

DISPLAY TWO / THREE



Cost-effective, operating and display units for the transmitters from the THERMOVAC and PENNINGVAC series.

All channels are displayed simultaneously.

Advantages to the User

- Power supply voltage for the transmitters
- Display range from 1×10^{-9} to 2000 mbar (0.75×10^{-9} to 1500 Torr)
- Readout selectable between mbar, Torr or Pascal
- Adjustable switching thresholds with variable hysteresis, floating change-over contacts and visual indication of the switching status in the display
- Option of entering gas correction factors for PENNINGVACs
- Separate chart recorder outputs 0 - 10 V for each measurement channel
- Compact bench top enclosure (1/4 19 in., 3 HU)
- For fitting into 19 in., 3 HU racks

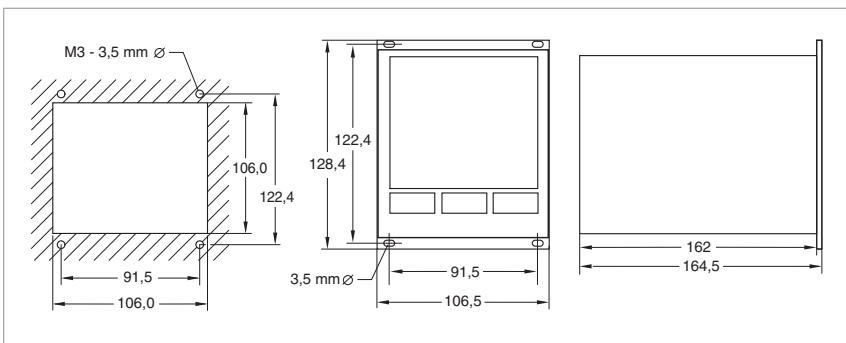
Connectable Sensors

THERMOVAC

- TTR 211
- TTR 216 S
- TTR 90
- TTR 91
- TTR 96 S
- TTR 100
- TTR 100 S2

PENNINGVAC

- PTR 90
- PTR 225
- PTR 225 S
- PTR 237



Dimensional drawing and panel cut-out for the DISPLAY TWO and THREE

Technical Data**DISPLAY TWO****DISPLAY THREE**

Number of measurement channels	2	3
Display for measured values	digital, 7 segment LED, 4 digits	digital, 7 segment LED, 4 digits
Display range mbar (Torr)	1×10^{-10} to 2000 (0.75×10^{-10} - 1500)	1×10^{-10} to 2000 (0.75×10^{-10} - 1500)
Unit of measurement (selectable)	mbar, Torr, Pascal	mbar, Torr, Pascal
Gas type correction (for PTR)	factor adjustable	factor adjustable
Sensor connection	FCC68 (RJ45)	FCC68 (RJ45)
Sensor power supply V DC	24	24
Electrical outputs	screw terminal	screw terminal
Switching threshold Number Adjustment range Hysteresis Relay contact Load rating	2 (1 per channel) sensor dependent adjustable floating changeover contact 60 V, 1 A DC / 30 V, 1 A AC	3 (1 per channel) sensor dependent adjustable floating changeover contact 60 V, 1 A DC / 30 V, 1 A AC
Ready relay Relay contact Load rating	normally open contact 60 V, 1 A DC / 30 V, 1 A AC	normally open contact 60 V, 1 A DC / 30 V, 1 A AC
Chart recorder output ($R_a \geq 10 \text{ k}\Omega$)	0 - 10 V per measurement channel, output characteristic corresponds to the connected transmitter	0 - 10 V per measurement channel, output characteristic corresponds to the connected transmitter
Control input	PENNINGVAC PTR: high voltage on	PENNINGVAC PTR: high voltage on
Mains connection V AC / Hz	85 - 240 / 50 - 60	85 - 240 / 50 - 60
Power consumption W	< 10	< 15
Nominal temperature range °C	+5 to +50	+5 to +50
Weight kg (lbs)	1.3 (2.87)	1.4 (3.09)
Protection class IP	40	40

Ordering Information**DISPLAY TWO****DISPLAY THREE**

EURO version, including mains cord US version, including mains cord	Part No. 230 024 Part No. 235 024	Part No. 230 025 Part No. 235 025
THERMOVAC transmitter	see section "Active Sensors"	see section "Active Sensors"
PENNINGVAC transmitter	see section "Active Sensors"	see section "Active Sensors"
Connection cables for THERMOVAC and PENNINGVAC (Type A)	see section "Connection Cables for Active Sensors"	see section "Connection Cables for Active Sensors"