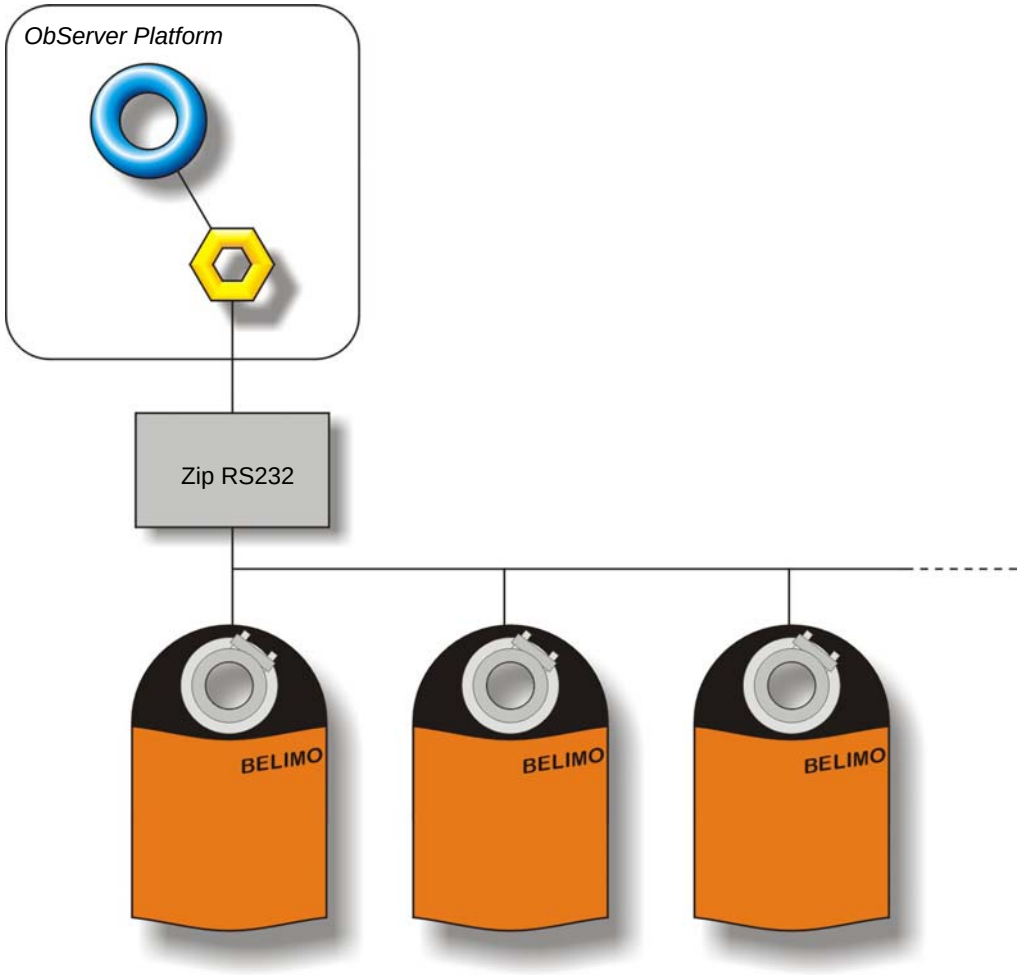
Product Engineering Guide

OSM v20 Belimo v10

Introduction

The Belimo OSM links a MP-Network of up to 8 Belimo MFT damper actuators, via a Belimo ZIP-RS232 module, to ObServer. The actuators are intended for the operation of air control dampers in ventilation and air-conditioning systems. Each actuator can be monitored and adjusted for speed, direction, position and torque. Warning statuses and usage can also be monitored. Each actuator can also be fitted with a temperature sensor.



Supported Range

- NM24-MFT(2) – damper actuator
- AM24-MFT(2) – damper actuator
- GM24-MFT(2) – damper actuator
- LF24-MFT(2) – damper actuator with spring return
- AF24-MFT(2) – damper actuator with spring return
- Pt1000 – temperature sensor
- Ni1000 – temperature sensor

Notes

Each individual actuator has to have a unique address in the range 1…8 set up within it. This is achieved using Belimo's configuration software.
The Belimo system does not report alarms to ObServer. If alarms are needed then an AlarmGen device will be required.
The Belimo system does not provide logging facilities to ObServer. If logging of values is needed then a LogMax device will be required.

Engineering

Step 1 – Install OSM

The Belimo OSM is installed automatically with all ObSys editions. Refer to the 'ObSys CD sleeve' for details on how to install ObSys.

Step 2 – Configure Belimo System

Using the Belimo software tool, set up the MP address within each actuator. The address must be in the range 1…8, and unique for the MP-Network. The MP-Network must have a Belimo ZIP-RS3232 module in order for the OSM to communicate with it. The Belimo ZIP-RS3232 module must be set to 'Actuator On'.

Step 3 – Connect COM Port to Belimo System

Using cable, connect Belimo ZIP-RS232 module to a COM port of the PC. Refer to the section 'Cable' below for details of the cable.

Step 4 – Plug in Belimo OSM to ObServer

Use object engineering software to locate the ObServer Setup object. Assign the Belimo OSM to an available channel. Refer to *'ObServer v20 Application Engineering Guide'.*

Note: After inserting the OSM, your engineering software may need to re-scan the ObServer object in order to view the OSM.

Step 5 – Configure Belimo OSM

The COM port, device label, alarm polling facilities, and alarm destination are configured using objects. Use object engineering software to view and modify the module objects within the OSM.

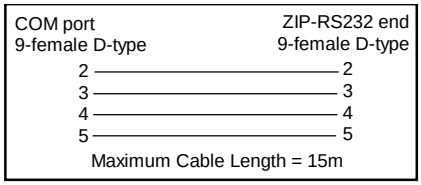
Step 6 – Access Objects within the Belimo system

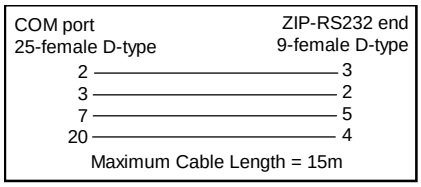
Values from the Triatek system are made available as objects from ObServer. Any object software that is connected to the ObServer can access these objects.

Engineering Reference

Cable Specification

The cable between the COM port and the Belimo system is as follows:





Objects

When the OSM is loaded the following objects are created within ObServer, use object software to access these objects.

Object [1]	***Label***	***R/W***	***Type***
S*c*	Belimo System connected to channel *c*	-	*[Belimo v10]* [2]
M*c*	Belimo Module connected to channel *c*	-	*[OSM v20\Belimo v10]*

Notes

[1] The ObServer channel number, *c*, is a number in the range 1…40.

[2] This object has a variable content and as such requires scanning.