

## Gas Monitor

Belimo's gas monitoring devices offer an intelligent peer-to-peer communication protocol that gives users unparalleled flexibility to configure and install a complete ventilation control system with only one monitor or dozens operating in multiple ventilation zones. With field-replaceable sensing elements, on-demand ventilation, stand-alone installation, integrated and lockable LCDs, Belimo's gas monitoring devices are an ideal choice for any application involving vehicle exhaust.



2-year warranty



## Type Overview

Type	Measured values	Number of relays	Output signal active gas	Communication
EXT-OP-6014-A	NO <sub>2</sub>	1	2x 2...10 V, 2x 4...20 mA	CAN bus, BACnet MS/TP
EXT-OP-6014-B	NO <sub>2</sub>	2	-	CAN bus, BACnet MS/TP
EXT-OP-6014-C	NO <sub>2</sub>	0	-	CAN bus

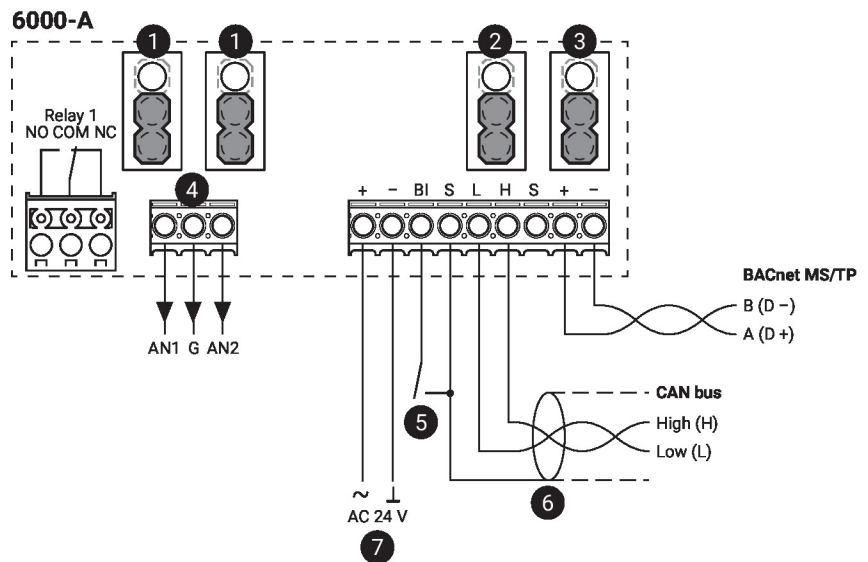
## Technical data

<b>Electrical Data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption AC	5 VA
	Power consumption DC	5 W
	Cable entry	2 top, 2 bottom, 1 rear – 1/2" EMT
	Cable specification	1 pair twisted shielded 24...18AWG
	Fuse	Thermal PTC, auto-reset
<b>Data bus communication</b>	Communication	CAN bus BACnet MS/TP
<b>Functional Data</b>	Application	air
	Output signal active note	2...10 V or 4...20 mA output, selectable with jumper
	Output signal relay note	Relays (1 or 2) SPDT, 5A @ AC 125 V, non-inductive
	Mounting	Half the height of the room
	Max. altitude	6562 ft [2000 m] above sea level
	Coverage area	Radius: 15 m [50 ft] Area: 700 m <sup>2</sup> [7500 ft <sup>2</sup> ] There can be no obstructions such as walls, stairs, elevators, shelving with solid fill, tool chests, etc.
	Display	LCD, With backlight Gas concentration, system status
	Response time	<30 s (T90)
	Alarm	Audible alarm, 85 db @ 1 m [3.3 ft]
	<b>Measuring Data</b>	Measured values
Measuring range gas		0...10 ppm
Long-term stability		<2% per month
Measurement Repeatability		<+2% NO <sub>2</sub> equivalent

<b>Materials</b>	Housing	Flame resistant polycarbonate ABS UL-94-V0 and UL-94-5VA for indoor use
<b>Safety Data</b>	Protection class IEC/EN	II, reinforced insulation
	Protection class UL	II, reinforced insulation
	UL Approval	CAN/CSA 205-2017, CAN/CSA 22.2 No. 152, BTL
	Pollution degree	2
	Ambient humidity	Max. 80% RH, non-condensing
	Ambient temperature	-20...40°C [-4...104°F]

