

## MODEL OVERVIEW



Version	SPG 501_001	SPG 501_004	SPG 501_005	SPG 501_007	SPG 501_009	SPG 501_003	SPG 501_006	SPG 501_008
Product name	SMART PRESSURE GATE Standard	SMART PRESSURE GATE FC – 4...20mA	SMART PRESSURE GATE FC – 0...10V	SMART PRESSURE GATE FC – 0...5V	SMART PRESSURE GATE FC – 0...5V	SMART PRESSURE GATE Standard – CO <sub>2</sub>	SMART PRESSURE GATE FC – 4...20mA – CO <sub>2</sub>	SMART PRESSURE GATE FC – 0...10V – CO <sub>2</sub>
Connection thread (welded)	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4
Refrigerants	R134a, R404a, R407c, R22, R407f, R410a, R448, R449, R507	R134a, R404a, R407c, R22, R407f, R410a, R448, R449, R507	R134a, R404a, R407c, R22, R407f, R410a, R448, R449, R507	R134a, R404a, R407c, R22, R407f, R410a, R448, R449, R507	R134a, R404a, R407c, R22, R407f, R410a, R448, R449, R507	R744 (CO <sub>2</sub> )	R744 (CO <sub>2</sub> )	R744 (CO <sub>2</sub> )
Pressure range	LP: -1...+19 bar / -14...+275 psi HP: 0...50 bar / 0...725 psi Accuracy: 0,5 % FS	LP: -1...+19 bar / -14...+275 psi HP: 0...50 bar / 0...725 psi Accuracy: 0,5 % FS	LP: -1...+19 bar / -14...+275 psi HP: 0...50 bar / 0...725 psi Accuracy: 0,5 % FS	LP: -1...+19 bar / -14...+275 psi HP: 0...50 bar / 0...725 psi Accuracy: 0,5 % FS	LP: -1...+19 bar / -14...+275 psi HP: 0...50 bar / 0...725 psi Accuracy: 0,5 % FS	LP: 0...60 bar HP: 0...160 bar Accuracy: 1 % FS	LP: 0...60 bar HP: 0...160 bar Accuracy: 1 % FS	LP: 0...60 bar HP: 0...160 bar Accuracy: 1 % FS
Replacing HP + LP gauges	✓	✓	✓	✓	✓	✓	✓	✓
Replacing* double pressure switch	✓	✓	✓	✓	✓	✓	✓	✓
Replacing 2 single pressure switches (up to 2 fans On/Off function)	✓	✓**	✓**	✓**	✓**	✓	✓**	✓**
Modbus RS485	✓	✓	✓	✓	✓	✓	✓	✓
Replacing HP + LP transmitter 4...20 mA	✗	✓	✗	✗	✗	✗	✓	✗
Replacing HP + LP transmitter 0...10 V	✗	✗	✓	✗	✓	✗	✗	✓
Replacing HP + LP transmitter 0...5 V	✗	✗	✗	✓	✗	✓	✗	✗
Direct fan speed control for EC fans	✗	✗	✓	✗	✓	✗	✗	✓
Capacity control inverter	✗	✗	✗	✗	✓	✗	✗	✗

\*This is not a safety device.

The system must absolutely be equipped additionally with a mechanical safety pressure switch.

