

## VIJAČNI KOMPRESORJI 18-315kW DD SERIJA DIREKTNO GNANI WK75 DD

### Screw Compressor System

Stationary, fully automatic, sound muffled in compact design.



#### WK 75 DD - Single-stage, air-cooled, electrically driven screw compressor system with coolant injection - Directly drive

|                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Screw compressor block</b>                                                                                                    | Performance optimized screw profile Wendel F 12                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Drive motor</b>                                                                                                               | <ul style="list-style-type: none"> <li>- Induction motor: OMEGA / Watt</li> <li>- Motor power: 75.0 kW</li> <li>- Efficiency of: 86.5%</li> <li>- Insulation class: F</li> <li>- Degree of protection: IP 55</li> <li>- Design: IE3 B35</li> </ul>                                                                                                                                                                                                               |
| <b>Suction filter</b>                                                                                                            | Generously dimensioned air intake filter                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Separation system</b>                                                                                                         | Long-term separator cartridge for constant. Coolant - residual content of 2-4 mg/m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Coolant</b>                                                                                                                   | Mineral: 46 or better, filling 30 l                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Lubricant circuit</b>                                                                                                         | TÜV certified water bowl filled with mineral oil, lubricants cooler, filter and thermal block                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Cooling</b>                                                                                                                   | <ul style="list-style-type: none"> <li>- Air-cooled coolant and compressed air aftercooler</li> <li>- Integrated centrifugal separator with el. Condensate drain</li> <li>- Ambient Temperature Min./Max. +0/+45°C</li> <li>- Full cooling air density</li> <li>- Compressed air outlet temperature 10-12°C over ambient</li> <li>- Integrated Compact fan, 2.2 kW, 12000 m<sup>3</sup>/h</li> </ul>                                                             |
| <b>Cabinet</b>                                                                                                                   | Integrated, degree of protection IP 54, emergency Stop, Siemens                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Control and monitoring:</b>                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Control</b>                                                                                                                   | <b>Logika</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>- Display</li> <li>- Display</li> <li>- Input</li> <li>- K -continuous display</li> </ul> | <ul style="list-style-type: none"> <li>- LCD Display</li> <li>- Symbol display of all important operating states</li> <li>- Via Control Panel, code protected</li> <li>- Plant in operation/ Standby / Load Test</li> <li>- Remote closing active</li> <li>- Automatic Restart</li> <li>- Final compression pressure</li> <li>- Final compression temperature</li> <li>- Operating mode: automatic, continuous optimization</li> <li>- Automatic mode</li> </ul> |
| <b>Pressure Sensor</b>                                                                                                           | Sensor                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Error Messages</b>                                                                                                            | Symbols and/or info Short Text                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Maintenance messages</b>                                                                                                      | Symbols and/or info Short Text                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Options</b>                                                                                                                   | <ul style="list-style-type: none"> <li>- Interface for remote control</li> <li>- Various analogue and digital inputs and outputs</li> <li>- Collective fault message floating</li> </ul>                                                                                                                                                                                                                                                                         |
| <b>Trim</b>                                                                                                                      | <ul style="list-style-type: none"> <li>- Temperature protected sound-absorbing hood with sound-absorbing lining</li> <li>- Large maintenance doors</li> <li>- Elastic storage unit on a stable</li> <li>- Sheet steel base frame</li> </ul>                                                                                                                                                                                                                      |

|                                |                                                                                                                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Options</b>                 | Preheating heating                                                                                                                                                                              |
| <b>Compact unit</b>            | Length x depth x height: 1300 x 1550 x 1750 mm<br>Weight approx: 1500 kg<br>Sound level at a distance of 1m 85 dB(A)<br>Compressed air connection: R 2"<br>Paint: White RAL 9016, gray RAL 7001 |
| <b>Electrical Installation</b> | Electrical Connection: 400V/50Hz/3 phases<br>Cable size: 5 x 25.0mm (max 15m)<br>Hedging 160A (slow)                                                                                            |

All technical data are specified in accordance with the DIN ISO 1217 Appendix C.

