

External RTD input modules for VAMP 255/245/230

General

External analog inputs (e.g. RTD) and digital inputs or outputs can be added to VAMP relays via external Modbus I/O modules (for example Dataq DI934ME or Adam 4015). Modules can be connected to the relay's EXTENSION port (located in the same D - connector on the relay as the LOCAL port) via VSE003 module (RS485 connection, more specific instructions later in this document).

NOTICE

Configuration requires VAMPSET version 1.2.46 or higher and relay software version 5.0 or higher.

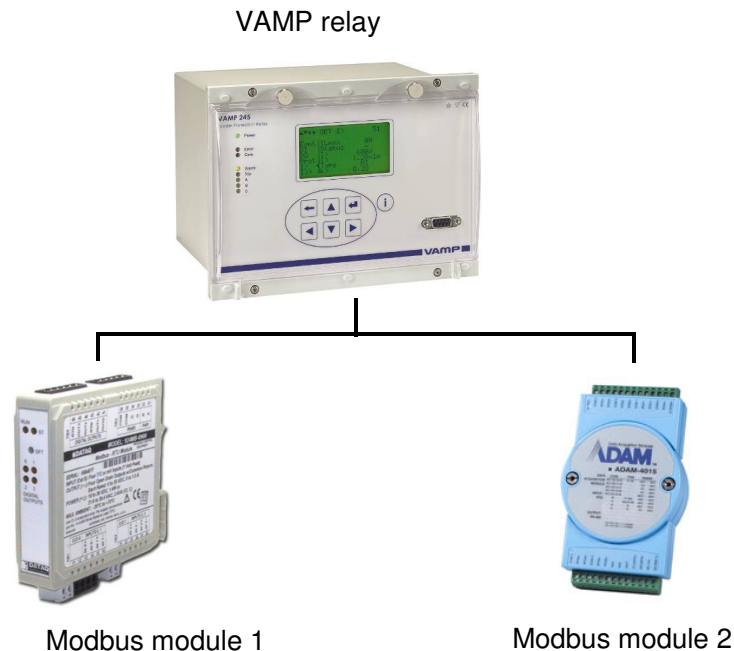


Figure 1. A system with VAMP relay and two Modbus I/O modules - Twisted pair RS-485 interface, Modbus RTU protocol.

Power supply

- The VSE003 module requires no additional power supply, it receives its power from the LOCAL port via D9 connector.
- For RTD modules, and other Modbus I/O modules, please see the device manual.

Configuration of the modules

1. Configure the external Modbus I/O modules according to their own manuals.
2. Make the necessary connections according to the figure 2.
Remember also to connect the relay to PC with VX003 cable (from relay front panel to a free serial port).

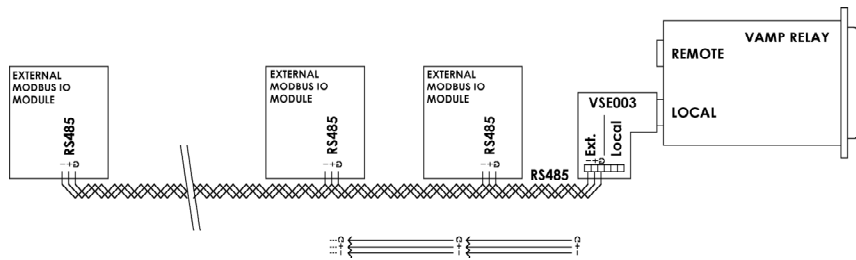


Figure 2. The connection.

The modules must be enabled from VAMPSET (downloadable at www.vamp.fi)

3. The following describe the installation processes:

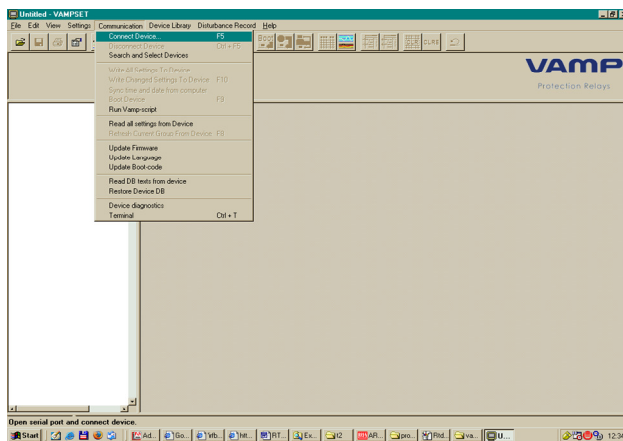


Figure 3. Loading the device settings.

- a. Select Communications/Connect device (or press F5)
- b. The program will start loading data from the relay.
- c. Answer yes to all queries and select access level to "CONFIGURATOR" (default password "2") when prompted.

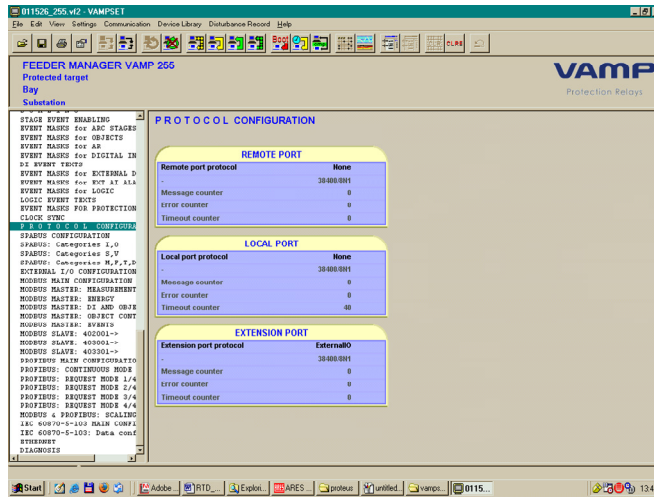


Figure 4. Selecting the correct data transmission settings.

