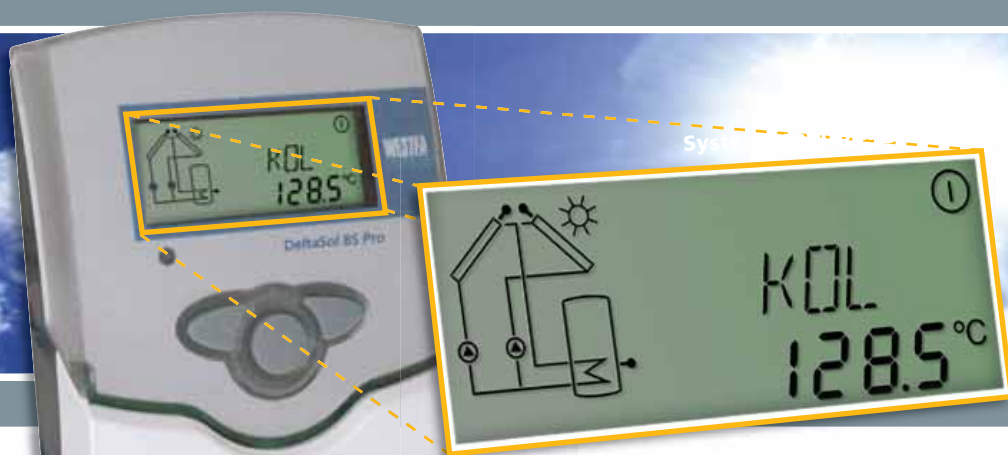
## Example application DeltaSol BS



Standard solar heating system

# Solar controller DeltaSol BS Pro

The DeltaSol BS Pro controller comes pre-programmed with system controller options for nine basic types of hydraulic system. Simple pictograms provide the user with easy-to-understand information about the functioning and operating status of the unit and the system as a whole. The controller has four inputs for Pt1000 temperature sensors and two semiconductor outputs with numerous functions. The central user control element is the button grouping below the display. The combination LCD display enables intuitive and safe controller configuration and visualises system statuses with easy-to-understand graphics.



## Advantages DeltaSol BS Pro

- Illuminated system monitoring display with 9 stored system layouts and pictograms
- Easy-to-understand visualisation and fast information about system statuses and functions
- 2 outputs with RPM control
- Special function for evacuated tube collectors
- Cooling and frost protection functions
- Safety shutdown
- Heat quantity statistics
- Functional control compliant with BAFA regulations

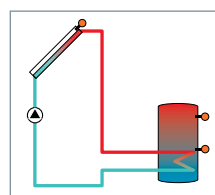
## Functions DeltaSol BS Pro

Standard solar controller with adjustable settings: minimum/maximum temperature limits, switch-on/switch-off temperature difference, frost protection/cooling function, safety shutdown, special function for evacuated tube collectors, heat quantity statistics, functionality compliant with BAFA regulations and solar operating hours counter

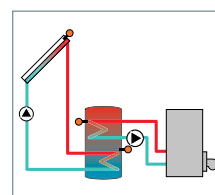
## Technical data DeltaSol BS Pro

DeltaSol BS Pro	
Dimensions W x H x D	172 x 110 x 46 mm
Housing	Plastic, PC/ABS and PMMA
Display	System monitoring with system visualisation, 16-segment display, 7-segment display, 8 symbols showing system status and two-colour indicator lamp
Operation	via 3 push-buttons on the front of the unit
Inputs	4 temperature sensors Pt1000
Outputs	2 semiconductor relays
Power supply	210 ... 250 V~, 50 ... 60 Hz
Total switching capacity	4 (2) A 250 V ~
Ambient temperature	0 ... 40°C
Protection class	IP20 / DIN 40050
Installation	Wall-mounted, can be installed in a switch panel

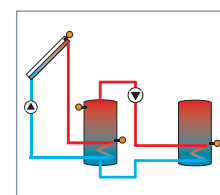
## Example applications DeltaSol BS Pro



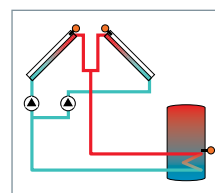
Standard solar heating system



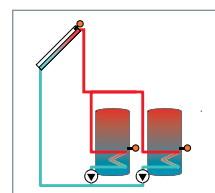
Solar system with backup heating



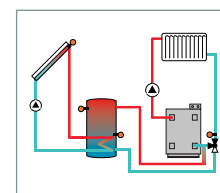
Solar system with heat exchange to existing storage tank



East/west roof



2-tank solar heating system with intelligent pump control



Solar system with heating circuit return increase

# Solar controller DeltaSol ES

This controller is pre-programmed for various solar and heating systems. The individual system configuration can be selected from a menu and is represented graphically on the display. The display enables easy visualisation, providing installers and operators with at-a-glance information about the system and controller statuses. The controller is equipped with a VBus and an RS232 interface for data communication and remote maintenance. These open up a bidirectional route to other modules, PCs or data logging systems.



## Advantages DeltaSol ES

- 30 stored system layouts
- Integrated heat volume meter and operating hours counter
- System monitoring to provide clear system status information and statistics on an easy-to-read display
- User-friendly, straightforward operation
- Installation-friendly housing with outstanding design

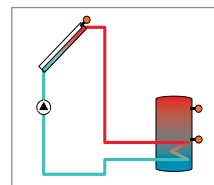
## Functions DeltaSol ES

Solar and heating controller with pre-programmed standard systems such as: 2-tank systems, east/west roof, heating circuit support, heat exchanger control, thermostat-controlled backup heating, solid fuel boilers, (activatable) functions and options such as heat volume meter, frost protection/cooling functions, special function for evacuated tube collectors, minimum temperature limit, RPM control, statistics and diagnostics functions, functional control compliant with BAFA regulations

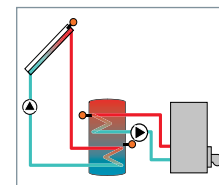
## Technical data DeltaSol ES

DeltaSol ES	
Dimensions W x H x D	220 x 155 x 62 mm
Housing	Plastic, PC/ABS and PMMA
Display	Illuminated system monitoring display with 30 stored system layouts and pictograms, one 4-character alphanumerical 16-segment and one 4-character numerical 7-segment display, 2-colour LED
Operation	via 3 push-buttons on the front of the unit
Inputs	8 sensor inputs for Pt1000, CS10, V40
Outputs	3 semiconductor relays, 2 standard relays, 1 voltage-free relay with changeover contact
Interfaces	RESOL VBus and RS232 (WS2 connection kit required)
Power supply	210 ... 250 V ~, 50 ... 60 Hz
Total switching capacity	4 (1) A 250 V ~
Ambient temperature	0 ... 40 °C
Protection class	IP 20 / DIN 40050
Installation	Wall-mounted, can be installed in a switch panel

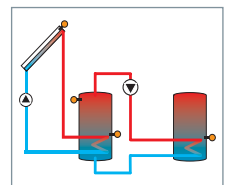
## Example applications DeltaSol ES



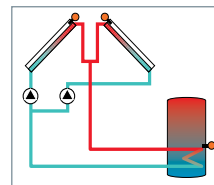
Standard solar heating system



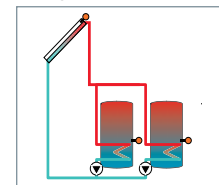
Solar system with backup heating



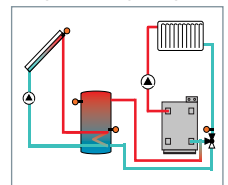
Solar system with heat exchange to existing storage tank



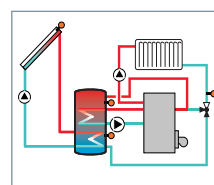
East/west roof



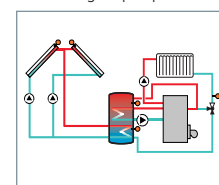
2-tank solar heating system with intelligent pump control



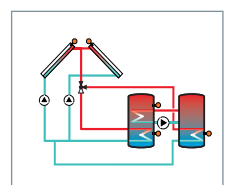
Solar system with heating circuit return increase



Solar system with heating circuit return increase and backup heating



East/west roof with heating circuit return increase and backup heating



East/west roof in a two-tank solar system with intelligent valve control and heat exchange to existing storage tank

# Solar controller DeltaSol M

The WESTFA-DeltaSol M is pre-programmed for seven basic types of solar heating systems and is also suitable as a controller for complex large systems. Featuring nine relay outputs and 15 sensor inputs as well as a large range of additional activatable functions and options, the controller can be adapted to the individual solar and heating system. The controller provides up to two integrated heat volume meters and can also regulate a weather-controlled heating circuit. The DeltaSol M comes ready equipped with service centre software (RSC) as a communication interface.



## Advantages DeltaSol M

- Pre-programmed for 7 basic system types
- Also suitable for controlling large systems
- Multi-language menu navigation
- Convenient configuration, control and analysis with software (RSC)
- 2 integrated heat volume meters
- Can regulate a weather-controlled heating circuit, expandable for a second heating circuit
- Installation-friendly housing with outstanding design

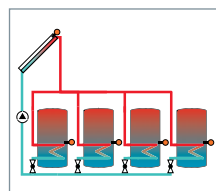
## Functions DeltaSol M

Solar system controller for use in solar and heating systems. The controller provides up to two integrated heat volume meters and can regulate a weather-controlled heating circuit, adjustable system parameters and activatable functions and options such as heat volume meter (menu-driven), statistics and diagnostics functions, functional control compliant with BAFA regulations

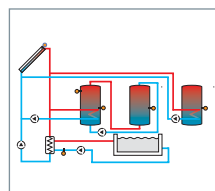
## Technical data DeltaSol M

DeltaSol M	
Dimensions W x H x D	260 x 216 x 64 mm
Housing	Plastic, PC/ABS and PMMA
Display	4-line LCD text display, illuminated, with menu navigation (multi-language), 2-colour LED
Operation	via 3 push-buttons on the front of the unit
Inputs	12 temperature sensors Pt1000 or 11 sensors Pt1000 and 1 remote control RESOL RTA11-M, 2 flow meters RESOL V40 and 1 solar cell RESOL CS10
Outputs	Depending on the version up to 9 relay outputs, of which 4 standard relays, 4 semiconductor relays for RPM control and 1 voltage-free relay with changeover contact
Interface	RESOL VBus and RS232
Power supply	210 ... 250 V~, 50 ... 60 Hz
Switching capacity	6.3 (1) A 250 V ~
Ambient temperature	0 ... 40 °C
Protection class	IP 40 / DIN 40050
Installation	Wall-mounted, can be installed in a switch panel

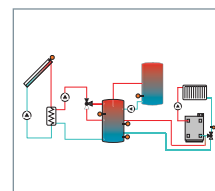
## Example applications DeltaSol M



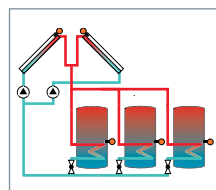
Standard solar heating system with up to 4 storage tanks



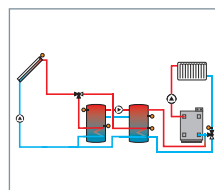
Solar/swimming pool controller with heat exchange to existing storage tank



Solar system with external heat exchanger and 2 storage tanks or stratified filling



East/west roof with up to 3 storage tanks



Solar system with 2 tanks, heating support and heat exchange control to existing service water storage tank

**NOTE:** In addition to the pictograms shown, all other example applications for DeltaSol BS, BS Pro and ES are also possible.

We will be happy to provide  
you with more information.

## General information

While this product information remains valid, individual products may be subject to modifications and particularly improvements. For the applicable specifications please consult the article descriptions relating to our current product offerings if necessary.

Our General Terms and Conditions apply.

**Information**  
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[www.westfa.eu](http://www.westfa.eu)