

## Oil-free rotary tooth compressors, 15-55 kW / 20-75 hp ZT 15-22, ZR/ZT 30-45, ZR/ZT 22-37-55 VSD

Atlas Copco's ZR/ZT oil-free rotary tooth compressors meet your needs for pure oil-free air while offering wide pressure ranges and improved energy efficiency. Developed especially for applications demanding the highest levels of purity, such as pharmaceutical production, food processing and critical electronics, ZR/ZT compressors eliminate the risks of oil contamination as well as the resulting extra costs. These ISO 8573-1 CLASS 0 certified compressors are easy to operate and are available with Variable Speed Drive for further energy savings.

### CUSTOMER BENEFITS

- Certified 100% oil-free air** – ZR/ZT compressors provide 100% pure, clean air, complying with ISO 8573-1 CLASS 0 (2010) certification. CLASS 0 means zero risk of contamination; zero risk of damaged or unsafe products; zero risk of losses from operational downtime; and zero risk of damaging your company's hard-won professional reputation. In 2006, Atlas Copco was the first manufacturer in the world to receive such certification for an oil-free compressor.
- VSD for direct energy savings** – Energy savings of 35% on average are possible with the Variable Speed Drive versions:
  - Unload losses are reduced to a minimum.
  - No blow-off of compressed air to the atmosphere.
  - Load/no load transition losses are eliminated.
  - Precise pressure control allows a tighter pressure band and a lower average working pressure, resulting in reduced energy consumption.
- Quiet operation** – The vertical layout of the coolers reduces the noise levels from the fan, motor and element. Moreover, ZR/ZT compressors are supplied in a sound-insulated canopy, thus avoiding the need for a separate compressor room and allowing installation in most working environments.
- Advanced control and monitoring** – To maximize efficiency and reliability, the Elektronikon® controls the main drive motor and regulates system pressure within a predefined and narrow pressure band. The Elektronikon® controller can be adapted to your specific needs with extra sensors, digital contacts, fieldbus, Internet and SMS communication functions. In combination with the ES multiple compressor controller, the operation of your complete compressor room is optimized.
- Easy maintenance** – The robust air inlet filter offers a long lifetime and high reliability for long service intervals and low maintenance needs.



| Type                                  | Max. working pressure |      | Capacity FAD* |                     |            | Installed motor power |    | Noise level** | Weight without dryer*** |      | Integrated dryer available |
|---------------------------------------|-----------------------|------|---------------|---------------------|------------|-----------------------|----|---------------|-------------------------|------|----------------------------|
|                                       | bar(e)                | psig | l/s           | m <sup>3</sup> /min | cfm        | kW                    | hp | dB(A)         | kg                      | lbs  |                            |
| <b>Air-cooled only</b>                |                       |      |               |                     |            |                       |    |               |                         |      |                            |
| ZT 15                                 | 7.5                   | 109  | 37.6          | 2.3                 | 80         | 15                    | 20 | 65            | 1060                    | 2337 | ID                         |
|                                       | 8.6                   | 125  | 34.9          | 2.1                 | 74         |                       |    |               |                         |      |                            |
|                                       | 10                    | 145  | 29.9          | 1.8                 | 63         |                       |    |               |                         |      |                            |
| ZT 18                                 | 7.5                   | 109  | 48.0          | 2.9                 | 102        | 18                    | 25 | 67            | 1080                    | 2381 | ID/IMD                     |
|                                       | 8.6                   | 125  | 45.7          | 2.7                 | 97         |                       |    |               |                         |      |                            |
|                                       | 10                    | 145  | 37.2          | 2.2                 | 79         |                       |    |               |                         |      |                            |
| ZT 22                                 | 7.5                   | 109  | 59.0          | 3.5                 | 125        | 22                    | 30 | 69            | 1086                    | 2394 | ID/IMD                     |
|                                       | 8.6                   | 125  | 53.2          | 3.2                 | 113        |                       |    |               |                         |      |                            |
|                                       | 10                    | 145  | 45.0          | 2.7                 | 95         |                       |    |               |                         |      |                            |
| <b>Air-(ZT) and water-cooled (ZR)</b> |                       |      |               |                     |            |                       |    |               |                         |      |                            |
| ZR/ZT 30                              | 7.5                   | 109  | 78.7          | 4.7                 | 167        | 30                    | 40 | 63            | 1432                    | 3157 | ID/IMD                     |
|                                       | 8.6                   | 125  | 73.7          | 4.4                 | 156        |                       |    |               |                         |      |                            |
| ZR/ZT 37                              | 7.5                   | 109  | 96.5          | 5.8                 | 204        | 37                    | 50 | 65            | 1432                    | 3157 | ID/IMD                     |
|                                       | 8.6                   | 125  | 92.1          | 5.5                 | 195        |                       |    |               |                         |      |                            |
| ZR/ZT 45                              | 7.5                   | 109  | 114.4         | 6.9                 | 243        | 45                    | 60 | 67            | 1432                    | 3157 | ID/IMD                     |
|                                       | 8.6                   | 125  | 108.9         | 6.5                 | 231        |                       |    |               |                         |      |                            |
| ZT 22 VSD                             | 7.5                   | 109  | 20.6-55.3     | 1.3-3.4             | 43.8-117.6 | 22                    | 30 | 69            | 1120                    | 2469 | ID                         |
|                                       | 8.6                   | 125  | 20.1-51.0     | 1.2-3.1             | 42.7-108.5 |                       |    |               |                         |      |                            |
|                                       | 10                    | 145  | 19.7-47.0     | 1.2-2.8             | 41.9-100   |                       |    |               |                         |      |                            |
| ZR/ZT 37 VSD                          | 7.5                   | 109  | 41.3-101.2    | 2.5-6.2             | 87.8-215.2 | 37                    | 50 | 68            | 1432                    | 3157 | ID/IMD                     |
|                                       | 8.6                   | 125  | 41.2-97.3     | 2.5-5.9             | 87.6-206.9 |                       |    |               |                         |      |                            |
| ZR/ZT 55 VSD                          | 7.5                   | 109  | 41.3-142.5    | 2.5-8.7             | 87.6-303.1 | 55                    | 75 | 68            | 1432                    | 3157 | ID/IMD                     |
|                                       | 8.6                   | 125  | 41.2-138.8    | 2.5-8.4             | 87.6-295.2 |                       |    |               |                         |      |                            |

\* Unit performance measured according to ISO 1217, Ed. 4, 2009, Annex E.

Reference conditions:

- absolute Inlet pressure, specify bar(a), ( e ) 1 bar (14.5 psi)
- intake air temperature 20°C (68°F)

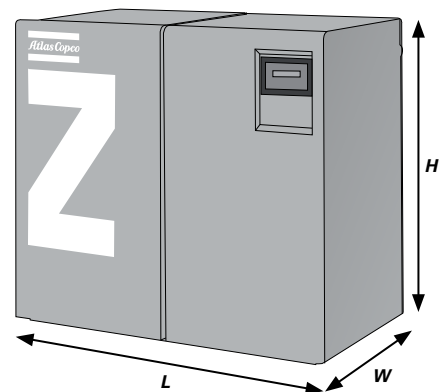
\*\* Noise level\* measured according to Pneurop/Cagi PN8NTC2, tolerance: 3 dB(A).

\*\*\* Integrated dryers will increase the weight.

\*\*\*\* For ZT air-cooled units: +3 dB(A).

FAD is measured at the following working pressure:

- 7.5 bar versions at 7 bar.
- 8.6 bar versions at 8 bar.
- 10 bar versions at 9.75 bar.



|                 | Dimensions L x W x H |              |              |
|-----------------|----------------------|--------------|--------------|
|                 | Length               | Width        | Height       |
| ZT 15-22        | 1760 / 69.3"         | 1026 / 40.4" | 1621 / 63.8" |
| ZR/ZT 30-45     | 2005 / 78.9"         | 1026 / 40.4" | 1880 / 74.0" |
| ZT 22 VSD       | 2195 / 86.4"         | 1026 / 40.4" | 1621 / 63.8" |
| ZR/ZT 37-55 VSD | 2440 / 96.1"         | 1026 / 40.4" | 1880 / 74.0" |

# Oil-free air- and water-cooled rotary screw compressors, 55-935 kW / 75-1253 hp

## Z 55-900 (VSD)

Atlas Copco's Z 55-900 VSD Pack and Full Feature ranges power your production with ultimate reliability and efficiency under the harshest conditions. The first air compressors in the world to be certified Class 0 according to ISO 8573-1 edition 2, 2010, they ensure completely oil-free air to protect your process and end products. Several energy saving features – Variable Speed Drive, energy-free MD dryers and energy recovery – are offered. Z 55-900 VSD compressors are all-inclusive, plug-and-play packages that ensure easy and low cost installation and a quick start-up.

### CUSTOMER BENEFITS

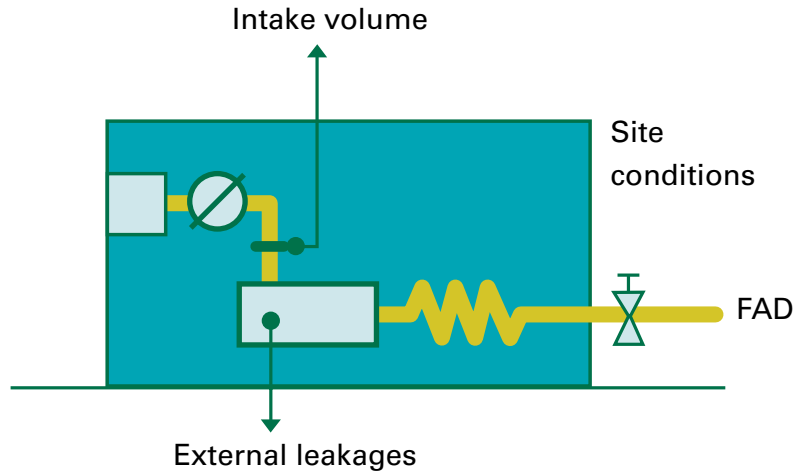
- **Highest reliability** – For over 680 years, Z compressors stand for durability and reliability. They incorporate Atlas Copco's proven screw technology, stainless steel coolers, AGMA A4/ DIN 5 gears and state-of-the art electrical drive systems, all of which contribute to overall high reliability. Z compressors are built using long-standing internal engineering practices, and are manufactured and tested according ISO 9001.
- **Certified 100% oil-free** – Z 55-900 compressors provide you with 100% pure, clean air that complies with ISO 8573-1 CLASS 0 (2010) certification. CLASS 0 means zero risk of contamination; zero risk of damaged or unsafe products; zero risk of losses from operational downtime; and zero risk of damaging your company's hard-won professional reputation. In 2006 Atlas Copco was the first manufacturer in the world to receive such certification on an oil-free compressor.
- **Maximum energy savings** – Atlas Copco's unique and time proven rotor coating ensures high efficiency over the compressors lifetime. The state-of-the art air compressor element is powered by a high-efficiency electric motor, contributing to maximum compressor package efficiency. Further optimize your energy savings with our innovative and unique Variable Speed Drive, our energy recovery feature and energy-free MD dryers.
- **Easy installation** – The integrated design of the Z compressor includes internal piping, coolers, motor, lubrication and control system: all supplied as a ready-to-use package. Installation is fault-free, commissioning time is low and no external instrument air is required.
- **Advanced control and monitoring** – To maximize efficiency and reliability, the Elektronikon® controls the main drive motor and regulates system pressure within a predefined and narrow pressure band. The Elektronikon® controller can be adapted to your specific needs with extra sensors, digital contacts, fieldbus, Internet and SMS communication functions. In combination with the ES multiple compressor controller, the operation of your complete compressor room is optimized.



**True performance:**

Atlas Copco Z-compressors are measured according to ISO 1217, Edition 3, Annex C stipulating the Capacity FAD measurement at the outlet of the package, net of all losses.

Atlas Copco specifications correspond to the capacity and pressure that are effectively available to the user, not to the air volume that is sucked in. Differences can be substantial.



**Dimensions & weight**

|           | A    | B    | C    | Weight |              | A    | B    | C    | Weight |                | A    | B    | C    | Weight |
|-----------|------|------|------|--------|--------------|------|------|------|--------|----------------|------|------|------|--------|
| ZR 55     | 2180 | 1450 | 2184 | 1640   | ZR 55 FF     | 2180 | 1450 | 2184 | 1890   | ZR 55 *        | 2180 | 1450 | 2184 | 1640   |
| ZR 75     | 2180 | 1450 | 2184 | 1715   | ZR 75 FF     | 2180 | 1450 | 2184 | 1965   | ZR 75 *        | 2180 | 1450 | 2184 | 1715   |
| ZR 90     | 2180 | 1450 | 2184 | 1780   | ZR 90 FF     | 2180 | 1450 | 2184 | 2030   | ZR 90 *        | 2180 | 1450 | 2184 | 1780   |
| ZR 75 VSD | 2630 | 1450 | 2184 | 2030   | ZR 75 VSD-FF | 2630 | 1450 | 2184 | 2280   | ZR 75 VSD *    | 2630 | 1450 | 2184 | 2030   |
| ZR 90 VSD | 2630 | 1450 | 2184 | 2030   | ZR 90 VSD-FF | 2630 | 1450 | 2184 | 2280   | ZR 90 VSD *    | 2630 | 1450 | 2184 | 2030   |
| ZT 55     | 2180 | 1450 | 2184 | 1760   | ZT 55 FF     | 2880 | 1450 | 2184 | 2360   | ZR 55 FF *     | 2880 | 1450 | 2184 | 1990   |
| ZT 75     | 2180 | 1450 | 2184 | 1835   | ZT 75 FF     | 2880 | 1450 | 2184 | 2475   | ZR 75 FF *     | 2880 | 1450 | 2184 | 2065   |
| ZT 90     | 2180 | 1450 | 2184 | 1900   | ZT 90 FF     | 2880 | 1450 | 2184 | 2500   | ZR 90 FF *     | 2880 | 1450 | 2184 | 2130   |
| ZT 75 VSD | 2630 | 1450 | 2184 | 2100   | ZT 75 VSD-FF | 3330 | 1450 | 2184 | 2700   | ZR 75 VSD-FF * | 3330 | 1450 | 2184 | 2370   |
| ZT 90 VSD | 2630 | 1450 | 2184 | 2100   | ZT 90 VSD-FF | 3330 | 1450 | 2184 | 2700   | ZR 90 VSD-FF * | 3330 | 1450 | 2184 | 2370   |

- <sup>(1)</sup> Reference conditions:
- dry air
  - absolute Inlet pressure, specify bar(a), ( e ) 1 bar(a)
  - cooling and air intake temperature 20 °C
  - nominal working pressure
  - performance of the compressor package measured according to ISO 1217, Third Edition, Annex C

\* Equipped with Energy Recovery system

- <sup>(2)</sup> Cooling water temperature rise of 15 °C
- <sup>(3)</sup> Max. capacity is at reference pressure and not at max. pressure
- <sup>(4)</sup> Pressure dewpoint is specified for
- 20 °C cooling air/water temperature
  - relative humidity of 60 %
  - nominal working pressure
  - load level of minimum 50 %
- For VSD: at reference speed
- <sup>(5)</sup> ± 3 dB(A) measured at a distance of 1 m and according to ISO 2151:2004 and using ISO 9614-2
- <sup>(6)</sup> Maximum intake / cooling air temperature is 50 °C for HAT versions

- Conversions
- 1 kg = 2.2 lbs
  - 1 mm = 0.039 inch
  - °F = °C x 9/5 + 32



## ZR 55-90 FF

| ZR/ZR FF<br>Watercooled<br>oil-free<br>compressors | Capacity FAD <sup>(1)</sup> |      |                     | Installed motor<br>power |     | Cooling water<br>consumption <sup>(2)</sup> |     | Pressure<br>dewpoint <sup>(4)</sup> | Sound<br>pressure<br>level <sup>(5)</sup> |
|--|-----------------------------|------|---------------------|--------------------------|-----|---|-----|-------------------------------------|---|
|  | Type                        | l/s  | m <sup>3</sup> /min | cfm                      | kW  | hp  | ZR  | ZR-FF                               |   |
| <b>50 Hz units</b>                                 |                             |      |                     |                          |     |   |     |                                     |   |
| ZR 55 - 7.5  | 143                         | 8.6  | 303                 | 55                       | 75  | 0.9   | 1.3 | -24                                 | 65  |
| ZR 55 - 8.6  | 131                         | 7.9  | 278                 | 55                       | 75  | 0.9   | 1.3 | -24                                 | 65  |
| ZR 55 - 10   | 121                         | 7.3  | 257                 | 55                       | 75  | 0.9   | 1.3 | -25                                 | 65  |
| <b>60 Hz units</b>                                 |                             |      |                     |                          |     |   |     |                                     |   |
| ZR 55 - 7.25                                       | 155                         | 9.3  | 329                 | 55                       | 75  | 1   | 1.4 | -24                                 | 65  |
| ZR 55 - 9  | 138                         | 8.3  | 293                 | 55                       | 75  | 1   | 1.4 | -25                                 | 65  |
| ZR 55 - 10.4                                       | 128                         | 7.7  | 271                 | 55                       | 75  | 1   | 1.4 | -25                                 | 65  |
| <b>50 Hz units</b>                                 |                             |      |                     |                          |     |   |     |                                     |   |
| ZR 75 - 7.5  | 194                         | 11.6 | 411                 | 75                       | 100 | 1.2   | 1.8 | -26                                 | 65  |
| ZR 75 - 8.6  | 184                         | 11.0 | 390                 | 75                       | 100 | 1.2   | 1.8 | -26                                 | 65  |
| ZR 75 - 10   | 174                         | 10.4 | 369                 | 75                       | 100 | 1.2   | 1.8 | -27                                 | 65  |
| <b>60 Hz units</b>                                 |                             |      |                     |                          |     |   |     |                                     |   |
| ZR 75 - 7.25                                       | 213                         | 12.8 | 452                 | 75                       | 100 | 1.3   | 1.9 | -26                                 | 65  |
| ZR 75 - 9  | 194                         | 11.6 | 411                 | 75                       | 100 | 1.3   | 1.9 | -27                                 | 65  |
| ZR 75 - 10.4                                       | 185                         | 11.1 | 392                 | 75                       | 100 | 1.3   | 1.9 | -27                                 | 65  |
| <b>50 Hz units</b>                                 |                             |      |                     |                          |     |   |     |                                     |   |
| ZR 90 - 7.5  | 234                         | 14.0 | 496                 | 90                       | 120 | 1.4   | 2.1 | -27                                 | 65  |
| ZR 90 - 8.6  | 220                         | 13.2 | 466                 | 90                       | 120 | 1.4   | 2.1 | -28                                 | 65  |
| ZR 90 - 10   | 209                         | 12.5 | 443                 | 90                       | 120 | 1.4   | 2.1 | -28                                 | 65  |
| <b>60 Hz units</b>                                 |                             |      |                     |                          |     |   |     |                                     |   |
| ZR 90 - 7.25                                       | 262                         | 15.7 | 555                 | 90                       | 120 | 1.6   | 2.3 | -26                                 | 65  |
| ZR 90 - 9  | 235                         | 14.1 | 498                 | 90                       | 120 | 1.6   | 2.3 | -28                                 | 65  |
| ZR 90 - 10.4                                       | 224                         | 13.4 | 475                 | 90                       | 120 | 1.6   | 2.3 | -29                                 | 65  |

## ZR 75-90 VSD-FF

| ZR VSD / ZR VSD-FF<br>Watercooled<br>oil-free<br>compressors | Capacity FAD <sup>(1)</sup> |      |                     | Cooling water<br>consumption <sup>(2)</sup> |             | Pressure<br>dewpoint <sup>(4)</sup> | Sound pressure<br>level <sup>(5)</sup> |           |
|--|-----------------------------|------|---------------------|---|-------------|-------------------------------------|--|-----------|
|  | Types – 50/60 Hz            | l/s  | m <sup>3</sup> /min | cfm   | ZR          | ZR-FF                               |  | ZR-FF     |
|  |                             |      |                     |   |             |                                     |  |           |
| <b>ZR 75 VSD-9 bar (e)</b>                                   |                             |      |                     |   | <b>1.25</b> | <b>1.92</b>                         | <b>-30</b>                             | <b>65</b> |
| Max <sup>(3)</sup>   | 220                         | 13.2 | 466                 |   |             |                                     |  |           |
| Min  | 75                          | 4.5  | 159                 |   |             |                                     |  |           |
| <b>ZR 75 VSD-10.4 bar (e)</b>                                |                             |      |                     |   | <b>1.25</b> | <b>1.92</b>                         | <b>-30</b>                             | <b>65</b> |
| Max <sup>(3)</sup>   | 198                         | 11.9 | 420                 |   |             |                                     |  |           |
| Min  | 98                          | 5.9  | 208                 |   |             |                                     |  |           |
| <b>ZR 90 VSD-9 bar (e)</b>                                   |                             |      |                     |   | <b>1.25</b> | <b>1.92</b>                         | <b>-30</b>                             | <b>65</b> |
| Max <sup>(3)</sup>   | 258                         | 15.5 | 547                 |   |             |                                     |  |           |
| Min  | 75                          | 4.5  | 159                 |   |             |                                     |  |           |
| <b>ZR 90 VSD-10.4 bar (e)</b>                                |                             |      |                     |   | <b>1.25</b> | <b>1.92</b>                         | <b>-30</b>                             | <b>65</b> |
| Max <sup>(3)</sup>   | 232                         | 13.9 | 492                 |   |             |                                     |  |           |
| Min  | 98                          | 5.9  | 208                 |   |             |                                     |  |           |

<sup>(1)</sup> Reference conditions:

- dry air
- absolute inlet pressure 1 bar(a)
- cooling and air intake temperature 20 °C
- nominal working pressure
- performance of the compressor package measured according to ISO 1217, Third Edition, Annex C

<sup>(2)</sup> Cooling water temperature rise of 15 °C

<sup>(3)</sup> Max. capacity is at reference pressure and not at max. pressure

<sup>(4)</sup> Pressure dewpoint is specified for

- 20 °C cooling air/water temperature

- relative humidity of 60 %

- nominal working pressure

- load level of minimum 50 %

For VSD: at reference speed

<sup>(5)</sup> ± 3 dB(A) measured at a distance of 1 m and according to ISO 2151:2004 and using ISO 9614-2

<sup>(6)</sup> Maximum intake / cooling air temperature is 50 °C for HAT versions

