BELIMO

# Technical data sheet P2200SU-761+ARX24-EP2-MOD

5-year warranty

## Type Overview

| Type | DN |
|---|---|
| P2200SU-761+ARX24-EP2-MOD | 50 |

## Technical data

| | | |
|---|---|---|
| **Electrical data** | Nominal voltage | AC/DC 24 V |
| | Nominal voltage frequency | 50/60 Hz |
| **Functional data** | Operating range Y | 2...10 V |
| | Operating range Y note | Hybrid via 2...10 V |
| | Input Impedance | 100 kΩ (0.1 mA), 500 Ω |
| | Options positioning signal | VDC variable |
| | Position feedback U | 2...10 V |
| | Position feedback U variable | VDC variable |
| | Running Time (Motor) | 90 s |
| | Control accuracy | ±5% |
| | Fluid | chilled or hot water, up to 60% glycol max (open loop/steam not allowed) |
| | Close-off pressure Δps | 200 kPa |
| | Servicing | maintenance-free |
| | Manual override | external push button |
| **Flow measurement** | Measuring accuracy flow | ±2%* |
| **Safety data** | Degree of protection IEC/EN | IP54 |
| | Degree of protection NEMA/UL | NEMA 2 |
| | Enclosure | UL Enclosure Type 2 |
| | Agency Listing | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU |
| | Quality Standard | ISO 9001 |
| | Ambient temperature | -22...122°F [-30...50°C] |
| | Storage temperature | -40...176°F [-40...80°C] |
| | Ambient humidity | max. 95% r.H., non-condensing |
| **Materials** | Flow measuring pipe | brass body nickel-plated |

## Safety notes

- Cable for ZIP-RS232 US and ZIP-USB-MP US to Belimo gateways.
- Battery Back Up System for SY(7~10)-110
- 120 to 24 VAC, 40 VA transformer.
- 50% voltage divider kit (resistors with wires).
- PC Tool computer programming interface, serial port.

**WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov**

## Accessories

| Sähköiset lisävarusteet | Kuvaus | Tyyppi |
|---|---|---|
| | | M2415-EP |
| | Service Tool, with ZIP-USB function, for configurable and communicative Belimo actuators / VAV controller and HVAC performance devices | ZTH US |

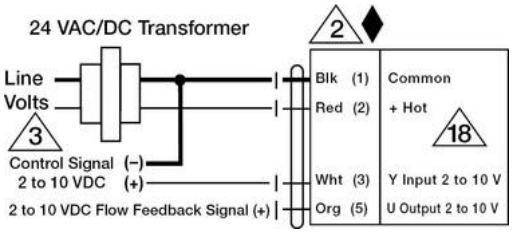
## Electrical installation

**INSTALLATION NOTES**

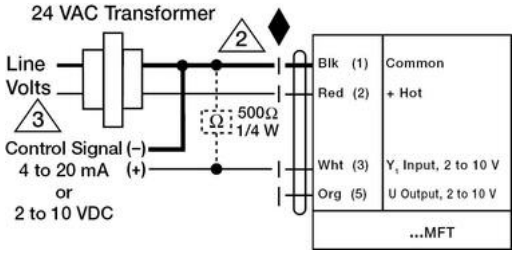
1 Provide overload protection and disconnect as required.
2 Actuators may be connected in parallel. Power consumption and input impedance must be observed.
3 Actuators may also be powered by 24 VDC.
4 Actuators are provided with color coded wires. Wire numbers are provided for reference.
16 Actuators are provided with a numbered screw terminal strip instead of a cable.
21 IN4004 or IN4007 diode required
Meets cULus requirements without the need of an electrical ground connection.

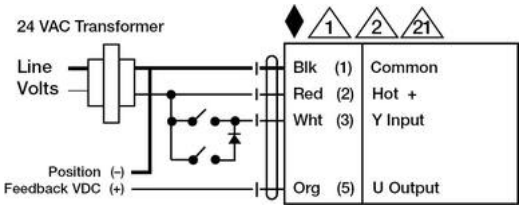
**Warning! Live Electrical Components!**

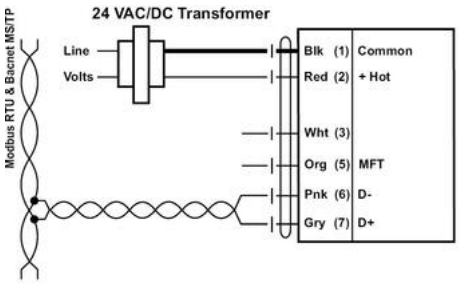
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.




