

PROFIBUS PROFINET Adaption POWER CHARGER

General informationen

The adaption of the PROFIBUS interface of the KNH35/KNH65 generator to the PROFINET interface of the POWER CHARGER requires an adaption of the control software and the use of a suitable converter.

The individual steps for adapting the two fieldbus communication standards are outlined further on of this document. The customer is responsible for the implementation and has to adapt this according to his previously used system.

Background

The POWER CHARGER generator supports the PROFINET interface. Details about the structure of the interface and overview of the used registers, etc. can be found in the protocol description E-en-0332-xxxx_PROFINET_POWER CHARGER.

Furthermore, the entire set of process data and parameters of the POWER CHARGER are significantly more extensive and, contrary to the structure of the PROFIBUS interface of the KNH35/KNH65, is structured differently.

Due to this different structure, an adaption of the control software is necessary for the operation of the POWER CHARGER in contrast to the KNH35/KNH65 generator used so far.

PROFINET – PROFIBUS Converter

To connect the PROFINET and PROFIBUS fieldbus standards, a converter is required to convert the individual signals and map the registers between the networks.

Any commercially available converter can be used to convert a PROFINET IRT IO device to a PROFIBUS slave.

Eltex recommends the use of the Anybus X-gateway - PROFINET IRT Device - PROFIBUS Slave from HMS Industrial Networks (part no. AB7508).

Link: [Anybus X-gateway](#)

This converter must then be configured according to the data previously used in conjunction with the KNH35/KNH65 and the supported data set of the POWER CHARGER.

List of the transmission data PROFIBUS KNH35/65

The individual transmission data of the PROFIBUS protocol of the KNH35/KNH65 generator are shown below. Also shown are possible matching data entries of the PROFINET protocol of the POWER CHARGER to the individual entries.

In principle, the possible settings and actual values of the PROFIBUS protocol of the KNH35/KNH65 generators are also supported with the POWER CHARGER generators. However, the corresponding differences in the data structure or the supported registers between the protocols must be observed.

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For further information, please refer to the relevant data sheets for the protocol structure:

- PROFIBUS POWER CHARGER
E-en-0332-xxxx_PROFINET_POWER CHARGER
- PROFIBUS KNH35/KNH65
E-en-0314-xxxx_PROFIBUS_KNH35-65

Input data		
Byte	PROFIBUS KNH35/KNH65	PROFINET POWER CHARGER
0	Actual value U	Charging Voltage (Index 0x0018)
1	Actual value I	Charging Current (Index 0x0019)
2	Generator status	System Status (Index 0x000A)
Output data		
0	Setpoint	Mode Voltage constant: Voltage Setpoint Charging (Index 0x003E) Modus Current constant: Current Setpoint Charging (Index 0x003F) Release: HV Release (Index 0x0001)
Diagnostic data		
7	Error number	Active Error (Index 0x000B)