**Accessories**

Mechanical accessories	Description	Type
	Audible alarm	EXT-OP-5000-AL
	Splash guard, Wall mount	EXT-OP-6000-BT
	Splash guard, Duct mount	EXT-OP-6000-GN
	Communication module, CAN bus, BACnet MS/TP, Relays (1 or 2) SPDT, 5A @ AC 125 V, non-inductive	EXT-OP-6000-A
	Communication module, CAN bus, BACnet MS/TP, Relays (1 or 2) SPDT, 5A @ AC 125 V, non-inductive	EXT-OP-6000-B
	Communication module, CAN bus, Relays (1 or 2) SPDT, 5A @ AC 125 V, non-inductive	EXT-OP-6000-C
	Communication module, Ventilated cover, CAN bus, BACnet MS/TP, Relays (1 or 2) SPDT, 5A @ AC 125 V, non-inductive	EXT-OP-6000-BVC
	Calibration gas bottle N <sub>2</sub> (Nitrogen), 0...100% vol., Zero gas, 103 L	EXT-OP-GAS-N2
	Calibration gas bottle NO <sub>2</sub> (Nitrogen Dioxide), 0...5 ppm, 58 L	EXT-OP-GAS-NO2
	Replacement sensor module NO <sub>2</sub> (Nitrogen Dioxide), 0...10 ppm, Electro-chemical	EXT-OP-5514

**Wiring Diagram**


**1 Analogue output settings**

Down position: 2...10 V (factory setting)  
 Up position: 4...20 mA

**2 End of line (EOL) jumper: CAN bus**

Down position: Termination OFF (factory setting)  
 Up position: Termination ON (first and last unit only should have this jumper in the up position)

**3 End of line (EOL) jumper: BACnet MS/TP**

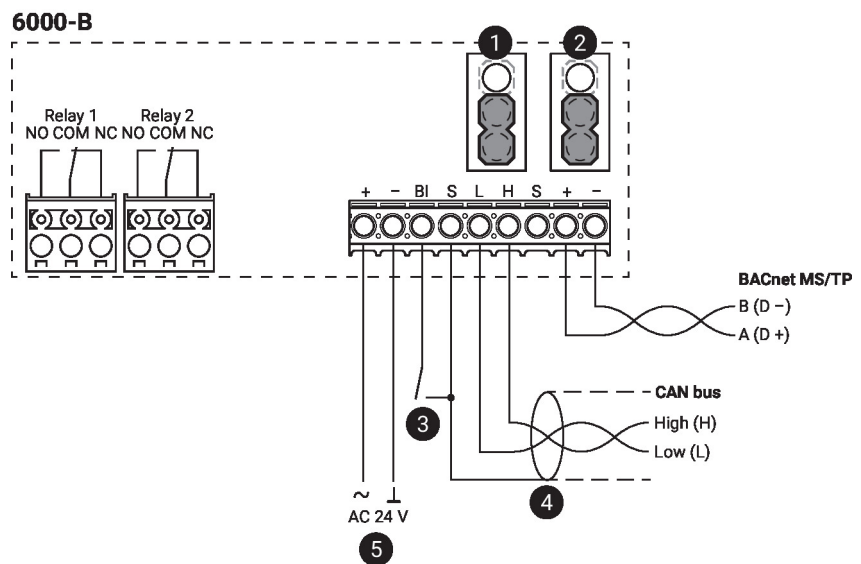
Down position: Termination OFF (factory setting)  
 Up position: Termination ON (first and last unit only should have this jumper in the up position)

**4 Analogue output**

**5 Binary input to limit switch**

**6 Shield connected at the first unit only, at others only looped through**

**7 No connection to the ground**



**1 End of line (EOL) jumper: CAN bus**

Down position: Termination OFF (factory setting)  
 Up position: Termination ON (first and last unit only should have this jumper in the up position)

**2 End of line (EOL) jumper: BACnet MS/TP**

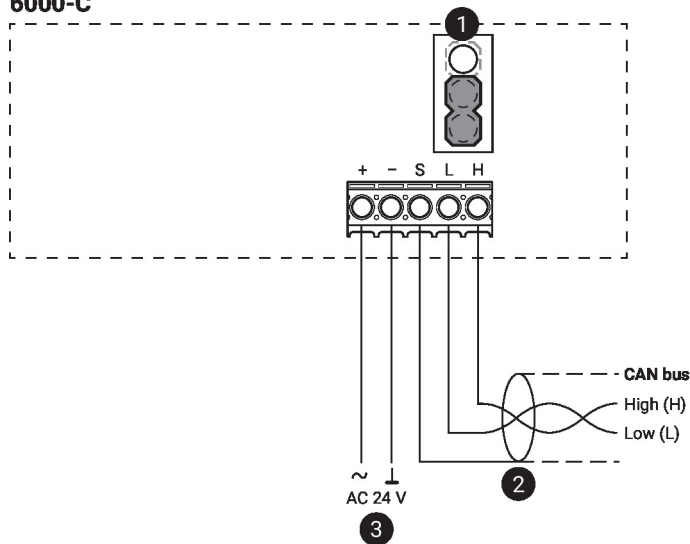
Down position: Termination OFF (factory setting)  
 Up position: Termination ON (first and last unit only should have this jumper in the up position)