- d. When VAMPSET has finished loading the data, select PROTOCOL menu
- e. Set up the correct protocol for EXTENSION PORT (ExternalIO).

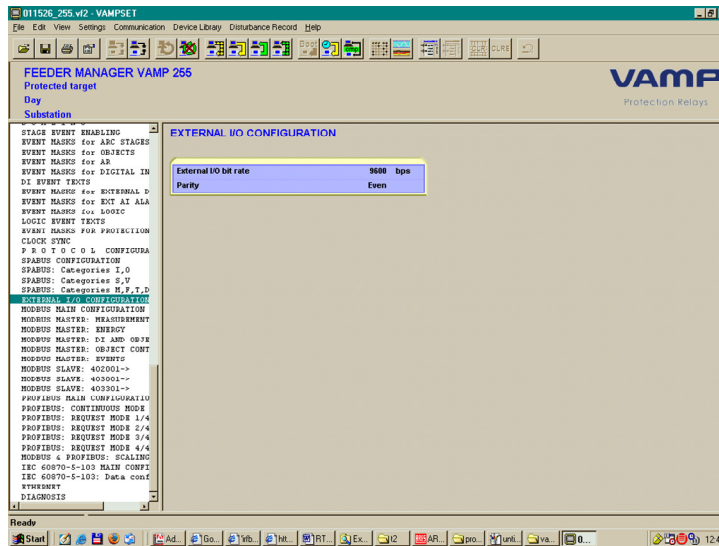


Figure 5. Setting up the correct speed and parity.

- f. Select EXTERNAL I/O CONFIGURATION menu and set up the correct communication parameters (speed and parity)

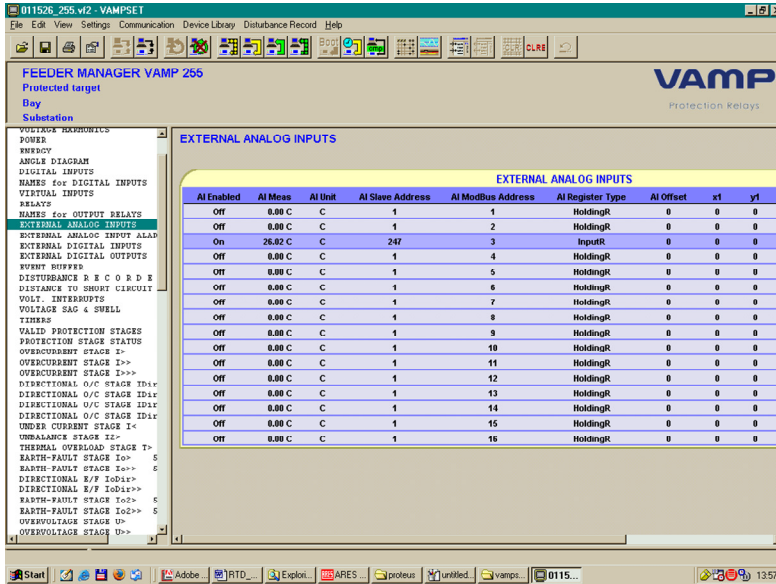


Figure 6. Setting the RTD address to the polling list.

- g. Select the desired EXTERNAL... menu and set the correct module address to the “Slave Address” column and the register address to “Modbus Address” column.
- h. Select also the correct register type.

Once done, the relay should start receiving data from the RTD module (error- and timeout counter should be constant in both External... and PROTOCOL menus).

Usage of modules

An event, which can be read via Spabus or Modbus, is generated every time when external DI or external analog input alarm is activated.

The following figure shows external DOs can be used from “EXTERNAL DO MATRIX” menu.

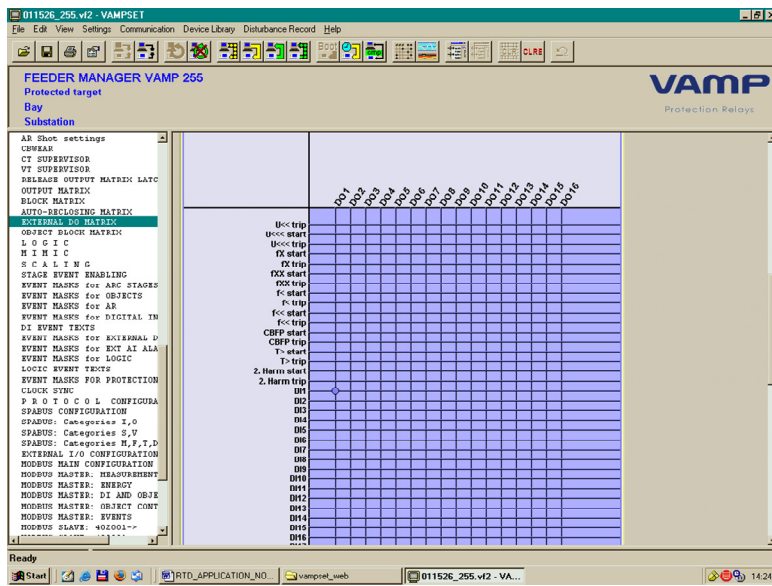


Figure 7. Using external DOs.

Keywords : External RTD input module, External I/O module, Dataq DI934ME RTD module, Adam 4015 RTD module

Schneider Electric

35 rue Joseph Monier
92506 Rueil-Malmaison
FRANCE

Phone: +33 (0) 1 41 29 70 00
Fax: +33 (0) 1 41 29 71 00

www.schneider-electric.com

Publishing: 4/2013

© 2012 Schneider Electric Industries SAS - All rights reserved. Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.