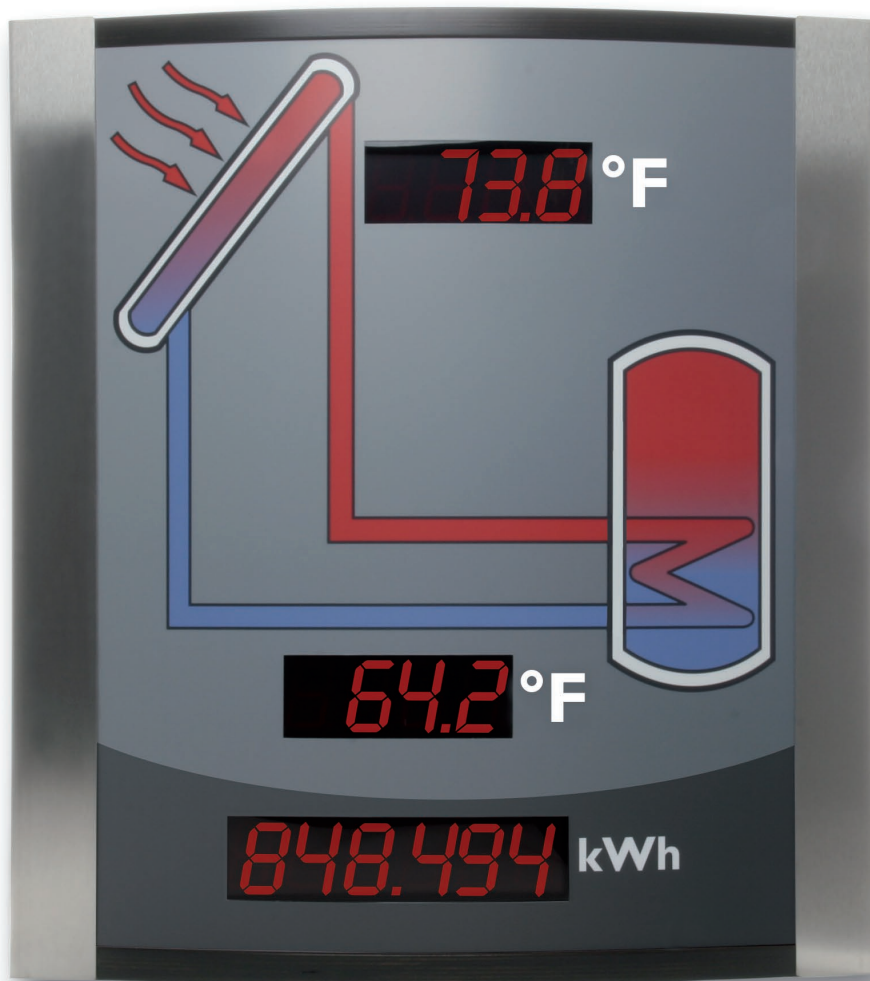


# RESOL Large Display GA3



# GA3

US/CA

Manual

[www.resol.de](http://www.resol.de)



48003860

Thank you for buying this RESOL product.  
Please read this manual carefully to get the best performance from this unit.

## Safety advice

Please pay attention to the following safety advice in order to avoid danger and damage to people and property.

## Regulations

Attention should be paid to

- the statutory provisions for prevention of industrial accidents,
- the statutory provisions for environmental protection,
- the Health and Safety at Work Act 1974, - Part P of the Building Regulations 2005,
- BS7671 Requirements for electrical installations and relevant safety regulations of DIN, EN and VDE

These instructions are exclusively addressed to authorised skilled personnel.

- Only qualified electricians should carry out electrical works.
- Initial installation must be effected by qualified personnel named by the manufacturer.

## Appropriate Usage

The large display GA3 may only be used for visualising the data issued by the controller in solar thermal systems in compliance with the technical data specified in this manual.

Improper use excludes all liability claims.

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Subject to changes without prior notice. Errors excepted.

## Declaration of conformity

We, RESOL Elektronische Regelungen GmbH, D-45527 Hattingen, declare under our sole responsibility that our product GA3 complies with the following standards:

EN 55 014-1

EN 60 730-1

According to the regulations of the above directives, the product is labelled with



89/336/EWG

73/ 23/EWG

Hattingen, 13. June 2007

RESOL - Elektronische Regelungen GmbH

ppa. Gerald Neuse

## Technical data

**Housing:** High-grade steel frame with multiplex-wood elements

**Dimensions:** 530 x 630 x 100 mm

**Protection type:** IP30 (suitable for dry interior locations)

**Display:** numerical 7-segment LED display

**Segment size:** 45 x 26 mm, 10°- digit inclination

**Ambient temperature:** 32 ... 104 °F

**Alimentation:** 110 ... 240V~ (via mains adapter, included in delivery scope)

**Power consumption:** max. 9 VA

**Bus connection:** RESOL VBus®



- Visualisation of collector and store temperature as well as of heat quantity
- one 6-digit and two 4-digit 7-segment LED displays
- easy connection via RESOL VBus®
- anti-reflective window
- power supply via mains adapter
- automatic controller recognition



The RESOL Large display GA3 is designed for simple connection to RESOL controllers via the RESOL VBus®. It is used for visualising the data issued by the controller: collector and store temperature as well as heat quantity produced in the solar system.