\*\*Only 1 fan in ON/OFF function

## YOU CAN SAVE THAT

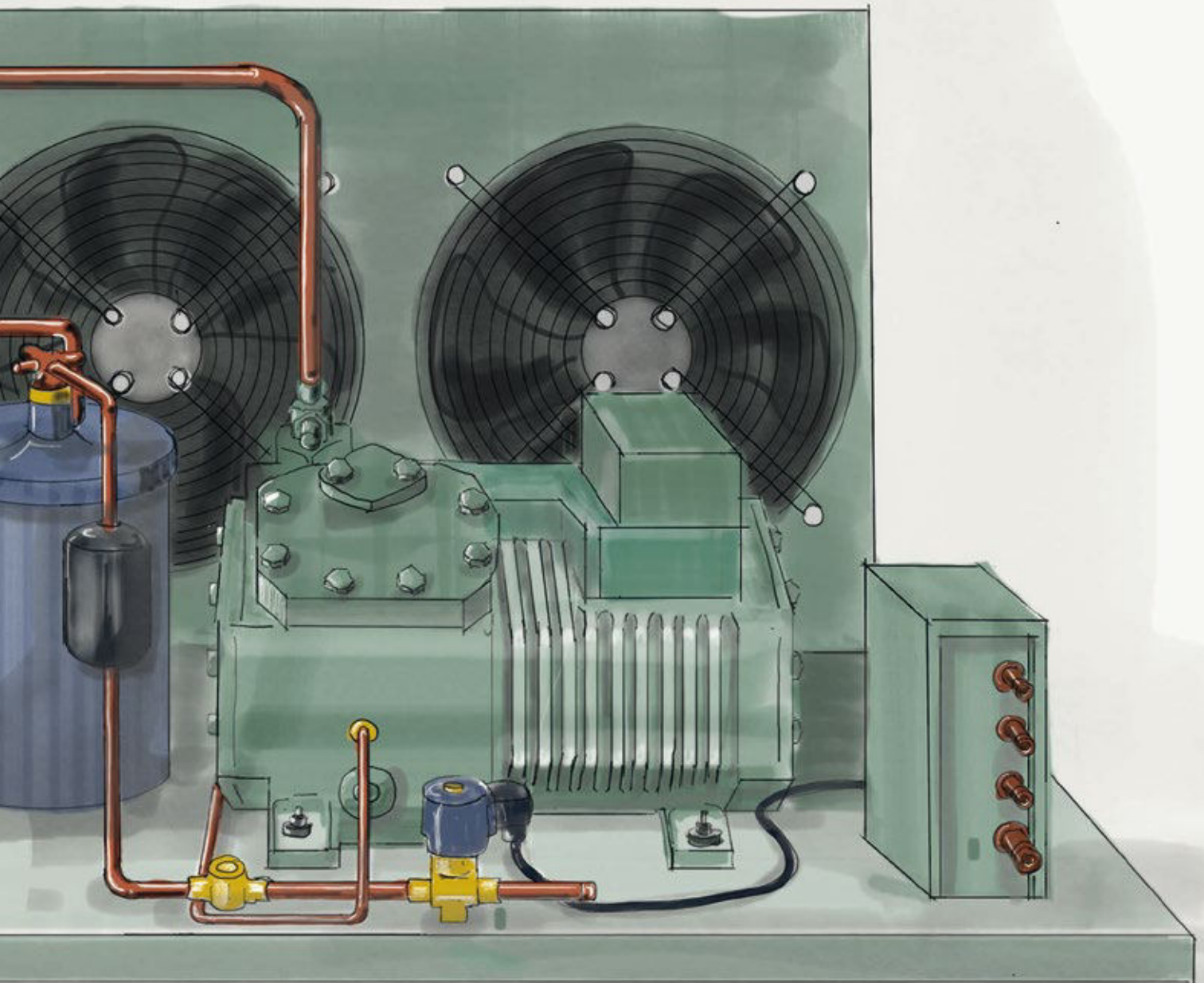
The SMART PRESSURE GATE 501 is replacing, depending on the version, the following components within the refrigeration cycle:

- 2 mechanical refrigeration pressure gauges (high and low pressure)
- 2 pressure transmitter (high and low pressure), depending on the version 4..20 mA, 0..10 V or 0..5 V
- EC-Condensing-Fan speed regulator on the basis of the high pressure analog output (0..10 V)
- Capacity control of inverter regulated refrigeration compressors on the basis of the low pressure analog output (0..10 V)

- up to 2 digital outputs to control AC-condensing fans
- double pressure switch to control the compressor from the low and high pressure side

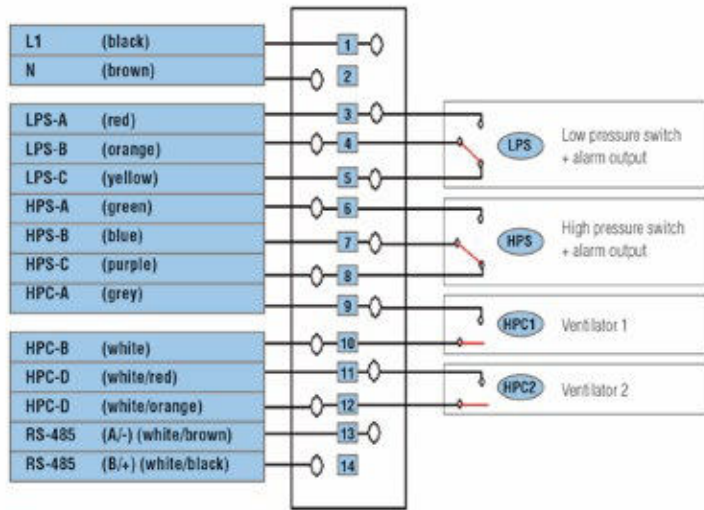
### And the best:

You can retrofit your refrigeration system at any time, because cabling and connections simply fit onto the existing connections.



