# EBV

## Smart Balancing Control Valve

- Pressure independent flow control
- On-Board **PID** temperature loop & **ΔT control**
- **Energy Control** and Energy Monitoring
- Modbus for direct **integration into BMS**
- **Cloud connectivity** for a future proof solution

**FULL RANGE**

| DN65 | DN80 | DN100 | DN125 | DN150 |
|---|---|---|---|---|
| 12÷37 $m^3/h$ | 25÷59 $m^3/h$ | 45÷77$m^3/h$ | 61÷118 $m^3/h$ | 80÷177$m^3/h$ |

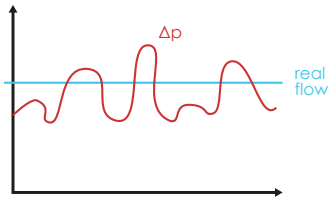
CONTROLLI

www.controlli.eu

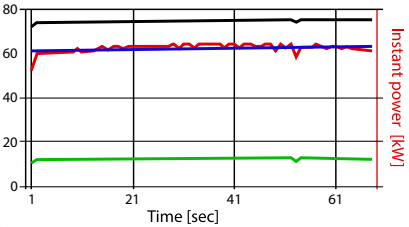
ENERGY EFFICIENCY

OPTION - actuator with **failsafe function**

**Pressure sensors** for pressure independent flow control




OPTION - **Supply & Return Temperature sensor** for Energy Monitoring and ΔT Control




| MOD. | DN | MIN FLOW [m³/h] | MAX FLOW [m³/h] | PN | MAX ΔP [kPa] | POWER SUPPLY |
|---|---|---|---|---|---|---|
| EBV65 | 65 | 12 | 37 | 16 | 35-800 | 24 Vac/dc<br>230 Vac |
| EBV80 | 80 | 25 | 59 | | | |
| EBV100 | 100 | 45 | 77 | | | |
| EBV125 | 125 | 61 | 118 | | | |
| EBV150 | 150 | 80 | 177 | | | |

**65** = DN65, max flow 37 m³/h
**80** = DN80, max flow 59 m³/h
**100** = DN100, max flow 77 m³/h
**125** = DN125, max flow 118 m³/h
**150** = DN150, max flow 177 m³/h

**EBVXX-XXX-X0X**

**024** = Power supply 24 Vac/dc
**230** = Power supply 230 Vac

**0** = No emergency return
**1** = With emergency return

**0** = Modbus connection

**0** = No temperature sensors
**1** = With temperature sensors

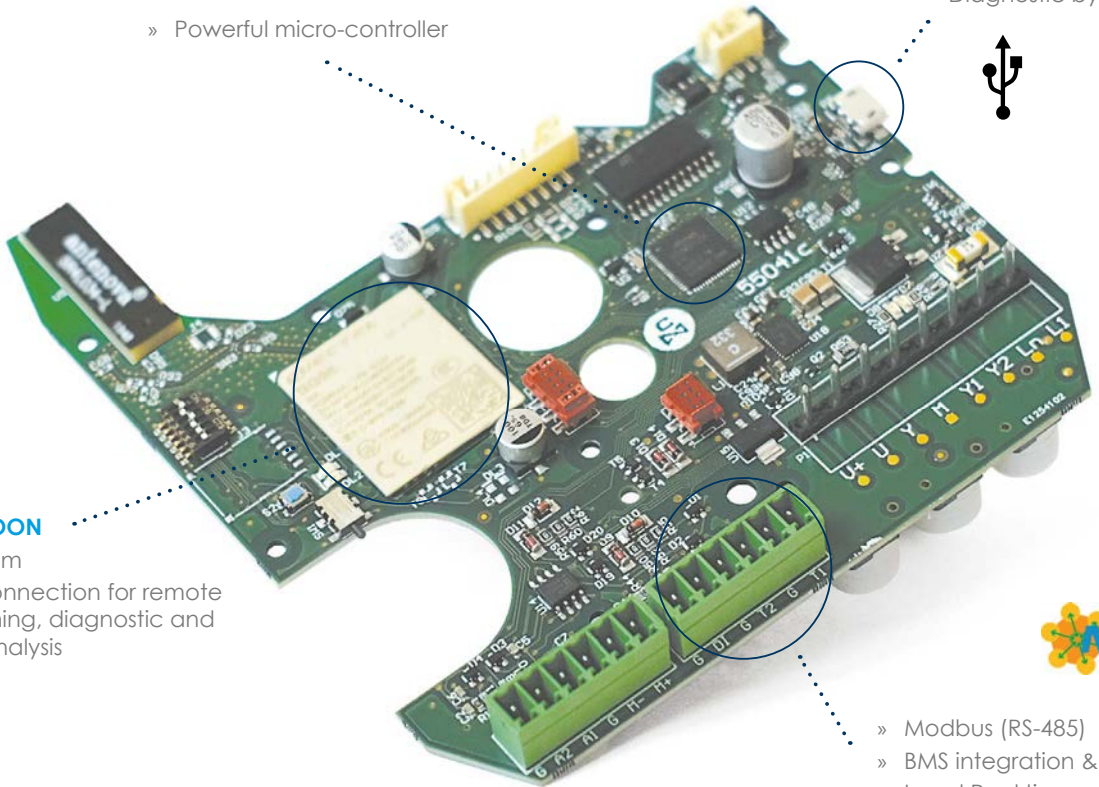
Example: **EBV65-024-001** → Max flow 37 m³/h, DN65, 24 Vac/dc, No emergency return, with Modbus connection, with Energy function enabled and 2 temperature sensors included

# EBV - Smart Balancing Control Valve

## Connectivity

» Mini USB
» Easy Commissioning & Diagnostic by PC Application

» Powerful micro-controller



**COMING SOON**

» 4G Modem
» Cloud Connection for remote comissioning, diagnostic and Energy Analysis

» Modbus (RS-485)
» BMS integration & Energy Analysis
» Local Real time monitoring by PC Application and USB converter

COMMISSIONING

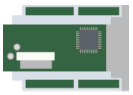
CONV-USB-RS485

CONFIGURATOR TOOL

OPERATION

Modbus RTU

TOUCH PANEL



MODBUS MASTER DEVICE

## Other relevant features:

- Compact solution compared to competitors; perfect for upgrading existing systems
- More competitive price with respect to competitors energy valve
- Possibility to improve energy calculation accuracy in conjunction with a pulse flow meter
- Full set of data available through Modbus (supply & return temperature °C, delta T °C, Instantaneous flow and power, Energy hystorical data)
- Possibility of controlling the valve by simple analog signal or Modbus protocol