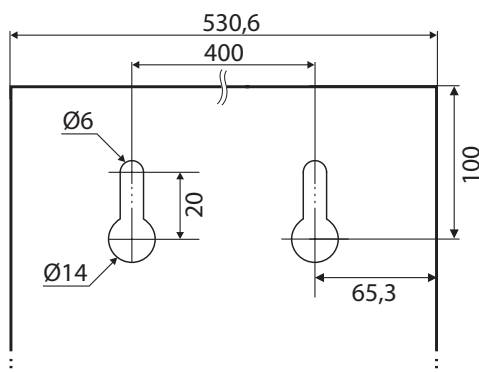
The use of high-efficient LEDs and antireflective filter glass assures a high optical brilliance and good readability - even in poor lighting conditions and at a larger distance.

## 1. Installation

### 1.1 Mounting



The device must only be located in dry interior rooms. It is not suitable for installation in hazardous locations and should be protected from electromagnetic fields!



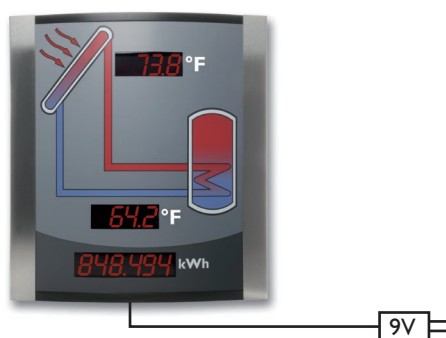
The device must only be located in dry interior rooms. It is not suitable for installation in hazardous locations and should be protected from electromagnetic fields!

There are two fastening holes at the rear side of the GA3 by means of which the GA3 can be attached to a corresponding wall mounting device.

Please make sure that the wall mounting device is correctly fastened to the wall (screws, nails, etc.) in order to prevent damage.

Please pay attention to the valid local regulations when mounting the device.

### 1.2 Electrical connection



First of all, connect the enclosed 9V-mains adapter to the mains terminals of the GA3 (9V DC, see bottom side), and then to the mains!

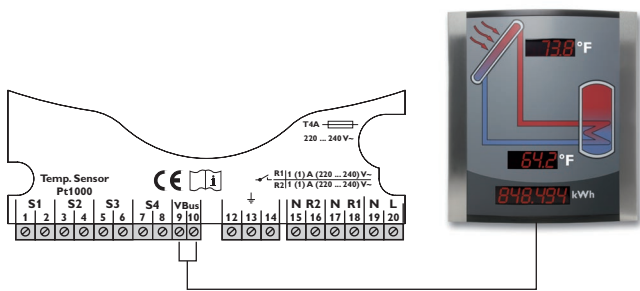
Mains connection

## 2. Commissioning



The large display GA3 as well as further VBus®-modules can be connected to the RESOL VBus® in parallel. The bus cable can be extended with a two-wire cable (bell wire). The cable carries low voltage and must not run together in a cable conduit with cables carrying a voltage higher than 50V (please pay attention to the valid local regulations such as VDE regulations for Germany). The cross section must be at least 0,5 mm<sup>2</sup> and the cable can be extended to up to 50 m in the case of a single connection.

## 2.1. Connection to the RESOL VBus®



Example: Connection to the DeltaSol® BS Plus

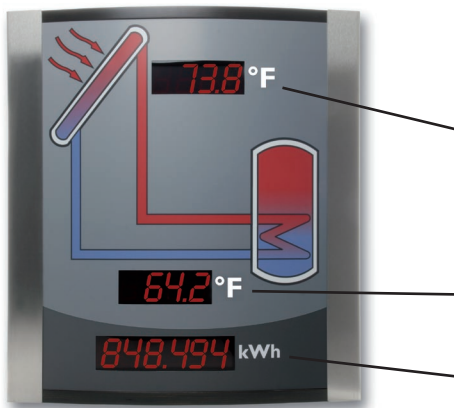
Connect the enclosed connection cable of the GA3 (accessory bag) with the stripped ends and either polarity to the VBus®-terminals.

Connect the cinch plug of the cable to the upper or lower cinch socket (parallel connection) of the GA3.

During commissioning, the GA3 is in an initialisation phase. The controller is automatically recognized.

Afterwards, the GA3 is ready for use.

## 3. Displays



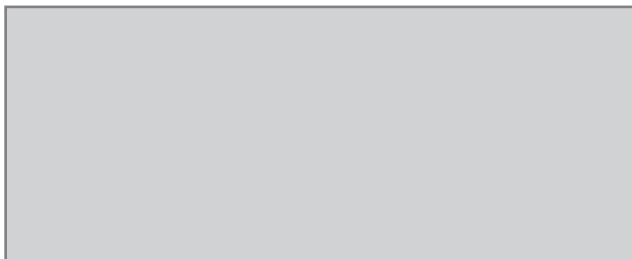
**Note:** If no indication is shown in the display, please check the connection at the VBus® terminals.

Collector temperature in °F

Store temperature in °F

Energy yield in kWh.

### Distributed by:



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### Important notice

We took a lot of care with the text and drawings of this manual and to the best of our knowledge and consent. As faults can never be excluded, please note:

Your own calculations and plans, under consideration of the current standards and directives should only be basis for your projects. We do not offer a guarantee for the completeness of the drawings and texts of this manual - they only represent some examples. They can only be used at your own risk. No liability is assumed for incorrect, incomplete or false information and / or the resulting damages.

### Please note

The design and the specifications are to be changed without prior notice

The illustrations may differ from the original product.

### Imprint

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Editor: RESOL - Elektronische Regelungen GmbH