7. Preface

This document describes how to implement a Modbus and/or Profibus connection to the Elektronikon MkIV and/or Elektronikon Mk5 compressor controller network.
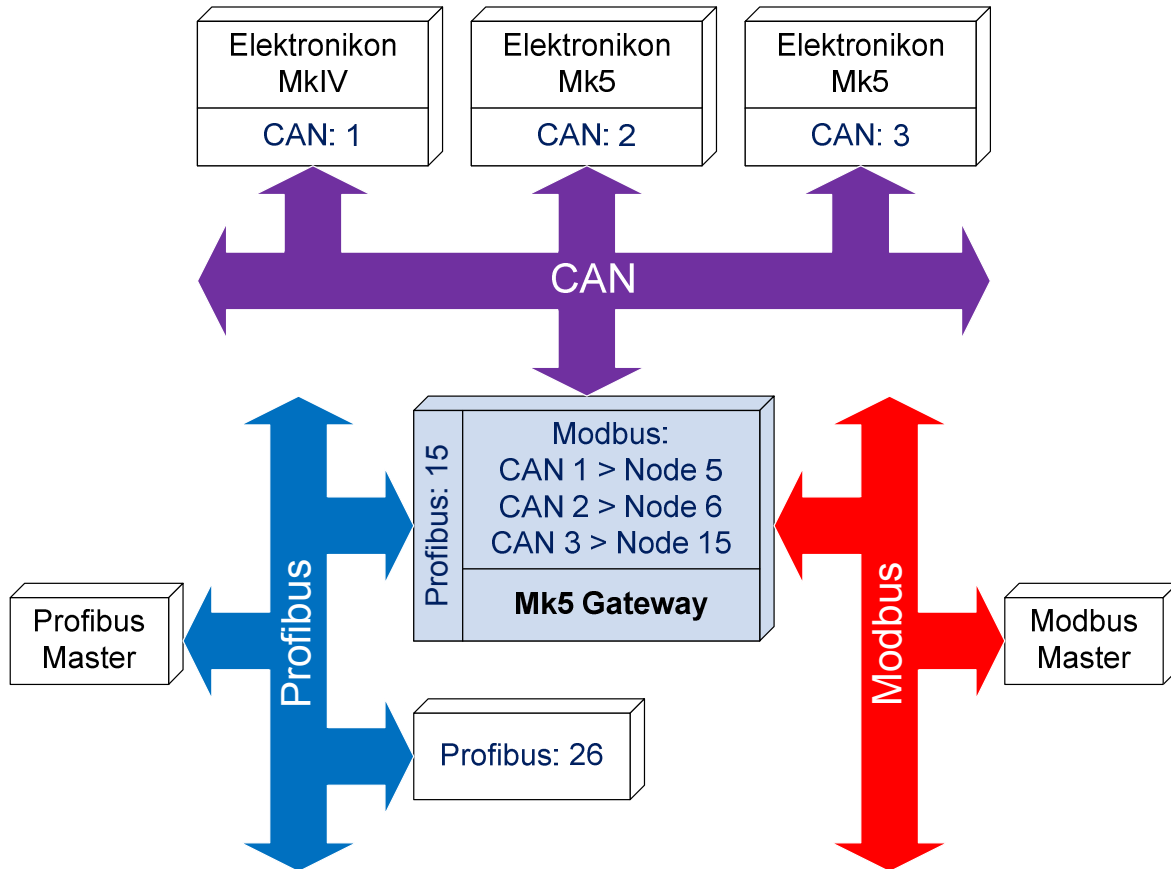
8. Physical Set-up

8.1. Modbus and/or Profibus in the network

In the Elektronikon system, all compressors in an installation can be connected by a data and/or control network. This is done according the Compressor Network Cabling instruction (LN: 9820 3582 00, GBP: 2946 1361 00). This instruction explains what connectors and cables should be used to interconnect the different compressors/controllers in the network. Basically this is a CAN-based network.

In order to set up a Modbus and/or Profibus connection to one or several of the compressors in this network, a special module has to be inserted in this network.

This will behave as a Modbus/Profibus proxy that allows access to all compressors in the network, whereby each compressor has its own Modbus address (proxy concept).

The module will as well behave as a bridge to access the data stored in the CAN node's Object Dictionary. In order to work correctly, this bridge module has to be assigned a slave node ID. From the master's point of view, this bridge acts as a way to access information of the CANBUS network.

NOTE: the profibus manufacturer of the module must create a so named "Electronic Datasheet" or GSD file that declares the dimensions and the type of the exchanged datas. This file is public information necessary for Profibus users to interface with the bridge module.