



VIADRY

Compressed Air Conditioning for highest Demand at Quality in Trade and Industry





VIA DRY COMPRESSED AIR CONDITIONING

The first-class of compressed air dryers. A compact and robust housing design, generously dimensioned connections and proven technology in an outstanding price - / achievement-relationship distinguish this model line. Quality "Made in Germany" and ISO 9001 certifying are natural.

INCLUDING
ENERGYSAVER
ELECTRONIC !

Heat-Exchanger-/Separator-System

No option but standard in all VIA compressed air dryers! All types of the VIAdry-series are equipped with our innovative, self cleaning stainless steel heat exchanger with integrated low speed separating system, which guarantees a continuous, optimal compressed air quality at a maintenance-free operation without pre-filters with lowest possible pressure loss.

Condensate-drain-technic

With all model of our VIA-series the condensate is derived by an automatic condensate drain. The drain is integrated in housing. It is mounted directly behind a housing plate, which allows a visual check and can easily be removed for maintenance.

Bypass lines

In order to take your VIAdry for maintenance off the compressed air network without disturbance, we offer fitting optional bypass lines for all port sizes. The $\frac{3}{4}$ " - model is a compact bypass, comfortably switchable by a slidegate valve. The bypass line of the size $2\frac{1}{2}$ " is supplied as a building group with three stop valves, ready for Installation.

Special Models / Variants

Of course our VIA-models are available in different internationally usual tension variants.



CALCULATION OF YOUR VIADRY

Our VIAdry finder helps you to find your optimum sized compressed air dryer, calculated with your individual working conditions.

www.agt-thermotechnik.de

VIADRY AT A GLANCE

To keep the subsequent and operating costs as low as possible, we have a long live expectancy with a continously high performed quality of the compressed air.

Minimum pressure drop due to maintenance free operation without prefilter. Unique energy efficiency due to the new developed innovative stainless steel heatexchanger.

VIADRY MAKES BENEFITS

Stainless steel heat exchanger

- ◆ No corrosion
- ◆ Permanent smooth surface
- use:**
- ◆ longer lifetime
- ◆ continuous high performed air quality
- ◆ minimum pressure loss also in the future

Efficient heat transfer

- ◆ precooling with outstreaming air
- ◆ efficient cooling due to optimum circulation of refrigerant
- ◆ large heat exchanger surface
- use:**
- ◆ energy saving

Re-heating of compressed air

Re-heating of the compressed air takes place within the upper section of the heat-exchanger whereby up to 55% cooling capacity is saved.

Cooling of compressed air

The untreated compressed air load with moisture, pollutants and oil passes the heat-exchanger in one step, vertically from the top to the bottom.

Vertical heat exchanger

- ◆ direct airflow
- ◆ self-cleaning due to flowing condensate
- ◆ optimum condensate-flow
- use:**
- ◆ minimum pressure loss, minimum operation costs
- ◆ no contamination, no increase of the pressure loss
- ◆ separation of the condensate takes place at the lowest point for a simple dischargement



several drain systems available

Separation of Condensate

- ◆ The low-speed separator ensures an optimum droplet formation
- ◆ Special designed plates for optimum droplet formation
- use:**
- ◆ Optimum efficiency ensure optimum dew point and no drag along of droplets

Re-heating of the compressed air

- ◆ due to the incoming air the cool air is being reheated
- use:**
- ◆ energy saving
- ◆ no condensate at compressed air lines, because they stay warm

Separation of Condensate

Separation of condensate takes place at the lowest point within the Low-Speed-Separator getting an efficiency of nearly 100%.

Discharge of Condensate

The condensate is reliably discharged from the system by an automatic condensate drain without any loss of compressed air.

EFFICIENCY OF THE NEW HEAT EXCHANGER AND SEPERATOR SYSTEM

- ◆ Stainless steel does not net corrosion and oxidation develop.
- ◆ Durable smooth surfaces don't get dirty thanks to the self-cleaning design.
- ◆ Large heat-exchanger surfaces packed into a very small space provide highest cooling performance.
- ◆ Vertical air flow transports liquids and solids in the best possible way downwards.
- ◆ The plate channel profile forms large separable condensate droplets.
- ◆ The Low-Speed-Separator utilises gravity forces and is working without internal parts.

