

# FRONIUS ENERGY MANAGEMENT RELAY

/ Energy management function for Fronius inverters



/ **Becoming energy self-sufficient** through the use of solar electricity and an intelligent energy management system is an increasingly attractive option. This is because the higher the self-consumption quota, the lower the amount of electricity consumed from the public grid.

/ **With the Energy Management Relay**, Fronius has developed a solution for optimising the private consumption of self-generated solar power. It allows power hysteresis to be configured for Fronius inverters (Depending on the inverter type, this function is either built-in as standard or can be added via a plug-in card). This means that switch on and off thresholds can be set on the inverter as units of power (Watt). If the inverter produces more than the set power (e.g. 2,000 W), a relay output is activated and an

electrical consumer is operated using the solar electricity generated instead of feeding power into the public grid. The relay output is deactivated if the energy yield drops below a specified value (e.g. 1,800 W).

/ In addition to the relay, Fronius SnapINverter and inverters with the Fronius Datamanager also have a digital energy management output with the same function (including definable minimum duty cycles).

## TECHNICAL DATA - SWITCHING CHARACTERISTICS ENERGY MANAGEMENT RELAY

FRONIUS SNAPINVERTER	DC	AC
Max. voltage	30 V	250 V
Max. current	1 A	4 A

## TECHNICAL DATA - SWITCHING CHARACTERISTICS OF DIGITAL ENERGY MANAGEMENT OUTPUT ON FRONIUS DATAMANAGER

FRONIUS SNAPINVERTER		
Voltage	12.8 V <sub>dc</sub> <sup>1)</sup> (or up to 24 V <sub>dc</sub> with external power supply)	
Maximum output	3.2 W	

<sup>1)</sup> Applies for Fronius SnapINverters; 10.8 V for older models

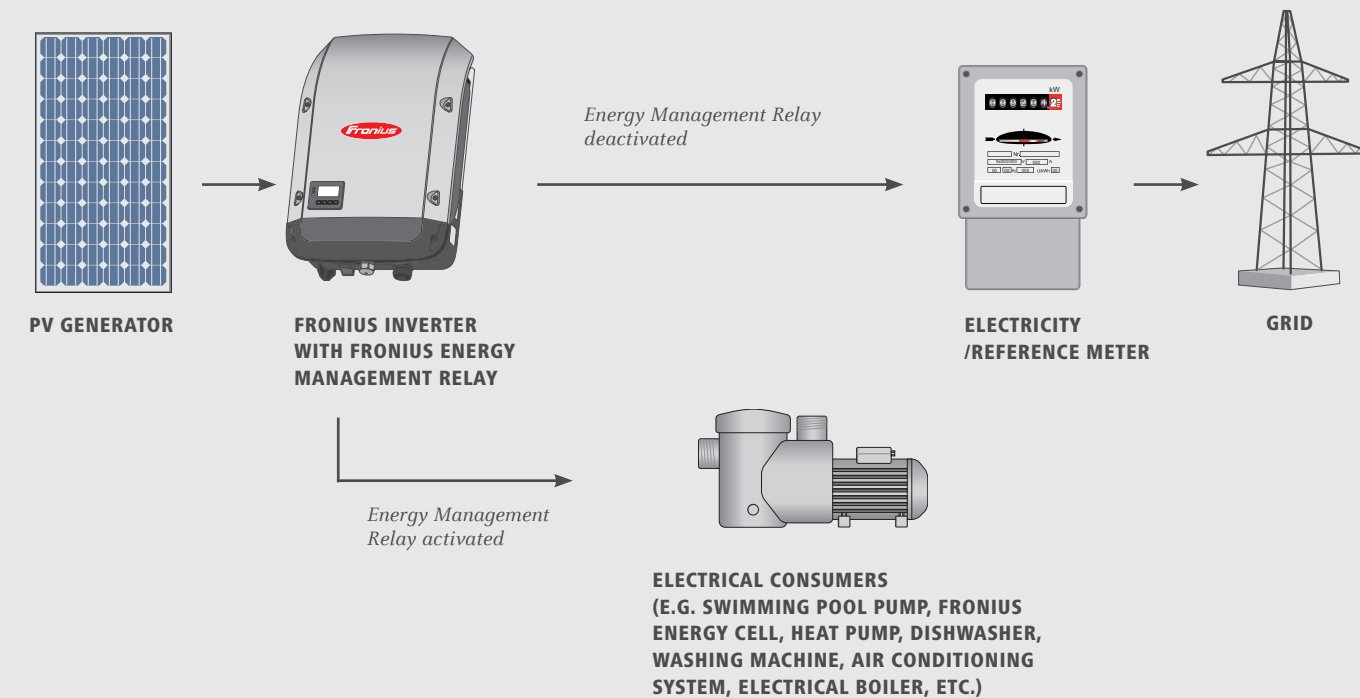


## ENERGY MANAGEMENT FUNCTION IN DETAIL

/ If the Energy Management Relay on the inverter is deactivated, the solar power generated is fed into the public grid. If the inverter produces more than the set power, the relay switches and the generated power is supplied to the specified electrical consumers<sup>1)</sup>. Power that is not required conti-

nues to be fed into the grid. The level of private consumption is derived from the difference between production and feed-in.

## CONFIGURATION DIAGRAM



<sup>1)</sup> Depending on the consumer, an external relay circuit may be required.

/ The energy management function is available as standard on all Fronius SnapINverter. Inverters that have already been installed can be easily updated with the energy management function using the Fronius Datamanager 2.0. The Fronius IG Plus series supports this function from Software version 5.00.49 or higher.

/ Perfect Welding / Solar Energy / Perfect Charging

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