

High level data-exchange between **ebm-papst GreenTech EC fans** (with **MODBUS RS485**) & **CAREL** designed **ebm-papst Universal Gateway**

epANZ have recently successfully tested high-level data exchange between ebm-papst GreenTech EC plug fan K3G250AV29B2 and CAREL designed ebm-papst Universal Gateway.

Main features:

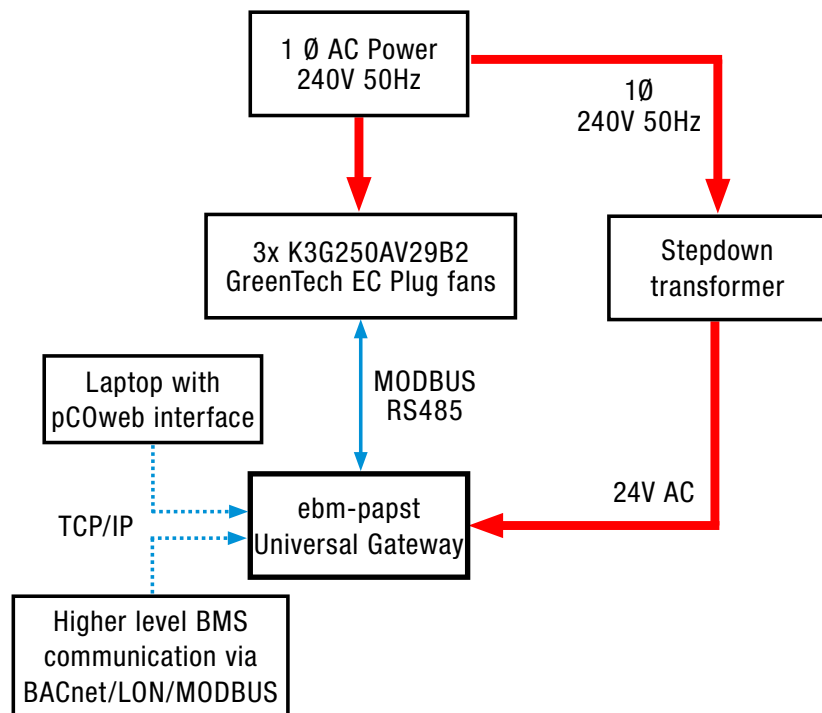
- Enables connection to ebm-papst GreenTech EC fans by third party controllers using most common HVAC open protocols viz. MODBUS, BACnet, LON
- Up to 30 fans in one serial line
- Integrated display to view and change the main fan parameters (without use of laptop)

Hardware involved:

- 3 x K3G250AV29B2 MODBUS version plug fans
- 1 x ebm-papst Universal Gateway
- Gateway and fans daisy chained on a twisted pair RSA/RSB
- Laptop – connected to Universal Gateway using an Ethernet cross-over cable

Using the gateway, we were able to WRITE to each of the connected fan:

- MODBUS address of the connected fans, in this case fan address 1, 2 and 3
- Set an absolute speed in rpm to each of the three connected fans.



Also we were able to READ from each of the connected EC fan:

- Speed in rpm
- DC Link voltage
- DC Link current
- Input power in watts
- Direction of rotation
- Electronics temperature in deg C.

We were also able to replicate the above data exchange (READ and WRITE) using the pCO web, communicating with the fans via the Universal Gateway – see set up below:

