PROCON MELCOBEMS MINI (A1M) QUICK START GUIDE - V02

Planet Devices Ltd

Thursday 22nd February 2024

VERSION HISTORY

Version	Date	Author	Notes		
V01	2023-09-07	JD	Initial release		
V02	2024-02-22	JD	• Rename to Atmo	• Update Atmo part number	
			• Add Procon part number	• Add operating hours time zone	

PREFACE

Atmo (RS-485 Modbus RTU) [P/N 386363-249] requires a Modbus interface in order to communicate with heat pump systems.

For Mitsubishi Electric Ecodan systems with a flow temperature controller (FTC) indoor unit - FTC4, FTC5 or FTC6 - this necessitates the installation of a Procon MelcoBEMS MINI (A1M) [P/N ACC-BEMS-A1M].

If your Atmo order did not include an accompanying Procon MelcoBEMS MINI (A1M), please quote part number *ACC-BEMS-A1M* to your preferred Mitsubishi Electric parts supplier.

PURPOSE OF THIS DOCUMENT

Modbus interfaces must be configured to match the serial settings of the Atmo device, or vice versa.

This document serves as a "quick start" guide only. Please refer to the Mitsubishi Electric documentation for more information: Procon MelcoBEMS MINI (A1M) Installation Manual.

INSTALLATION INSTRUCTIONS

1. Remove all power from the heat pump system

2. On the Procon, set the DIP switches according to the following table:

SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
ON ↓	OFF ↑	OFF ↑	OFF ↑	OFF ↑	ON ↓	ON ↓	OFF ↑

See *Appendix A – DIP Switch Setting Summary* for a summary of the changes made by these DIP switches.

3. Connect the male connector on the Procon to the CN105/CN92 female connector on the FTC board

Please consult the terminal diagrams present in the Mitsubishi Electric documentation for supplementary information:

- [Ecodan FTC4 PAC-IF051B-E / PAC-IF052B-E / PAC-SIF051B-E Instruction Book](#) (pg. 20)

- [Ecodan FTC5 PAC-IF061B-E / PAC-IF062B-E / PAC-IF063B-E / PAC-SIF051B-E Instruction Book](#) (pg. 21)

- [Ecodan FTC6 PAC-IF071B-E / PAC-IF072B-E / PAC-IF073B-E / PAC-SIF051B-E Instruction Book](#) (pg. 19)

The Modbus interface is now ready for a Atmo device to be connected. Please refer to the Atmo Installation Manual for further steps.

ADDENDUM

The Modbus interface can be permanently mounted using 4x M3 bolts. Please refer to the [Procon MelcoBEMS MINI (A1M) Installation Manual](#) (pg. 9).

TECHNICAL SUPPORT

If you are unable to use your Atmo device as intended after following the steps in this manual – and the Atmo Installation Manual – please contact our Support team.

Planet Devices operate Monday to Friday, between the hours of 09:00 and 17:30 (UTC/GMT/BST):

Email Address	support@planetdevices.com
Telephone Number	+44 (0) 1752 680 128

APPENDIX A – DIP SWITCH SETTING SUMMARY

- SW1 – SW5 sets the Modbus Worker Address to 1 using binary notation (0 + 0 + 0 + 0 + 1)

- SW6 instructs the Modbus interface to communicate using the following parameters:

  - Baud rate of 9600

  - No parity bits

  - 8 data bits (immutable)

  - 1 stop bit (immutable)

- SW7 selects the Modbus RTU protocol

- SW8 disables Deadband mode