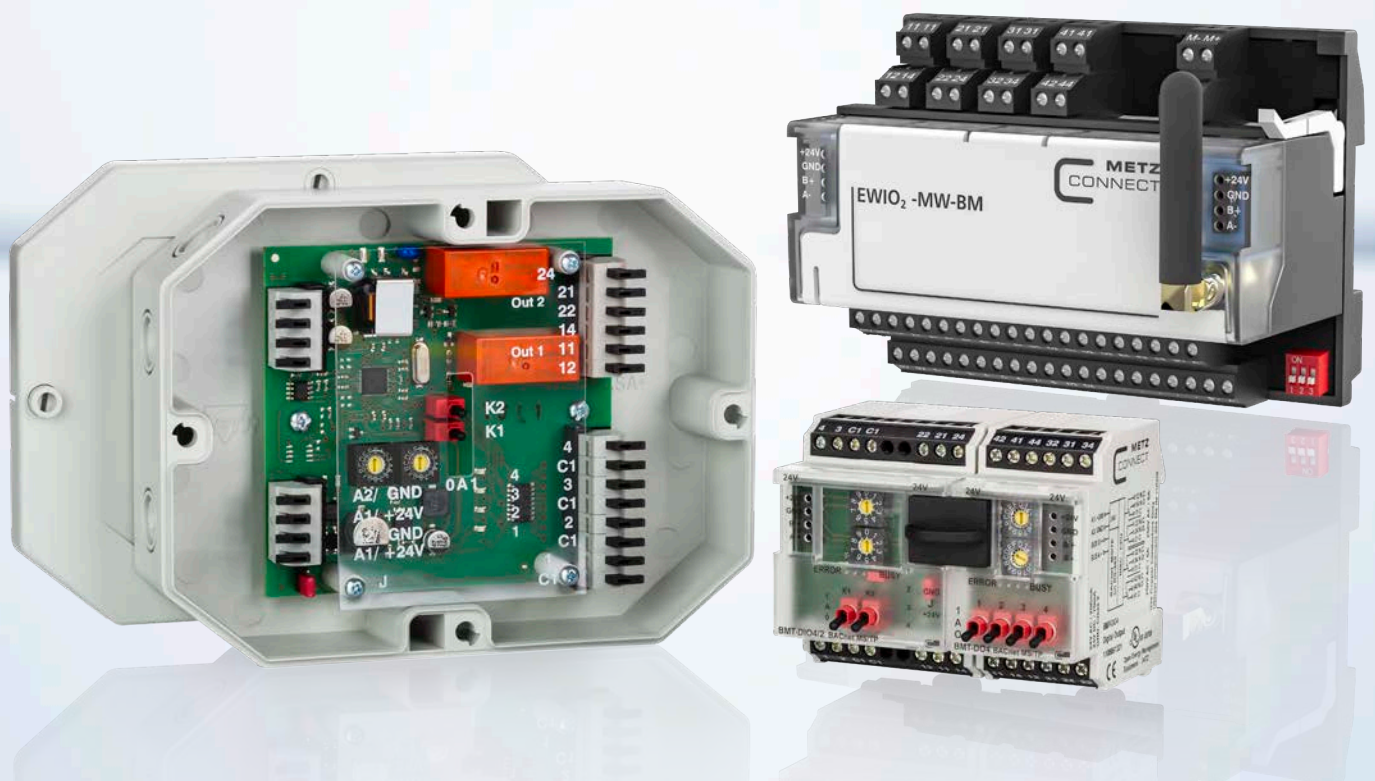
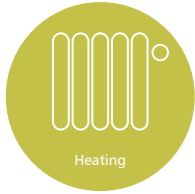


# Building Automation System I/O Components

BACnet, Modbus, LON, and CANbus

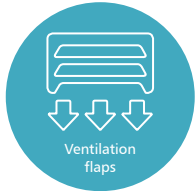


## Heating



- > Actuating heating coils
- > Measuring room temperatures
- > Actuating pumps (e.g. flow line)
- > Actuating mixer motors
- > Actuating motorized valves (radiators)
- > Fan coil actuation

## Ventilation



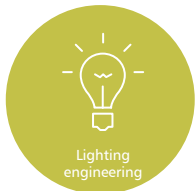
- > Actuating motorized valves (radiators)
- > Temperature recording
- > Actuating window flap motors
- > Detecting wind speed
- > Rain sensor detection
- > Volume flow

## Air conditioning



- > Actuating fan motor
- > Detecting ventilation flap position
- > Actuating ventilation flaps
- > Detecting and controlling volume flow
- > Pressure switches before and after the flap
- > Detecting CO2 values in the room (department stores)
- > Harmful gas monitoring

## Lighting and solar protection



- > Switch light on and off
- > Detection from light switches
- > Raising and lowering the blind
- > Brightness measurement
- > Wind force to protect the blind
- > Lockout function, patio door detection
- > Control of blind drives (curtain)

## Fire detection and smoke extraction



- > Actuating fire damper motors
- > Switching on the sprinkler system
- > Smoke extraction with damper drives
- > Detection of the dampers
- > Smoke extraction by actuating the fan
- > Escape routes must be supplied with fresh air, oxygen must be extracted at the seat of the fire
- > Unlocking the photosensor on elevators

## Intrusion and access control



- > Counting people
- > Motion sensors
- > Monitoring window contacts
- > Detecting vibration contacts (window pane)
- > Detecting infrared sensors
- > Detecting radar sensors
- > Alarm sensors

## Energy management



- > Meter measurement (water, gas, electricity, heat)
- > Energy data and temperature detection
- > Load control
- > Motion sensors (switch off lights)