**3 Binary input to limit switch**

**4 Shield connected at the first unit only, at others only looped through**

**5 No connection to the ground**

**6000-C**



**1 End of line (EOL) jumper: CAN bus**

Down position: Termination OFF (factory setting)

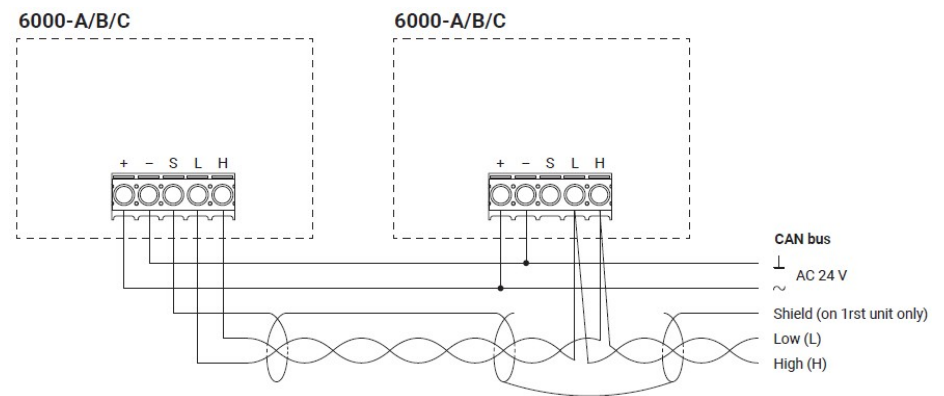
Up position: Termination ON (first and last unit only should have this jumper in the up position)

**2 Shield connected at the first unit only, at others only looped through**

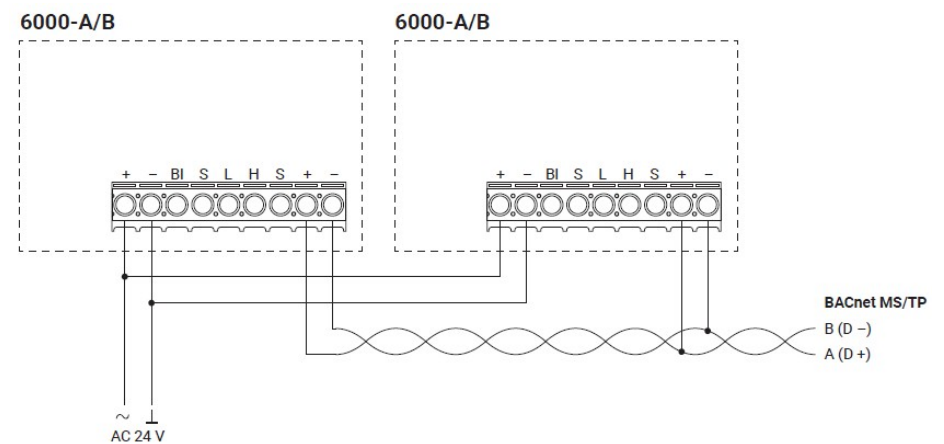
**3 No connection to the ground**

**Wiring CAN bus**

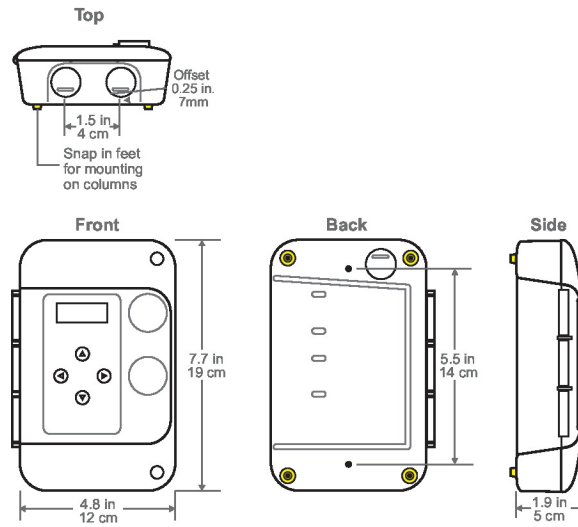
CAN bus



**Wiring RS485 BACnet MS/TP**



Dimensions



Type	Weight
EXT-OP-6014-A	0.95 lb [0.43 kg]
EXT-OP-6014-B	0.95 lb [0.43 kg]
EXT-OP-6014-C	0.95 lb [0.43 kg]