

**50 bar**

max. operating pressure

**1,5 to 45 °C**

operating ambient temperature

**3°C**

pressure dew point

**20 to 950 Nm<sup>3</sup>/h**

flow rate

**R134a**

refrigerant

**air cooled**

type of cooling

## DESCRIPTION

RDHP series (high pressure dryers for compressed air systems up to 50 barg) makes the most of manufacturing and functional advantages of heat exchangers, designed for high pressure working conditions.

Drying is achieved on the principle of cooling which takes place with highly efficient three stage air thermal management.

Excellent performance with low pressure drop and constant pressure dew point is standard on this series. Robustness, simple and ergonomic component layout guarantees functionality and efficiency.

## APPLICATIONS

- High pressure compressed air systems

# RDHP SERIES

## REFRIGERATION HIGH PRESSURE COMPRESSED AIR DRYERS




**TECHNICAL DATA**

| Type     | Inlet flow         | Dimensions |           |           | Air connection<br>IN and OUT |
|----------|--------------------|------------|-----------|-----------|------------------------------|
|          | Nm <sup>3</sup> /h | W<br>[mm]  | L<br>[mm] | H<br>[mm] |                              |
| RDHP 20  | 20                 | 358        | 455       | 604       | G 3/8" BSP-F                 |
| RDHP 35  | 35                 | 358        | 455       | 604       | G 3/8" BSP-F                 |
| RDHP 50  | 50                 | 358        | 455       | 604       | G 3/8" BSP-F                 |
| RDHP 75  | 75                 | 358        | 455       | 604       | G 3/8" BSP-F                 |
| RDHP 100 | 100                | 358        | 455       | 604       | G 3/8" BSP-F                 |
| RDHP 140 | 140                | 486        | 580       | 904       | G 1/2" BSP-F                 |
| RDHP 180 | 180                | 486        | 580       | 904       | G 1/2" BSP-F                 |
| RDHP 235 | 235                | 486        | 580       | 904       | G 1/2" BSP-F                 |
| RDHP 300 | 300                | 486        | 580       | 904       | G 3/4" BSP-F                 |
| RDHP 380 | 380                | 596        | 735       | 1104      | G 3/4" BSP-F                 |
| RDHP 480 | 480                | 596        | 735       | 1104      | G 3/4" BSP-F                 |
| RDHP 600 | 600                | 718        | 697       | 1405      | G 1" BSP-F                   |
| RDHP 750 | 750                | 596        | 735       | 1104      | G 1" BSP-F                   |
| RDHP 950 | 950                | 718        | 697       | 1405      | G 1" BSP-F                   |

**CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES**

|                          |      |      |      |      |      |      |      |     |
|--------------------------|------|------|------|------|------|------|------|-----|
| Operating pressure [bar] | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50  |
| Operating pressure [bar] | 218  | 290  | 363  | 435  | 508  | 580  | 652  | 725 |
| Correction factor        | 0,52 | 0,64 | 0,73 | 0,80 | 0,85 | 0,91 | 0,95 | 1   |

**CORRECTION FACTOR FOR DEW POINT CHANGES**

|                   |      |       |       |       |
|-------------------|------|-------|-------|-------|
| Temperature [°C]  | 3    | 5     | 7     | 10    |
| Temperature [°F]  | 37,4 | 41    | 44,6  | 50    |
| Correction factor | 1,00 | 1,099 | 1,209 | 1,385 |

**CORRECTION FACTOR FOR INLET TEMPERATURE CHANGES**

|                   |     |      |    |      |      |      |     |
|-------------------|-----|------|----|------|------|------|-----|
| Temperature [°C]  | ≤25 | 30   | 35 | 40   | 45   | 50   | 55  |
| Temperature [°F]  | 77  | 86   | 95 | 104  | 113  | 122  | 131 |
| Correction factor | 1,2 | 1,12 | 1  | 0,83 | 0,69 | 0,59 | 0,5 |

**CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES**

|                   |     |      |     |      |      |
|-------------------|-----|------|-----|------|------|
| Temperature [°C]  | ≤25 | 30   | 35  | 40   | 45   |
| Temperature [°F]  | 77  | 86   | 95  | 104  | 113  |
| Correction factor | 1   | 0,96 | 0,9 | 0,82 | 0,72 |