**MANUFACTURER OF THE MAIN COMPONENTS IN THE ESSENTIAL (PREFERABLY):**

Compressor stage: Wendel

Air filter: Spin-on

Oil filter and separator: MAN

|                              |                                                                                                                              | WK 45 DD new |                          |     | WK 55 DD |                          |     | WK 75 DD |                          |     |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------|-----|----------|--------------------------|-----|----------|--------------------------|-----|
|                              |                                                                                                                              | 7            | 10                       | 13  | 7        | 10                       | 13  | 7        | 10                       | 13  |
|                              |                                                                                                                              | 98           | 140                      | 182 | 98       | 140                      | 182 | 98       | 140                      | 182 |
| COMPRESSOR TECHNICAL DETAILS | Operating pressure (bar)                                                                                                     | 7            | 10                       | 13  | 7        | 10                       | 13  | 7        | 10                       | 13  |
|                              | Operating pressure [psi g]                                                                                                   | 98           | 140                      | 182 | 98       | 140                      | 182 | 98       | 140                      | 182 |
|                              | Free air delivery at max pressure (m <sup>3</sup> /min)                                                                      | -            | 6,5                      | -   | 9,66     | -                        | -   | 12,7     | 9,66                     | -   |
|                              | Free air delivery at max pressure (m <sup>3</sup> /h)                                                                        | -            | 390                      | -   | 579,6    | -                        | -   | 762      | 579,6                    | -   |
|                              | Free air delivery at max pressure (c/fm)                                                                                     | -            | 227,5                    | -   | 338,1    | -                        | -   | 444,5    | 338,1                    | -   |
|                              | (kW/m <sup>3</sup> /h)                                                                                                       | -            | 6,92                     | -   | 5,69     | -                        | -   | 5,91     | 7,76                     | -   |
|                              | Operation Oil Temperature (C)                                                                                                | -            | 79                       | -   | -        | 79                       | -   | -        | 79                       | -   |
|                              | Thermostat Oil Inlet Temperature(C)                                                                                          | -            | 71                       | -   | -        | 71                       | -   | -        | 71                       | -   |
|                              | Delivery Air Temperature (at 20 C)                                                                                           | -            | 30                       | -   | -        | 30                       | -   | -        | 30                       | -   |
|                              | Oil Content (lt)                                                                                                             | -            | 30                       | -   | -        | 30                       | -   | -        | 30                       | -   |
| TRANSMISSION SYSTEM          | Airline Connection (G)                                                                                                       | -            | 1 1/2"                   | -   | -        | 1 1/2"                   | -   | -        | 2"                       | -   |
|                              | Noise level 1m distance at C.P. [dB(A)]                                                                                      | -            | 80                       | -   | -        | 81                       | -   | -        | 85                       | -   |
|                              | Manufacturer                                                                                                                 | -            | TAMSAN TV12              | -   | -        | TAMSAN CTRL 126R         | -   | -        | TAMSAN CTRL 135L         | -   |
|                              | Origin                                                                                                                       | -            | Turkey                   | -   | -        | Turkey                   | -   | -        | Turkey                   | -   |
|                              | Airend Type                                                                                                                  | -            | Oil Injected             | -   | -        | Oil Injected             | -   | -        | Oil Injected             | -   |
|                              | Rotation Speed (rpm)                                                                                                         | -            | 3000                     | -   | -        | 3000                     | -   | -        | 3000                     | -   |
|                              | Manufacturer                                                                                                                 | -            | OMEGA/WAT                | -   | -        | OMEGA/WAT                | -   | -        | OMEGA/WAT                | -   |
|                              | Origin                                                                                                                       | -            | Turkey                   | -   | -        | Turkey                   | -   | -        | Turkey                   | -   |
|                              | Main Motor Power (kw)[hp]                                                                                                    | -            | 45 [60,3]                | -   | -        | 55 [73,7]                | -   | -        | 75 [100,5]               | -   |
|                              | Main Motor Speed (rpm)                                                                                                       | -            | 2950                     | -   | -        | 2950                     | -   | -        | 2950                     | -   |
| MAIN MOTOR DETAILS           | Protection Class                                                                                                             | -            | IP55                     | -   | -        | IP55                     | -   | -        | IP55                     | -   |