24 VAC/DC Transformer



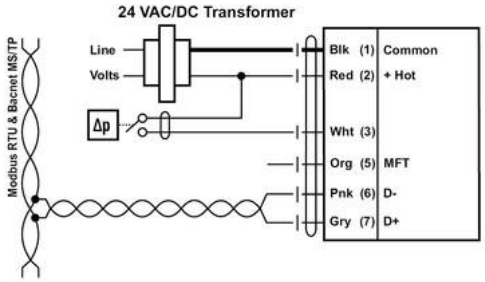




**Modbus & BACnet control for Non-Spring Return**

**Note:**

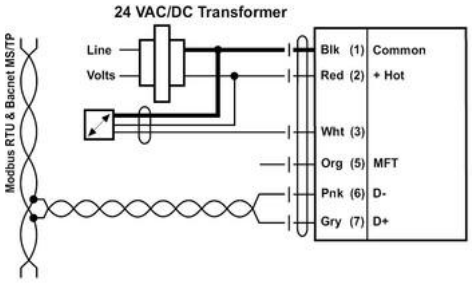
Modbus signal assignment:
$C_1$ = D- = A
$C_2$ = D+ = B

Power supply and communication are not galvanically isolated.
Interconnect ground signal of the devices.



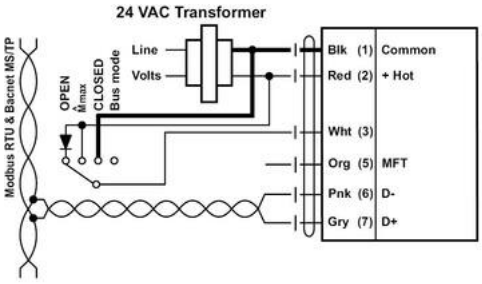

**Modbus & BACnet control with switching contact for Non-Spring Return**

**Requirements for switching contact:**
The switching contact must be able to accurately switch a current of 16 mA at 24 V.




**Modbus &BACnet control with active sensor for Non-Spring Return**

**Possible input voltage range:**
0...32 V (resolution 30 mV)



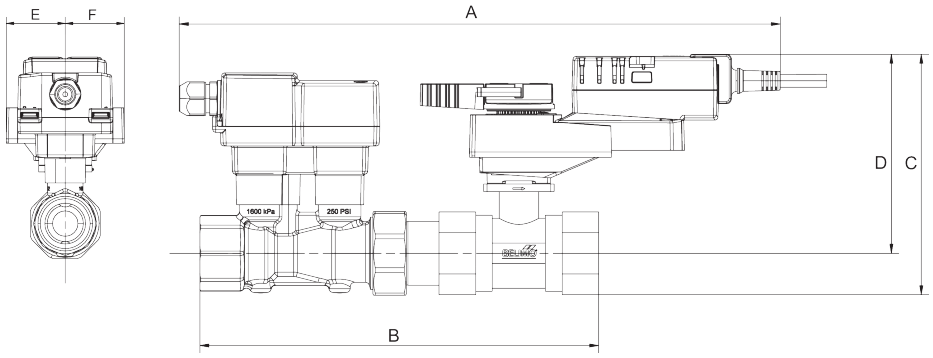

**Modbus & BACnet control with local override (AC only, analog override) for Non-Spring Return**

**Note:**
If no sensor is integrated, then connection 3 (Y) is available for the protective circuit of a local override control. Options: CLOSED, Vmax, OPEN

## Dimensions

### Dimensional drawings

Non-Spring Return




| A | B | C | D | E | F |
|---|---|---|---|---|---|
| 17.0" [433] | 11.2" [284] | 6.9" [175] | 5.6" [142] | 1.7" [44] | 1.7" [44] |