

INTEGRATED CONTROLLER RESUN 600i

Technical datasheet Nr 83



• DESCRIPTION:



Solar



High efficiency circulator pump

RESUN 600i is a solar controller integrated in our solar charging stations. It is designed for the control of the most common large solar systems up to 2 collector fields with different orientation and up to 4 stores.

It can accommodate up to 9 temperature sensor inputs, 1 analog GDS sensor input, 1 pulse counter input and 1 solar irradiation cell input. It can control up to 5 relay outputs and 4 PWM or 0-10V outputs for speed control of high-efficiency pumps.

Its large graphic display offers a clear view of heat quantity measurements and operating graphs. Many pre-programmed functions facilitate the system commissioning. The SD memory card included allows to transfer settings, to record data and to update firmware.

• SETTINGS:

Before delivery, our technical team supplies* you the customised settings to meet the requirements of the design office and to ensure optimal use of the required solar system. A hydraulic diagram, a wiring diagram and a setting book are provided* to facilitate the commissioning and the monitoring of the installation.

**under conditions*

• TECHNICAL SPECIFICATIONS:

Max. number of collector fields (different orientations)	2	Housing	plastic, PC-ABS, PMMA
Max. number of stores	4	Mounting	wall mounting (or into patch panels)
Temperature sensor input in total	9	Dimensions	198 x 170 x 43 mm
Grundfos Direct Sensor input (GDS)	1	Ambient temperature	0 to 40 °C
Pulse counter input	1	Ingress protection	IP 20 / IEC 60529
Irradiation sensor input	1	Protection class	I
Relay outputs in total	5	Switching capacity / relay	semiconductor 1 (1) A 240V~
- whose semiconductor (whose speed control)	4 (4)	Switching capacity / relay	Potential-free 4 (1) A 240 V~
- whose potential-free	1	Total switching capacity	4 A 240 V~
PWM outputs (whose convertible to 0-10V)	4 (4)	Absorbed power	< 1 W in standby
Vbus data interface	yes	Power supply	100...240 V~, 50...60 Hz
SD card data interface	yes	Compatibility with datalogger ED2 and ED3	yes
Real-time clock	yes	Compatibility with standard and large display panels	yes
Illuminated display	graphi	Compatibility with energy measurement device	yes

• MAINS SOFTWARE FUNCTIONS:

Heat quantity measurement with flowmeter	2	Store maximum limitation	yes
Heat quantity measurement with pulse counter	1	Store emergency shutdown	yes
Heat quantity measurement with GDS	RPS	Store set temperature	yes
Function block	yes	Cooling functions and cooling mode	yes
Thermostat	yes	Irradiation switch	yes
Additional ΔT control (ex: heat exchanger)	yes	Backup heating suppression	yes
External heat exchanger	yes	Priority loading	yes
Heat exchange	yes	Store loading in layers	yes
Solar circuit bypass	yes	Thermal disinfection	yes
Irradiation-dependent bypass	yes	Solar parallel relay	yes
Vacuum tube collector	yes	Free parallel relay	yes
Twin pump for solar circuit	yes	Boiler loading	yes
Target temperature	yes	DHW heating	yes
Antifreeze for solar circuit	yes	Circulation	yes
Collector minimum limitation	yes	Error relay	yes
Collector emergency shutdown	yes	Flow rate and pressure monitoring	yes
Heat dump	yes	Function control	yes

• AVAILABLE MODEL:

Reference	Designation
40030506009	Integrated controller RESUN 600i