|                              | Frame Construction                                                                                                           | -            | B35                      | -   | -        | B35                      | -   | -        | B35                      | -   |
|                              | Demurrage Current (A)[380V]                                                                                                  | -            | -                        | -   | -        | -                        | -   | -        | -                        | -   |
|                              | Frequency                                                                                                                    | -            | 50-60                    | -   | -        | 50-60                    | -   | -        | 50-60                    | -   |
|                              | Energy Class                                                                                                                 | -            | IE3                      | -   | -        | IE3                      | -   | -        | IE3                      | -   |
|                              | Insulation Class                                                                                                             | -            | F                        | -   | -        | F                        | -   | -        | F                        | -   |
|                              | Cooling Design                                                                                                               | -            | Additional Cooling Fan   | -   | -        | Additional Cooling Fan   | -   | -        | Additional Cooling Fan   | -   |
|                              | Cooling Fan Air Flow Condition                                                                                               | -            | 12000                    | -   | -        | 12000                    | -   | -        | 12000                    | -   |
|                              | Fan Static Pressure at max. Flow [Pa]                                                                                        | -            | 168,2                    | -   | -        | 168,2                    | -   | -        | 168,2                    | -   |
|                              | Fan Motor Power (kw) [hp]                                                                                                    | -            | 2,2 [2,95]               | -   | -        | 2,2 [2,95]               | -   | -        | 2,2 [2,95]               | -   |
| COOLING SYSTEM               | Fan Motor Speed (rpm)                                                                                                        | -            | 1420                     | -   | -        | 1420                     | -   | -        | 1420                     | -   |
|                              | Nominal Current (A)[380V]                                                                                                    | -            | 4A                       | -   | -        | 4A                       | -   | -        | 4A                       | -   |
|                              | Radiator                                                                                                                     | -            | Monoblock                | -   | -        | Monoblock                | -   | -        | Monoblock                | -   |
|                              | Cooling Air Outlet Temp.(at 25C)                                                                                             | -            | 35                       | -   | -        | 35                       | -   | -        | 35                       | -   |
|                              | Manufacturer                                                                                                                 | -            | TAMSAN                   | -   | -        | TAMSAN                   | -   | -        | TAMSAN                   | -   |
|                              | Transmission System                                                                                                          | -            | Direct Drive             | -   | -        | Direct Drive             | -   | -        | Direct Drive             | -   |
|                              | Design                                                                                                                       | -            | HRC                      | -   | -        | HRC                      | -   | -        | HRC                      | -   |
|                              | Electric component                                                                                                           | -            | Siemens                  | -   | -        | Siemens                  | -   | -        | Siemens                  | -   |
|                              | Invertor Brand                                                                                                               | -            | -                        | -   | -        | -                        | -   | -        | -                        | -   |
|                              | Electric supply (V)                                                                                                          | -            | 380-400                  | -   | -        | 380-400                  | -   | -        | 380-400                  | -   |
| TRANSMISSION SYSTEM          | Cable size (15mt.)                                                                                                           | -            | 3x25mm+16                | -   | -        | 3x35+16                  | -   | -        | 3x50+25                  | -   |
|                              | Maximum Current (A)[380V]                                                                                                    | -            | 88                       | -   | -        | 110                      | -   | -        | 155                      | -   |
|                              | Load Current(A)[380V]                                                                                                        | -            | 84                       | -   | -        | 107                      | -   | -        | 144                      | -   |
|                              | Unload Current(A)[380V]                                                                                                      | -            | 38                       | -   | -        | 42                       | -   | -        | 50                       | -   |
|                              | Main Fuse                                                                                                                    | -            | -                        | -   | -        | -                        | -   | -        | -                        | -   |
