

SYNERGYR[®]

Bus Power Pack

TRW30



The bus power pack is used to power the building bus and to read out consumption data in plants with no central unit.

The SYNERGYR components are powered via a separate transformer.

Use

The TRW30 bus power pack is a component of the SYNERGYR Control & Metering Systems and is for use in SYNERGYR plants with no central unit.

For application of SYNERGYR, please refer to data sheets 2800 and 2801 (System Overview).

Functions

The bus power pack

- receives the operating voltage of AC 24 V from an external isolating transformer and passes it on to all SYNERGYR components, with the exception of the room units, which receive their power from the control and heating costs allocation valve,
- supplies power to the building bus,
- facilitates central readout of meters; for this purpose, the AZW30 service unit must be connected to it; the service unit communicates with the units in the apartments via the building bus

Note

In the case of SYNERGYR plants with no OZW30 central unit, it must be taken into consideration that their functionality is reduced. The restrictions are the following:

- no set day function
- no monthly values
- no load compensation
- no logging of errors
- no clock synchronization

Ordering

When ordering, please give type reference **TRW30**.

Mechanical design

The bus power pack is accommodated in a plastic casing with a sealable cover. The casing can be mounted in two different ways:

- on a wall; the base has fixing holes
 - flush panel mounting; for fixing, each corner of the casing is provided with a catch
- The unit has a total of 12 knockout holes for cable entry.

Engineering notes

The electrical installation must comply with local regulations.

To provide the operating voltage of AC 24 V, an isolating transformer is required which powers the whole SYNERGYR system and which must be installed near the power pack. When sizing the transformer, the power consumption of all units connected to it must be taken into consideration.

The secondary side of the transformer must never be earthed.

Fitting notes

When choosing the mounting location, the ambient conditions must be observed.

The bus power pack is suitable for mounting

- on a flat surface such as a wall, inside a control panel, etc.
- in a panel cutout

Technical data

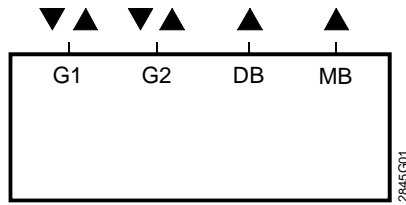
Bus power pack

Operating voltage (safety extra low voltage to EN 60730)	AC 24 V
Frequency	50 Hz
Power consumption	7 VA
Degree of protection to EN 60529	IP 40
Insulation class to EN 60730	III
Electromagnetic compatibility	
Immunity	EN 50082-2
Emissions	EN 50081-1
Permissible ambient temperatures	
Transport and storage	-25...+65 °C
Operation	0...50 °C
Weight	0.75 kg

Building bus

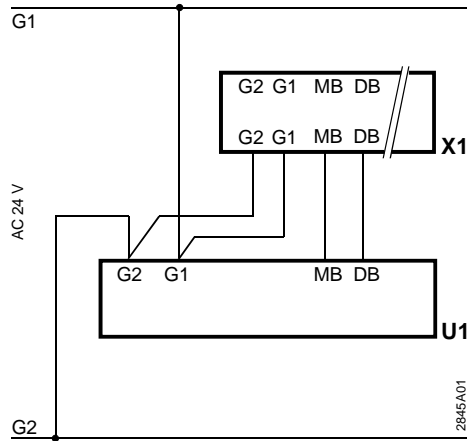
Baud rate	4800 Baud
Voltage when idling	15.5 V ± 10 %
Voltage when under load	13.8 V at 150 mA
Short-circuit current	300 mA ± 10 %

Connection terminals



- DB Data building bus
- MB Ground building bus
- G1 AC 24 V supply
- G2 AC 24 V supply

Connection diagram



- U1 Bus power pack TRW30
- X1 Conduit box ALW30 or ALW84

Dimensions