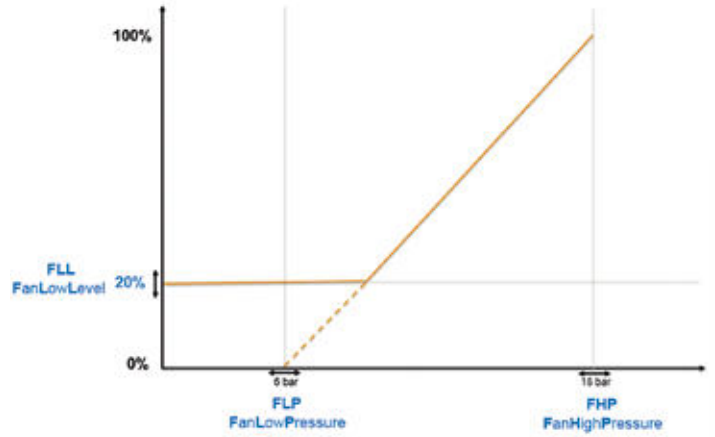
# - 4 - SMART PRESSURE GATE 501

**Wiring diagram 1** - Versions 001, 003



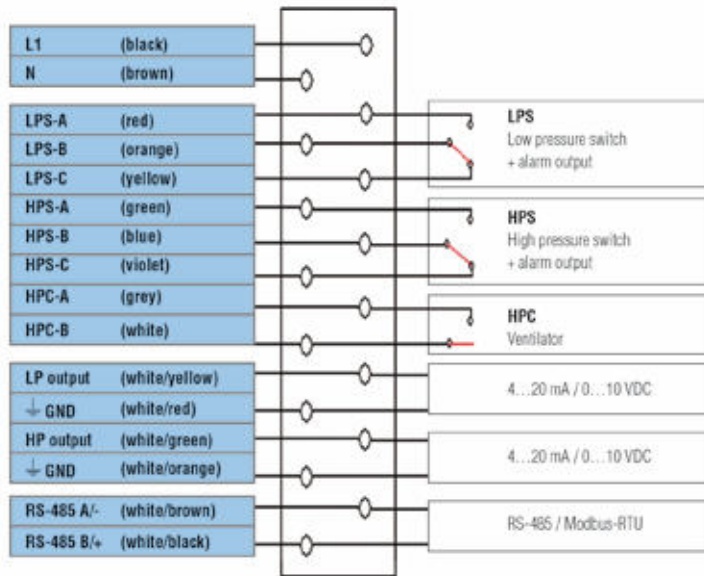
**HP fan control**

adjustable high pressure analogue output



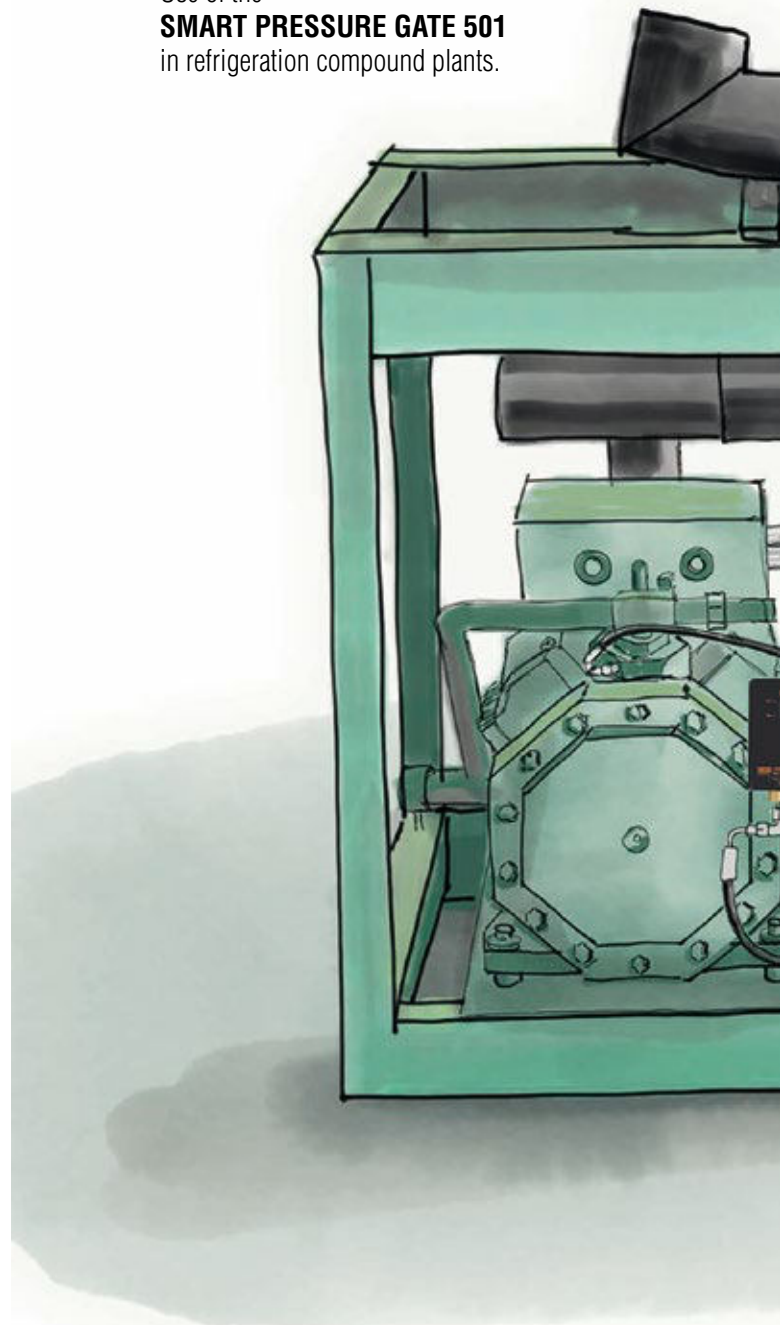
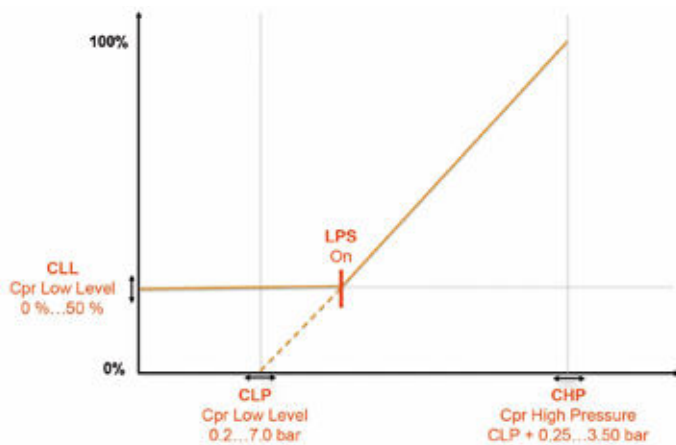
Use of the **SMART PRESSURE GATE 501** in refrigeration compound plants.

**Wiring diagram 2** - Versions 004, 005, 006, 008

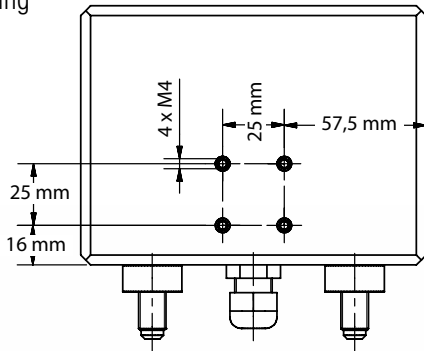


**LP capacity control**

adjustable low pressure analogue output



**Mounting options**  
Wall mounting



CONNECTION AND MOUNTING



**According to your wishes:**

We configure according to your requirements. According to your technical specifications and on request with your company logo and your company colour.