SPECIALS OF THE POWERTOWER

- ◆ Advanced housing design: compact, space-saving, robust.
- ◆ High visibility, ergonomic and user friendly.
- ◆ Generously dimensioned air connections, coordinated with the flow rate.
- ◆ Simplest mounting option at the wall or on the ground.
- ◆ Optional bypass lines. ISO 9001 certification.
- ◆ All substantial components are manufactured in Europe.

TECHNICAL DATA

| Modell | Air flow V | | Power consumption | Pressure drop | Fittings | Elektrical Connections | | | Dimensions | | | Weight |
|---------|------------|---------|-------------------|---------------|----------|------------------------|-------|-----------|------------|------|------|--------|
| | [m³/h] | [l/min] | | | | [KW] | [bar] | [Ein/Aus] | [V] | [Hz] | [Ph] | |
| VD8-35 | 35 | 600 | 0,2 | 0,19 | 3/4" i | 230 | 50/60 | 1 | 325 | 265 | 745 | 24 |
| VD8-65 | 65 | 1.100 | 0,3 | 0,22 | 3/4" i | 230 | 50/60 | 1 | 325 | 265 | 745 | 30 |
| VD8-100 | 100 | 1.700 | 0,4 | 0,25 | 3/4" i | 230 | 50/60 | 1 | 325 | 265 | 745 | 35 |
| VD8-150 | 150 | 2.500 | 0,5 | 0,21 | 1 1/2" i | 230 | 50/60 | 1 | 405 | 420 | 845 | 48 |
| VD8-220 | 220 | 3.700 | 0,7 | 0,26 | 1 1/2" i | 230 | 50/60 | 1 | 405 | 420 | 845 | 56 |
| VD8-280 | 280 | 4.700 | 0,8 | 0,33 | 1 1/2" i | 230 | 50/60 | 1 | 405 | 420 | 845 | 61 |
| PT 0385 | 385 | 6.400 | 1,1 | 0,08 | 1 1/2" i | 230 | 50/60 | 1 | 800 | 670 | 1350 | 163 |
| PT 0470 | 470 | 7.800 | 1,3 | 0,09 | 2 1/2" i | 230 | 50/60 | 1 | 800 | 670 | 1350 | 184 |
| PT 0550 | 550 | 9.200 | 1,5 | 0,11 | 2 1/2" i | 230 | 50/60 | 1 | 800 | 670 | 1350 | 185 |
| PT 0660 | 660 | 11.000 | 1,6 | 0,16 | 2 1/2" i | 230 | 50/60 | 1 | 800 | 670 | 1350 | 230 |
| PT 0760 | 760 | 12.700 | 1,8 | 0,14 | 2 1/2" i | 230 | 50/60 | 1 | 800 | 670 | 1350 | 235 |
| PT 0880 | 880 | 14.700 | 2,0 | 0,22 | 2 1/2" i | 230 | 50/60 | 1 | 800 | 670 | 1350 | 245 |
| PT 1050 | 1050 | 17.500 | 2,2 | 0,16 | 2 1/2" i | 230 | 50/60 | 1 | 800 | 670 | 1350 | 255 |

CORRECTION FACTORS

On other working pressures p_1 multiply the flow volume with factor (f_1):

| p_1 [bar] | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| (f_1) | 0,75 | 0,85 | 0,90 | 0,95 | 1,00 | 1,04 | 1,07 | 1,10 | 1,12 | 1,14 | 1,18 | 1,20 |

On other incoming Air temperatures t_1 the flow volume has to multiply with factor (f_2):

| t_1 [°C] | 30 | 35 | 40 | 45 | 50 |
|------------|------|------|------|------|------|
| (f_2) | 1,25 | 1,00 | 0,85 | 0,75 | 0,60 |

On other cooling gas temperatures t_c flow volume has to multiply with factor (f_3):

| t_c [°C] | 25 | 30 | 35 | 40 | 43 |
|------------|------|------|------|------|------|
| (f_3) | 1,00 | 0,96 | 0,92 | 0,88 | 0,80 |

On other dew points t_{pd} flow volume has to multiply with factor (f_4):

| t_{pd} [°C] | 2 | 3 | 5 | 7 | 10 |
|---------------|------|------|------|------|------|
| (f_4) | 0,90 | 1,00 | 1,12 | 1,24 | 1,35 |

Volume flow in m³/h, or m³/min., based on: 20°C, 1bar

Working pressure p_1 : 7 bar

Incoming temperature pressured air t_1 : 35°C

Cooled air temperature t_c : 25°C

Dew point t_{pd} : 3°C

Subject to change without notice. Fotos: AGT, Shutterstock