|                              | Control Panel                                                                                                                | -            | Logika Italy             | -   | -        | Logika Italy             | -   | -        | Logika Italy             | -   |
|                              | Temperature switch                                                                                                           | -            | Electronic               | -   | -        | Electronic               | -   | -        | Electronic               | -   |
|                              | Air Tank Capacity (Recommended)                                                                                              | -            | 1000 lt /2000 lt         | -   | -        | 1000 lt /2000 lt         | -   | -        | 2000 lt                  | -   |
|                              | Air Dryer                                                                                                                    | -            | -                        | -   | -        | -                        | -   | -        | -                        | -   |
|                              | Pressure dewpoint [°C] at ambient                                                                                            | -            | -                        | -   | -        | -                        | -   | -        | -                        | -   |
| CONTROL PANEL                | Line Filter ( prefilter for water)                                                                                           | -            | -                        | -   | -        | -                        | -   | -        | -                        | -   |
|                              | Dimensions (W X L X H) [cm]                                                                                                  | -            | 127 0x 1980 x 1770       | -   | -        | 127 0x 1980 x 1770       | -   | -        | 127 0x 1980 x 1770       | -   |
|                              | Pack Dimensions (W X L X H) [cm]                                                                                             | -            | 1320 x 2050 x 1920       | -   | -        | 1320 x 2050 x 1920       | -   | -        | 1320 x 2050 x 1920       | -   |
|                              | Weight [ kg]                                                                                                                 | -            | 1200                     | -   | -        | 1550                     | -   | -        | 1750                     | -   |
|                              | Panel Filter Norm                                                                                                            | -            | EU3                      | -   | -        | EU3                      | -   | -        | EU3                      | -   |
|                              | Moving                                                                                                                       | -            | By Forklift / Crane      | -   | -        | By Forklift /Crane       | -   | -        | By Forklift/Crane        | -   |
|                              | Isolation                                                                                                                    | -            | Fireproof Foam           | -   | -        | Fireproof Foam           | -   | -        | Fireproof Foam           | -   |
|                              | Air Intake Kit                                                                                                               | -            | HF85/Normally Closed     | -   | -        | HF85/Normally Closed     | -   | -        | HF85/Normally Closed     | -   |
|                              | Separator Filter                                                                                                             | -            | Inline Separator         | -   | -        | Inline Separator         | -   | -        | Inline Separator         | -   |
|                              | Oil Filter                                                                                                                   | -            | Spin-on Filter by TAMSAN | -   | -        | Spin-on Filter by TAMSAN | -   | -        | Spin-on Filter by TAMSAN | -   |
| AIR TANK AND DRYER           | Air Filter                                                                                                                   | -            | Heavy duty               | -   | -        | Heavy duty               | -   | -        | Heavy duty               | -   |
|                              | Working Switch                                                                                                               | -            | Transmitter 4-20 mA      | -   | -        | Transmitter 4-20 mA      | -   | -        | Transmitter 4-20 mA      | -   |
|                              | Safety Valve                                                                                                                 | -            | CE Italy                 | -   | -        | CE Italy                 | -   | -        | CE Italy                 | -   |
|                              | Safety switch                                                                                                                | -            | yes                      | -   | -        | yes                      | -   | -        | yes                      | -   |
|                              | Hose                                                                                                                         | -            | 135 C Teflon             | -   | -        | 135 C Teflon             | -   | -        | 135 C Teflon             | -   |
|                              | 2 years factory warranty - Guarantee supply parts for 10 years                                                               |              |                          |     |          |                          |     |          |                          |     |
|                              | Our company reserves the right to change technical details without notice , this details can be different upon to countries. |              |                          |     |          |                          |     |          |                          |     |
|                              | Manuel controller's upgrade norm will be used for Tamtronic Controller switch DIN ISO 1217 Annex C                           |              |                          |     |          |                          |     |          |                          |     |
|                              |                                                                                                                              |              |                          |     |          |                          |     |          |                          |     |
|                              |                                                                                                                              |              |                          |     |          |                          |     |          |                          |     |