Conversions

- 1 kg = 2.2 lbs

- 1 mm = 0.039 inch

- °F = °C x 9/5 + 32

## ZR 110-750 and ZR 132-900 VSD compressors - 50 Hz

|                           | ZR watercooled | Capacity FAD <sup>(1)</sup> |                     |      | Installed motor power | Cooling water consumption <sup>(2)</sup> | Pressure dewpoint <sup>(3)</sup> | Noise level <sup>(4)</sup> |       | Weight | Dimensions L x W x H |                   |                    |
|---------------------------|----------------|-----------------------------|---------------------|------|-----------------------|--|----------------------------------|----------------------------|-------|--------|----------------------|-------------------|--------------------|
|                           | Type           | l/s                         | m <sup>3</sup> /min | cfm  |                       |  |                                  | kW                         | l/s   |        | °C                   | w/o duct<br>dB(A) | with duct<br>dB(A) |
| <b>50 Hz - 7.5 bar(e)</b> |                |                             |                     |      |                       |  |                                  |                            |       |        |                      |                   |                    |
| FF (with IMD Dryer)       | ZR 110         | 318                         | 19.1                | 674  | 110                   | 3.5                                      | -28                              | 70                         | 68    | 3265   | 3440                 | 2000              | 1650               |
|                           | ZR 132         | 367                         | 22.0                | 778  | 132                   | 4.1                                      | -29                              | 70                         | 68    | 3390   | 3440                 | 2000              | 1650               |
|                           | ZR 145         | 394                         | 23.6                | 835  | 145                   | 4.2                                      | -30                              | 70                         | 68    | 3530   | 3440                 | 2000              | 1650               |
|                           | ZR 160         | 471                         | 28.3                | 998  | 160                   | 4.4                                      | -25                              | 67                         | 66    | 4705   | 4340                 | 2000              | 1650               |
|                           | ZR 200         | 607                         | 36.4                | 1286 | 200                   | 5.1                                      | -25                              | 67                         | 66    | 5365   | 4340                 | 2000              | 1650               |
|                           | ZR 250         | 726                         | 43.6                | 1538 | 250                   | 5.8                                      | -28                              | 67                         | 66    | 5360   | 4340                 | 2000              | 1650               |
|                           | ZR 275         | 780                         | 46.8                | 1653 | 275                   | 6.2                                      | -30                              | 67                         | 66    | 5560   | 4340                 | 2000              | 1650               |
| Pack (w/o IMD Dryer)      | ZR 110         | 318                         | 19.1                | 674  | 110                   | 1.7                                      | -                                | 67                         | 65    | 2635   | 2540                 | 2000              | 1650               |
|                           | ZR 132         | 367                         | 22.0                | 778  | 132                   | 1.9                                      | -                                | 67                         | 65    | 2760   | 2540                 | 2000              | 1650               |
|                           | ZR 145         | 394                         | 23.6                | 835  | 145                   | 2.0                                      | -                                | 67                         | 66    | 2900   | 2540                 | 2000              | 1650               |
|                           | ZR 160         | 471                         | 28.3                | 998  | 160                   | 2.3                                      | -                                | 67                         | 66    | 3795   | 3140                 | 2000              | 1650               |
|                           | ZR 200         | 607                         | 36.4                | 1286 | 200                   | 3.0                                      | -                                | 67                         | 66    | 3995   | 3140                 | 2000              | 1650               |
|                           | ZR 250         | 726                         | 43.6                | 1538 | 250                   | 3.7                                      | -                                | 67                         | 66    | 3990   | 3140                 | 2000              | 1650               |
|                           | ZR 275         | 780                         | 46.8                | 1653 | 275                   | 4.1                                      | -                                | 67                         | 66    | 4190   | 3140                 | 2000              | 1650               |
|                           | ZR 300         | 775                         | 46.5                | 1642 | 315                   | 4.0                                      | -                                | 70                         | 69    | 6650   | 3700                 | 2400              | 2120               |
|                           | ZR 315         | 855                         | 51.3                | 1812 | 315                   | 4.4                                      | -                                | 71                         | 69    | 6650   | 3700                 | 2400              | 2120               |
|                           | ZR 355         | 949                         | 56.9                | 2011 | 355                   | 4.8                                      | -                                | 71                         | 69    | 6950   | 3700                 | 2400              | 2120               |
|                           | ZR 400         | 1049                        | 62.9                | 2223 | 400                   | 5.4                                      | -                                | 71                         | 70    | 7050   | 3700                 | 2400              | 2120               |
|                           | ZR 425         | 1162                        | 69.7                | 2462 | 450                   | 6.2                                      | -                                | 72                         | 70    | 7250   | 3700                 | 2400              | 2120               |
|                           | ZR 450         | 1257                        | 75.4                | 2663 | 450                   | 7.2                                      | -                                | 73                         | 71    | 9500   | 4060                 | 2400              | 2120               |
|                           | ZR 500         | 1387                        | 83.2                | 2939 | 500                   | 7.8                                      | -                                | 73                         | 71    | 9500   | 4060                 | 2400              | 2120               |
|                           | ZR 630         | 1726                        | 103.6               | 3657 | 630                   | 9.4                                      | -                                | 75                         | 73    | 10225  | 4060                 | 2400              | 2120               |
| ZR 750                    | 2075           | 124.5                       | 4397                | 750  | 11.3                  | -  | 75                               | 73                         | 10325 | 4060   | 2400                 | 2120              |                    |

<sup>(1)</sup> Reference conditions:

- dry air
- absolute inlet pressure 1 bar(a)
- cooling and air intake temperature 20 °C
- nominal working pressure
- performance of the compressor package measured according to ISO 1217, Third Edition, Annex C

<sup>(2)</sup> Cooling water temperature rise of 15 °C

<sup>(3)</sup> Max. capacity is at reference pressure and not at max. pressure

- <sup>(4)</sup> Pressure dewpoint is specified for
- 20 °C cooling air/water temperature
  - relative humidity of 60 %
  - nominal working pressure
  - load level of minimum 50 %
- For VSD: at reference speed

<sup>(5)</sup> ± 3 dB(A) measured at a distance of 1 m and

according to ISO 2151:2004 and using ISO 9614-2

<sup>(6)</sup> Maximum intake / cooling air temperature is 50 °C for HAT versions

Conversions

- 1 kg = 2.2 lbs
- 1 mm = 0.039 inch
- °F = °C x 9/5 + 32



ZR 110-750 and ZR 132-900 VSD compressors - 50 Hz

|                           | ZR water-cooled | Capacity FAD <sup>(1)</sup> |      |                     | Installed motor power | Cooling water consumption <sup>(2)</sup> | Pressure dewpoint <sup>(3)</sup> | Noise level <sup>*(4)</sup> |       | Weight | Dimensions L x W x H |      |                |
|---------------------------|-----------------|-----------------------------|------|---------------------|-----------------------|--|----------------------------------|-----------------------------|-------|--------|----------------------|------|----------------|
|                           |                 | Type                        | l/s  | m <sup>3</sup> /min |                       |  |                                  | cfm                         | kW    |        | l/s                  | °C   | w/o duct dB(A) |
| <b>50 Hz - 8.6 bar(e)</b> |                 |                             |      |                     |                       |  |                                  |                             |       |        |                      |      |                |
| FF (with IMD Dryer)       | ZR 110          | 285                         | 17.1 | 604                 | 110                   | 3.1                                      | -28                              | 70                          | 68    | 3265   | 3440                 | 2000 | 1650           |
|                           | ZR 132          | 326                         | 19.6 | 691                 | 132                   | 3.5                                      | -29                              | 70                          | 68    | 3390   | 3440                 | 2000 | 1650           |
|                           | ZR 132 VSD      | 372                         | 22.3 | 778                 | 132                   | 3.9                                      | -28/-32                          | 68-72                       | 66-69 | 3500   | 3440                 | 2000 | 1650           |
|                           | ZR 145          | 362                         | 21.7 | 767                 | 145                   | 3.9                                      | -30                              | 70                          | 68    | 3530   | 3440                 | 2000 | 1650           |
|                           | ZR 160          | 435                         | 26.1 | 922                 | 160                   | 4.2                                      | -25                              | 67                          | 66    | 4705   | 4340                 | 2000 | 1650           |
|                           | ZR 160 VSD      | 431                         | 25.9 | 913                 | 160                   | 4.2                                      | -28/-32                          | 68-74                       | 66-71 | 3500   | 3440                 | 2000 | 1650           |
|                           | ZR 200          | 553                         | 33.2 | 1172                | 200                   | 4.8                                      | -25                              | 67                          | 66    | 5365   | 4340                 | 2000 | 1650           |
|                           | ZR 250          | 691                         | 41.5 | 1464                | 250                   | 5.6                                      | -28                              | 67                          | 66    | 5360   | 4340                 | 2000 | 1650           |
|                           | ZR 250 VSD      | 721                         | 43.3 | 1528                | 250                   | 5.8                                      | -25/-30                          | 63-73                       | 62-71 | 6080   | 4340                 | 2000 | 1650           |
|                           | ZR 275          | 723                         | 43.4 | 1532                | 275                   | 5.8                                      | -30                              | 67                          | 66    | 5560   | 4340                 | 2000 | 1650           |
| ZR 315 VSD                | 836             | 50.2                        | 1771 | 299                 | 6.8                   | -25/-30                                  | 63-73                            | 62-71                       | 6080  | 4340   | 2000                 | 1650 |                |
| Pack (w/o IMD Dryer)      | ZR 110          | 285                         | 17.1 | 604                 | 110                   | 1.5                                      | -                                | 67                          | 65    | 2635   | 2540                 | 2000 | 1650           |
|                           | ZR 132          | 326                         | 19.6 | 691                 | 132                   | 1.7                                      | -                                | 67                          | 65    | 2760   | 2540                 | 2000 | 1650           |
|                           | ZR 132 VSD      | 376                         | 22.6 | 797                 | 132                   | 1.9                                      | -                                | 62-68                       | 61-66 | 2870   | 2540                 | 2000 | 1650           |
|                           | ZR 145          | 362                         | 21.7 | 767                 | 145                   | 1.9                                      | -                                | 67                          | 66    | 2900   | 2540                 | 2000 | 1650           |
|                           | ZR 160          | 435                         | 26.1 | 922                 | 160                   | 2.2                                      | -                                | 67                          | 66    | 3795   | 3140                 | 2000 | 1650           |
|                           | ZR 160 VSD      | 436                         | 26.1 | 922                 | 160                   | 2.2                                      | -                                | 62-70                       | 61-66 | 2870   | 2540                 | 2000 | 1650           |
|                           | ZR 200          | 553                         | 33.2 | 1172                | 200                   | 2.8                                      | -                                | 67                          | 66    | 3995   | 3140                 | 2000 | 1650           |
|                           | ZR 250          | 691                         | 41.5 | 1464                | 250                   | 3.5                                      | -                                | 67                          | 66    | 3990   | 3140                 | 2000 | 1650           |
|                           | ZR 250 VSD      | 721                         | 43.3 | 1528                | 250                   | 3.7                                      | -                                | 63-73                       | 62-71 | 4710   | 3140                 | 2000 | 1650           |
|                           | ZR 275          | 723                         | 43.4 | 1532                | 275                   | 3.8                                      | -                                | 67                          | 66    | 4190   | 3140                 | 2000 | 1650           |
|                           | ZR 300          | 723                         | 43.4 | 1532                | 315                   | 4.1                                      | -                                | 71                          | 70    | 6650   | 3700                 | 2400 | 2120           |
|                           | ZR 315          | 798                         | 47.9 | 1691                | 315                   | 4.5                                      | -                                | 72                          | 70    | 6650   | 3700                 | 2400 | 2120           |
|                           | ZR 315 VSD      | 836                         | 50.2 | 1771                | 299                   | 4.3                                      | -                                | 63-73                       | 62-71 | 4710   | 3140                 | 2000 | 1650           |
|                           | ZR 355          | 886                         | 53.2 | 1877                | 355                   | 4.9                                      | -                                | 72                          | 72    | 6950   | 3700                 | 2400 | 2120           |
|                           | ZR 400          | 978                         | 58.7 | 2072                | 400                   | 5.4                                      | -                                | 72                          | 71    | 7050   | 3700                 | 2400 | 2120           |
|                           | ZR 400 VSD      | 1114                        | 66.9 | 2361                | 425                   | 6.4                                      | -                                | 68-75                       | 66-73 | 8350   | 4060                 | 2470 | 2120           |
|                           | ZR 425          | 1081                        | 64.9 | 2291                | 450                   | 6.2                                      | -                                | 73                          | 71    | 7250   | 3700                 | 2400 | 2120           |
|                           | ZR 450          | 1166                        | 70.0 | 2471                | 450                   | 7.1                                      | -                                | 74                          | 72    | 9500   | 4060                 | 2400 | 2120           |
|                           | ZR 500          | 1291                        | 77.5 | 2735                | 500                   | 7.7                                      | -                                | 74                          | 72    | 9500   | 4060                 | 2400 | 2120           |
|                           | ZR 500 VSD      | 1318                        | 79.1 | 2793                | 525                   | 7.6                                      | -                                | 68-76                       | 66-74 | 8350   | 4060                 | 2470 | 2120           |
| ZR 630                    | 1602            | 96.1                        | 3394 | 630                 | 9.3                   | -  | 76                               | 74                          | 10225 | 4060   | 2400                 | 2120 |                |
| ZR 700 VSD                | 2063            | 123.8                       | 4371 | 700                 | 11.6                  | -  | 70-78                            | 68-76                       | 11850 | 4675   | 2470                 | 2120 |                |
| ZR 750                    | 1850            | 111.0                       | 3920 | 750                 | 10.7                  | -  | 76                               | 74                          | 10325 | 4060   | 2400                 | 2120 |                |
| ZR 900 VSD                | 2456            | 147.4                       | 5204 | 935                 | 13.2                  | -  | 68-78                            | 68-76                       | 11850 | 4675   | 2470                 | 2120 |                |
| <b>50 Hz - 10 bar(e)</b>  |                 |                             |      |                     |                       |  |                                  |                             |       |        |                      |      |                |
| FF (with IMD Dryer)       | ZR 110          | 265                         | 15.9 | 562                 | 110                   | 3.3                                      | -28                              | 70                          | 68    | 3265   | 3440                 | 2000 | 1650           |
|                           | ZR 132          | 313                         | 18.8 | 663                 | 132                   | 3.8                                      | -29                              | 70                          | 68    | 3390   | 3440                 | 2000 | 1650           |
|                           | ZR 132 VSD      | 330                         | 19.8 | 699                 | 132                   | 4.1                                      | 0,875                            | 68-72                       | 66-69 | 3500   | 3440                 | 2000 | 1650           |
|                           | ZR 145          | 334                         | 20.0 | 708                 | 145                   | 4.1                                      | -30                              | 70                          | 68    | 3530   | 3440                 | 2000 | 1650           |
|                           | ZR 160          | 402                         | 24.1 | 852                 | 160                   | 4.3                                      | -25                              | 67                          | 66    | 4705   | 4340                 | 2000 | 1650           |
|                           | ZR 160 VSD      | 392                         | 23.5 | 831                 | 160                   | 4.4                                      | 0,875                            | 68-74                       | 66-71 | 3500   | 3440                 | 2000 | 1650           |
|                           | ZR 200          | 504                         | 30.2 | 1068                | 200                   | 4.9                                      | -25                              | 67                          | 66    | 4905   | 4340                 | 2000 | 1650           |
|                           | ZR 250          | 629                         | 37.7 | 1333                | 250                   | 5.6                                      | -28                              | 67                          | 66    | 5360   | 4340                 | 2000 | 1650           |
|                           | ZR 250 VSD      | 648                         | 38.9 | 1373                | 250                   | 5.8                                      | -25/-30                          | 67-73                       | 65-71 | 6080   | 4340                 | 2000 | 1650           |
|                           | ZR 275          | 689                         | 41.3 | 1460                | 275                   | 6.0                                      | -30                              | 67                          | 66    | 5560   | 4340                 | 2000 | 1650           |
| ZR 315 VSD                | 746             | 44.8                        | 1581 | 299                 | 6.7                   | -25/-30                                  | 67-73                            | 65-71                       | 6080  | 4340   | 2000                 | 1650 |                |
| Pack (w/o IMD Dryer)      | ZR 110          | 265                         | 15.9 | 562                 | 110                   | 1.6                                      | -                                | 67                          | 65    | 2380   | 2540                 | 2000 | 1650           |
|                           | ZR 132          | 313                         | 18.8 | 663                 | 132                   | 1.8                                      | -                                | 67                          | 65    | 2440   | 2540                 | 2000 | 1650           |
|                           | ZR 132 VSD      | 333                         | 20.0 | 706                 | 132                   | 1.9                                      | -                                | 62-68                       | 61-66 | 2590   | 2540                 | 2000 | 1650           |
|                           | ZR 145          | 334                         | 20.0 | 708                 | 145                   | 1.9                                      | -                                | 67                          | 66    | 2580   | 2540                 | 2000 | 1650           |
|                           | ZR 160          | 402                         | 24.1 | 852                 | 160                   | 2.3                                      | -                                | 67                          | 66    | 3795   | 3140                 | 2000 | 1650           |
|                           | ZR 160 VSD      | 394                         | 23.6 | 835                 | 160                   | 2.1                                      | -                                | 62-70                       | 61-66 | 2590   | 2540                 | 2000 | 1650           |
|                           | ZR 200          | 504                         | 30.2 | 1068                | 200                   | 2.9                                      | -                                | 67                          | 66    | 3995   | 3140                 | 2000 | 1650           |
|                           | ZR 250          | 629                         | 37.7 | 1333                | 250                   | 3.6                                      | -                                | 67                          | 66    | 3990   | 3140                 | 2000 | 1650           |
|                           | ZR 250 VSD      | 648                         | 38.9 | 1373                | 250                   | 3.7                                      | -                                | 64-70                       | 65-68 | 4710   | 3140                 | 2000 | 1650           |
|                           | ZR 275          | 689                         | 41.3 | 1460                | 275                   | 4.0                                      | -                                | 67                          | 66    | 4190   | 3140                 | 2000 | 1650           |
|                           | ZR 300          | 689                         | 41.3 | 1460                | 315                   | 4.2                                      | -                                | 71                          | 70    | 6650   | 3700                 | 2400 | 2120           |
|                           | ZR 315          | 765                         | 45.9 | 1621                | 315                   | 4.5                                      | -                                | 72                          | 70    | 6650   | 3700                 | 2400 | 2120           |
|                           | ZR 315 VSD      | 746                         | 44.8 | 1581                | 299                   | 4.3                                      | -                                | 63-73                       | 62-71 | 4710   | 3140                 | 2000 | 1650           |
|                           | ZR 355          | 846                         | 50.8 | 1793                | 355                   | 4.9                                      | -                                | 73                          | 71    | 6950   | 3700                 | 2400 | 2120           |
|                           | ZR 400          | 939                         | 56.3 | 1990                | 400                   | 5.4                                      | -                                | 73                          | 71    | 7050   | 3700                 | 2400 | 2120           |
|                           | ZR 400 VSD      | 979                         | 58.7 | 2074                | 425                   | 5.7                                      | -                                | 69-76                       | 66-73 | 8350   | 4060                 | 2470 | 2120           |
|                           | ZR 450          | 1047                        | 62.8 | 2218                | 450                   | 7.1                                      | -                                | 74                          | 72    | 9500   | 4060                 | 2400 | 2120           |
|                           | ZR 500          | 1199                        | 71.9 | 2541                | 500                   | 7.9                                      | -                                | 74                          | 72    | 9500   | 4060                 | 2400 | 2120           |
|                           | ZR 500 VSD      | 1150                        | 69.0 | 2437                | 525                   | 7.6                                      | -                                | 69-77                       | 66-74 | 8350   | 4060                 | 2470 | 2120           |
|                           | ZR 630          | 1474                        | 88.4 | 3123                | 630                   | 9.3                                      | -                                | 76                          | 74    | 10225  | 4060                 | 2400 | 2120           |
| ZR 700 VSD                | 1859            | 111.5                       | 3939 | 700                 | 11.4                  | -  | 70-78                            | 68-76                       | 11850 | 4675   | 2470                 | 2120 |                |
| ZR 750                    | 1704            | 102.2                       | 3611 | 750                 | 10.5                  | -  | 76                               | 74                          | 10325 | 4060   | 2400                 | 2120 |                |
| ZR 900 VSD                | 2057            | 123.4                       | 4359 | 935                 | 12.5                  | -  | 68-79                            | 68-77                       | 11850 | 4675   | 2470                 | 2120 |                |
| <b>50 Hz - 13 bar(e)</b>  |                 |                             |      |                     |                       |  |                                  |                             |       |        |                      |      |                |
| FF (with IMD)             | ZR 145          | 297                         | 17.8 | 629                 | 145                   | 4.2                                      | -30                              | 75                          | 72    | 3530   | 3440                 | 2000 | 1650           |
|                           | ZR 250          | 505                         | 30.3 | 1070                | 250                   | 5.4                                      | -28                              | 72                          | 70    | 5360   | 4340                 | 2000 | 1650           |
|                           | ZR 275          | 550                         | 33.0 | 1165                | 275                   | 5.7                                      | -30                              | 72                          | 70    | 5560   | 4340                 | 2000 | 1650           |
| Pack (w/o IMD)            | ZR 145          | 297                         | 17.8 | 629                 | 145                   | 2.0                                      | -                                | 75                          | 72    | 2900   | 2540                 | 2000 | 1650           |
|                           | ZR 250          | 505                         | 30.3 | 1070                | 250                   | 3.4                                      | -                                | 72                          | 70    | 3990   | 3140                 | 2000 | 1650           |
|                           | ZR 275          | 551                         | 33.1 | 1168                | 275                   | 3.7                                      | -                                | 72                          | 70    | 4190   | 3140                 | 2000 | 1650           |

## ZR 110-750 and ZR 132-900 VSD compressors - 60 Hz

|                            | ZR<br>watercooled | Capacity FAD <sup>(1)</sup> |       |                     | Installed<br>motor<br>power | Cooling<br>water<br>consump-<br>tion <sup>(2)</sup> | Pressure<br>dewpoint <sup>(3)</sup> | Noise level* <sup>(4)</sup> |       | Weight | Dimensions L x W x H |      |          |           |    |    |    |    |
|----------------------------|-------------------|-----------------------------|-------|---------------------|-----------------------------|---|-------------------------------------|-----------------------------|-------|--------|----------------------|------|----------|-----------|----|----|----|----|
|                            |                   | Type                        | l/s   | m <sup>3</sup> /min |                             |   |                                     | cfm                         | HP    |        | l/s                  | °C   | w/o duct | with duct | kg | A  | B  | C  |
|                            |                   |                             |       |                     |                             |   |                                     |                             |       |        |                      |      | dB(A)    | dB(A)     |    | mm | mm | mm |
| <b>60 Hz - 7 bar(e)</b>    |                   |                             |       |                     |                             |   |                                     |                             |       |        |                      |      |          |           |    |    |    |    |
| FF (with<br>IMD<br>Dryer)  | ZR 110            | 352                         | 21.1  | 746                 | 150                         | 3.9   | -28                                 | 70                          | 68    | 3265   | 3440                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 160            | 463                         | 27.8  | 981                 | 200                         | 4.4   | -25                                 | 67                          | 66    | 4695   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 200            | 574                         | 34.4  | 1216                | 250                         | 4.9   | -25                                 | 67                          | 66    | 5305   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 250            | 667                         | 40.0  | 1413                | 300                         | 5.4   | -28                                 | 67                          | 66    | 5515   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 275            | 752                         | 45.1  | 1593                | 350                         | 5.9   | -30                                 | 67                          | 66    | 5635   | 4340                 | 2000 | 1650     |           |    |    |    |    |
| Pack<br>(w/o IMD<br>Dryer) | ZR 110            | 352                         | 21.1  | 746                 | 150                         | 1.9   | -                                   | 67                          | 65    | 2635   | 2540                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 160            | 463                         | 27.8  | 981                 | 200                         | 2.3   | -                                   | 67                          | 66    | 3785   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 200            | 574                         | 34.4  | 1216                | 250                         | 2.9   | -                                   | 67                          | 66    | 3935   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 250            | 667                         | 40.0  | 1413                | 300                         | 3.4   | -                                   | 67                          | 66    | 4145   | 3140                 | 2000 | 1650     |           |    |    |    |    |
| ZR 275                     | 752               | 45.1                        | 1593  | 350                 | 3.8                         | -   | 67                                  | 66                          | 4265  | 3140   | 2000                 | 1650 |          |           |    |    |    |    |
| <b>60 Hz - 8.6 bar(e)</b>  |                   |                             |       |                     |                             |   |                                     |                             |       |        |                      |      |          |           |    |    |    |    |
| FF (with<br>IMD<br>Dryer)  | ZR 110            | 321                         | 19.3  | 679                 | 150                         | 3.8   | -28                                 | 70                          | 68    | 3265   | 3440                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 132 VSD        | 372                         | 22.3  | 778                 | 175                         | 3.9   | -28/-32                             | 68-72                       | 66-69 | 3500   | 3440                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 145            | 398                         | 23.9  | 843                 | 200                         | 4.1   | -30                                 | 70                          | 68    | 3530   | 3440                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 160            | 419                         | 25.1  | 888                 | 200                         | 4.4   | -25                                 | 67                          | 66    | 4695   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 160 VSD        | 431                         | 25.9  | 913                 | 215                         | 4.2   | -28/-32                             | 68-74                       | 66-71 | 3500   | 3440                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 200            | 516                         | 31.0  | 1093                | 250                         | 4.6   | -25                                 | 67                          | 66    | 5305   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 250            | 619                         | 37.1  | 1312                | 300                         | 5.2   | -28                                 | 67                          | 66    | 5515   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 250 VSD        | 721                         | 43.3  | 1528                | 335                         | 5.8   | -25/-30                             | 63-73                       | 62-71 | 6080   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 275            | 726                         | 43.6  | 1538                | 350                         | 5.8   | -30                                 | 67                          | 66    | 5635   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 315 VSD        | 836                         | 50.2  | 1771                | 400                         | 6.8   | -25/-30                             | 63-73                       | 62-71 | 6080   | 4340                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 110            | 321                         | 19.3  | 679                 | 150                         | 1.7   | -                                   | 67                          | 65    | 2635   | 2540                 | 2000 | 1650     |           |    |    |    |    |
| Pack (w/o<br>IMD<br>Dryer) | ZR 132 VSD        | 376                         | 22.6  | 797                 | 175                         | 1.9   | -                                   | 62-68                       | 61-66 | 2870   | 2540                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 145            | 398                         | 23.9  | 843                 | 200                         | 2.1   | -                                   | 68                          | 66    | 2900   | 2540                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 160            | 419                         | 25.1  | 888                 | 200                         | 2.1   | -                                   | 67                          | 66    | 3785   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 160 VSD        | 436                         | 26.1  | 922                 | 215                         | 2.2   | -                                   | 62-70                       | 61-66 | 2870   | 2540                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 200            | 516                         | 31.0  | 1093                | 250                         | 2.6   | -                                   | 67                          | 66    | 3935   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 250            | 619                         | 37.1  | 1312                | 300                         | 3.1   | -                                   | 67                          | 66    | 4145   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 250 VSD        | 721                         | 43.3  | 1528                | 335                         | 3.7   | -                                   | 63-73                       | 62-71 | 4710   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 275            | 726                         | 43.6  | 1538                | 350                         | 3.7   | -                                   | 67                          | 66    | 4265   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 300            | 755                         | 45.3  | 1600                | 350                         | 4.1   | -                                   | 71                          | 70    | 6550   | 3700                 | 2400 | 2120     |           |    |    |    |    |
|                            | ZR 315            | 850                         | 51.0  | 1801                | 400                         | 4.6   | -                                   | 72                          | 70    | 6550   | 3700                 | 2400 | 2120     |           |    |    |    |    |
|                            | ZR 315 VSD        | 836                         | 50.2  | 1771                | 400                         | 4.3   | -                                   | 63-73                       | 62-71 | 4710   | 3140                 | 2000 | 1650     |           |    |    |    |    |
|                            | ZR 355            | 955                         | 57.3  | 2024                | 450                         | 5.1   | -                                   | 72                          | 70    | 6950   | 3700                 | 2400 | 2120     |           |    |    |    |    |
|                            | ZR 400            | 1043                        | 62.6  | 2210                | 500                         | 5.6   | -                                   | 72                          | 71    | 7050   | 3700                 | 2400 | 2120     |           |    |    |    |    |
|                            | ZR 400 VSD        | 1114                        | 66.9  | 2361                | 570                         | 6.4   | -                                   | 68-75                       | 66-73 | 8320   | 4060                 | 2470 | 2120     |           |    |    |    |    |
|                            | ZR 450            | 1306                        | 78.4  | 2767                | 600                         | 7.8   | -                                   | 74                          | 72    | 9300   | 4060                 | 2400 | 2120     |           |    |    |    |    |
|                            | ZR 500            | 1538                        | 92.3  | 3259                | 700                         | 8.9   | -                                   | 74                          | 72    | 9500   | 4060                 | 2400 | 2120     |           |    |    |    |    |
|                            | ZR 500 VSD        | 1318                        | 79.1  | 2793                | 703                         | 7.6   | -                                   | 68-76                       | 66-74 | 8320   | 4060                 | 2470 | 2120     |           |    |    |    |    |
|                            | ZR 630            | 1700                        | 102.0 | 3602                | 800                         | 9.9   | -                                   | 76                          | 74    | 10225  | 4060                 | 2400 | 2120     |           |    |    |    |    |
|                            | ZR 700 VSD        | 2063                        | 123.8 | 4371                | 938                         | 11.6  | -                                   | 70-78                       | 68-76 | 11850  | 4675                 | 2470 | 2120     |           |    |    |    |    |
|                            | ZR 750            | 1939                        | 116.3 | 4109                | 900                         | 11.2  | -                                   | 76                          | 74    | 10225  | 4060                 | 2400 | 2120     |           |    |    |    |    |
| ZR 900 VSD                 | 2456              | 147.4                       | 5204  | 1253                | 13.2                        | -   | 68-78                               | 68-76                       | 11850 | 4675   | 2470                 | 2120 |          |           |    |    |    |    |

<sup>(1)</sup> Reference conditions:

- dry air
- absolute inlet pressure 1 bar(a)
- cooling and air intake temperature 20 °C
- nominal working pressure
- performance of the compressor package measured according to ISO 1217, Third Edition, Annex C

<sup>(2)</sup> Cooling water temperature rise of 15 °C<sup>(3)</sup> Max. capacity is at reference pressure and not at max. pressure

- <sup>(4)</sup> Pressure dewpoint is specified for
  - 20 °C cooling air/water temperature
  - relative humidity of 60 %
  - nominal working pressure
  - load level of minimum 50 %

<sup>(5)</sup> ± 3 dB(A) measured at a distance of 1 m and

according to ISO 2151:2004 and using ISO 9614-2

<sup>(6)</sup> Maximum intake / cooling air temperature is 50 °C for

HAT versions

Conversions

- 1 kg = 2.2 lbs
- 1 mm = 0.039 inch
- °F = °C x 9/5 + 32



ZR 110-750 and ZR 132-900 VSD compressors - 60 Hz

|                      | ZR water-cooled | Capacity FAD <sup>(1)</sup> |      |                     | Installed motor power | Cooling water consumption <sup>(2)</sup> | Pressure dewpoint <sup>(3)</sup> | Noise level <sup>(4)</sup> |       | Weight | Dimensions L x W x H |      |          |
|----------------------|-----------------|-----------------------------|------|---------------------|-----------------------|--|----------------------------------|----------------------------|-------|--------|----------------------|------|----------|
|                      |                 | Type                        | l/s  | m <sup>3</sup> /min |                       |  |                                  | cfm                        | HP    |        | l/s                  | °C   | w/o duct |
| 60 Hz - 10.4 bar(e)  |                 |                             |      |                     |                       |  |                                  |                            |       |        |                      |      |          |
| FF (with IMD Dryer)  | ZR 110          | 287                         | 17.2 | 608                 | 150                   | 3.5                                      | -28                              | 70                         | 68    | 3265   | 3440                 | 2000 | 1650     |
|                      | ZR 132 VSD      | 330                         | 19.8 | 699                 | 175                   | 3.9                                      | -28/-32                          | 68-72                      | 66-69 | 3500   | 3440                 | 2000 | 1650     |
|                      | ZR 145          | 336                         | 20.2 | 712                 | 200                   | 4.1                                      | -30                              | 70                         | 68    | 3530   | 3440                 | 2000 | 1650     |
|                      | ZR 160          | 375                         | 22.5 | 795                 | 200                   | 4.4                                      | -25                              | 67                         | 66    | 4695   | 4340                 | 2000 | 1650     |
|                      | ZR 160 VSD      | 392                         | 23.5 | 831                 | 215                   | 4.2                                      | -28/-32                          | 68-74                      | 66-71 | 3500   | 3440                 | 2000 | 1650     |
|                      | ZR 200          | 459                         | 27.5 | 973                 | 250                   | 4.7                                      | -25                              | 67                         | 66    | 4845   | 4340                 | 2000 | 1650     |
|                      | ZR 250          | 548                         | 32.9 | 1161                | 300                   | 5.2                                      | -28                              | 67                         | 66    | 5515   | 4340                 | 2000 | 1650     |
|                      | ZR 250 VSD      | 648                         | 38.9 | 1373                | 335                   | 5.8                                      | -25/-30                          | 67-73                      | 65-71 | 6080   | 4340                 | 2000 | 1650     |
|                      | ZR 275          | 641                         | 38.5 | 1358                | 350                   | 5.7                                      | -30                              | 67                         | 66    | 5635   | 4340                 | 2000 | 1650     |
| Pack (w/o IMD Dryer) | ZR 315 VSD      | 746                         | 44.8 | 1581                | 400                   | 6.7                                      | -25/-30                          | 67-73                      | 65-71 | 6080   | 4340                 | 2000 | 1650     |
|                      | ZR 110          | 287                         | 17.2 | 608                 | 150                   | 1.7                                      | -                                | 67                         | 65    | 2635   | 2540                 | 2000 | 1650     |
|                      | ZR 132 VSD      | 333                         | 20.0 | 706                 | 214                   | 1.9                                      | -                                | 62-68                      | 61-66 | 2590   | 2540                 | 2000 | 1650     |
|                      | ZR 145          | 336                         | 20.2 | 712                 | 200                   | 2.0                                      | -                                | 67                         | 66    | 2900   | 2540                 | 2000 | 1650     |
|                      | ZR 160          | 375                         | 22.5 | 795                 | 200                   | 2.2                                      | -                                | 67                         | 66    | 3785   | 3140                 | 2000 | 1650     |
|                      | ZR 160 VSD      | 394                         | 23.6 | 835                 | 215                   | 2.1                                      | -                                | 62-70                      | 61-66 | 2590   | 2540                 | 2000 | 1650     |
|                      | ZR 200          | 459                         | 27.5 | 973                 | 250                   | 2.6                                      | -                                | 67                         | 66    | 3935   | 3140                 | 2000 | 1650     |
|                      | ZR 250          | 548                         | 32.9 | 1161                | 300                   | 3.1                                      | -                                | 67                         | 66    | 4145   | 3140                 | 2000 | 1650     |
|                      | ZR 250 VSD      | 648                         | 38.9 | 1373                | 335                   | 3.7                                      | -                                | 64-70                      | 65-68 | 4710   | 3140                 | 2000 | 1650     |
|                      | ZR 275          | 641                         | 38.5 | 1358                | 350                   | 3.6                                      | -                                | 67                         | 66    | 4265   | 3140                 | 2000 | 1650     |
|                      | ZR 300          | 677                         | 40.6 | 1434                | 350                   | 4.3                                      | -                                | 71                         | 70    | 6550   | 3700                 | 2400 | 2120     |
|                      | ZR 315          | 762                         | 45.7 | 1615                | 400                   | 4.6                                      | -                                | 72                         | 70    | 6550   | 3700                 | 2400 | 2120     |
|                      | ZR 315 VSD      | 746                         | 44.8 | 1581                | 400                   | 4.3                                      | -                                | 63-73                      | 62-71 | 4710   | 3140                 | 2000 | 1650     |
|                      | ZR 355          | 858                         | 51.5 | 1818                | 450                   | 5.1                                      | -                                | 73                         | 71    | 6950   | 3700                 | 2400 | 2120     |
|                      | ZR 400          | 945                         | 56.7 | 2002                | 500                   | 5.5                                      | -                                | 73                         | 71    | 7050   | 3700                 | 2400 | 2120     |
|                      | ZR 400 VSD      | 979                         | 58.7 | 2074                | 570                   | 5.7                                      | -                                | 69-76                      | 66-73 | 8350   | 4060                 | 2470 | 2120     |
|                      | ZR 450          | 1144                        | 68.6 | 2424                | 600                   | 7.7                                      | -                                | 74                         | xx    | 9300   | 4060                 | 2400 | 2120     |
|                      | ZR 500          | 1332                        | 79.9 | 2822                | 700                   | 8.7                                      | -                                | 75                         | xx    | 9500   | 4060                 | 2400 | 2120     |
|                      | ZR 500 VSD      | 1150                        | 69.0 | 2437                | 703                   | 7.6                                      | -                                | 69-77                      | 66-74 | 8350   | 4060                 | 2470 | 2120     |
|                      | ZR 630          | 1474                        | 88.4 | 3123                | 800                   | 9.4                                      | -                                | 76                         | 74    | 10225  | 4060                 | 2400 | 2120     |
| ZR 700 VSD           | 1859            | 111.5                       | 3939 | 938                 | 11.4                  | -  | 70-78                            | 68-76                      | 11850 | 4675   | 2470                 | 2120 |          |
| ZR 750               | 1739            | 104.3                       | 3685 | 900                 | 10.8                  | -  | 76                               | 74                         | 10225 | 4060   | 2400                 | 2120 |          |
| ZR 900 VSD           | 2057            | 123.4                       | 4359 | 1253                | 12.5                  | -  | 68-79                            | 68-77                      | 11850 | 4675   | 2470                 | 2120 |          |
| 60 Hz - 13 bar(e)    |                 |                             |      |                     |                       |  |                                  |                            |       |        |                      |      |          |
| FF (with IMD Dryer)  | ZR 145          | 299                         | 17.9 | 634                 | 200                   | 4.3                                      | -28                              | 75                         | 72    | 3530   | 3440                 | 2000 | 1650     |
|                      | ZR 250          | 491                         | 29.5 | 1040                | 300                   | 5.4                                      | -28                              | 72                         | 70    | 5515   | 4340                 | 2000 | 1650     |
|                      | ZR 275          | 550                         | 33.0 | 1165                | 350                   | 5.8                                      | -30                              | 72                         | 70    | 5635   | 4340                 | 2000 | 1650     |
| Pack (w/o IMD Dryer) | ZR 145          | 299                         | 17.9 | 634                 | 200                   | 2.0                                      | -                                | 75                         | 72    | 2900   | 2540                 | 2000 | 1650     |
|                      | ZR 250          | 491                         | 29.5 | 1040                | 300                   | 3.4                                      | -                                | 72                         | 70    | 4145   | 3140                 | 2000 | 1650     |
|                      | ZR 275          | 550                         | 33.0 | 1165                | 350                   | 3.8                                      | -                                | 72                         | 70    | 4265   | 3140                 | 2000 | 1650     |

<sup>(1)</sup> Reference conditions:

- dry air
- absolute inlet pressure 1 bar(a)
- cooling and air intake temperature 20 °C
- nominal working pressure
- performance of the compressor package measured according to ISO 1217, Third Edition, Annex C

<sup>(2)</sup> Cooling water temperature rise of 15 °C

<sup>(3)</sup> Max. capacity is at reference pressure and

not at max. pressure

- <sup>(4)</sup> Pressure dewpoint is specified for
  - 20 °C cooling air/water temperature
  - relative humidity of 60 %
  - nominal working pressure
  - load level of minimum 50 %
- For VSD: at reference speed

<sup>(5)</sup> ± 3 dB(A) measured at a distance of 1 m and according to ISO 2151:2004 and using ISO 9614-2

<sup>(6)</sup> Maximum intake / cooling air temperature is 50 °C for

HAT versions

Conversions

- 1 kg = 2.2 lbs
- 1 mm = 0.039 inch
- °F = °C x 9/5 + 32