

### Contact your local Worthington Creyssensac representative

Care. Trust. Efficiency



#### Care

Care is what service is all about: professional service by knowledgeable people, using high-quality original parts.

### Trust

Trust is earned by delivering on our promises of reliable, uninterrupted performance and long equipment lifetime.

### **Efficiency**

is ensured by regular maintenance. Efficiency of the service organization is how Original Parts and Service make the difference.







BECAUSE IMPROVEMENT





What are the two most important criteria when selecting a compressed air dryer? It's air quality and operational costs. Worthington Creyssensac's DW ES cycling dryer delivers on both. With a stable pressure dew point as low as 3°C, it gives you a reliable supply of premium, dry air. At the same time, the DW ES keeps your energy use and costs in check with its advanced efficiency features. With 18 sizes to choose from, you can be sure there is a DW ES to meet your requirements.





### AIR QUALITY YOU CAN COUNT ON...

- Stable pressure dew point as low as +3°C.
- Constant purity class -;4 according ISO 8573-1:2010.
- Hot gas bypass valve stabilizes pressure dew point and prevents freezing at lower loads.
- Fan switch optimizes the pressure dew point at very low temperatures.



#### ... AT A LOW OPERATIONAL COST

- Low pressure drop, typically below 0.2 bar/2.9 psi.
- Cycling technology cuts energy consumption during intermittent use.
- Heat exchanger designed for optimal pre-cooling and minimal pressure drop.
- Electronic condensate drain prevents compressed air waste by opening only when needed.

## AIRLOGIC<sup>2</sup> CONTROLLER & CONNECTIVITY

The Airlogic<sup>2</sup> Graphic controller helps you monitor and manage your DW ES' performance:

- → USER-FRIENDLY graphic screens, data logging and storage.
- → ENERGY SAVINGS with dual pressure band time scheduling and start/stop timers.
- → INCREASE RELIABILITY with planned service interventions.
- → MINIMIZE THE RISK OF DOWNTIME with the Airlogic<sup>2</sup>'s service alerts and shutdown alarms.





## ZERO DEPLETION

Meeting emission and sustainability standards has become a mandatory requirement. The DW ES was designed to minimize your environmental impact. Aside from its energy efficiency, both refrigerants (R513 A and R410A) used are CFC-free and have an ozone depletion potential (ODP) of zero.





### DO I REALLY NEED A COMPRESSED AIR DRYER?

The short answer: yes, you really do. The air that surrounds us naturally contains water vapors. When that air is compressed, the concentration of these water vapors increases. For example, a 15kW compressor can generate 1.3 liters per hour of excess water and moisture. If this moisture is not removed, it can compromise your entire air system. A dryer protects your air network and equipment, as well as your final products from corrosion and contamination.

# TECHNICAL SPECIFICATIONS

| Model     | Max.<br>working<br>pressure |     | Air treatment capacity |      | Power consumption |      | Inlet/outlet connections | Dimensions |      |      | Weight |     |                 |
|-----------|-----------------------------|-----|------------------------|------|-------------------|------|--------------------------|------------|------|------|--------|-----|-----------------|
|           | bar                         | psi | l/min                  | m³/h | cfm               | w    | V/Ph/Hz                  | Gas/DN     | A mm | B mm | C mm   | KG  | Refrigerant gas |
| DW 2 ES   | 16                          | 232 | 360                    | 21.6 | 12.7              | 200  | 230/1/50                 | 3/4" M     | 393  | 525  | 521    | 27  | R513 A          |
| DW 3 ES   | 16                          | 232 | 600                    | 36   | 21.2              | 200  | 230/1/50                 | 3/4" M     | 393  | 525  | 521    | 27  | R513 A          |
| DW 5 ES   | 16                          | 232 | 900                    | 54   | 31.8              | 330  | 230/1/50                 | 3/4" M     | 393  | 525  | 521    | 32  | R513 A          |
| DW 7 ES   | 16                          | 232 | 1200                   | 72   | 42.4              | 410  | 230/1/50                 | 3/4" M     | 393  | 525  | 521    | 34  | R513 A          |
| DW 9 ES   | 16                          | 232 | 1500                   | 90   | 53                | 410  | 230/1/50                 | 3/4" M     | 393  | 525  | 521    | 34  | R513 A          |
| DW 11 ES  | 16                          | 232 | 1800                   | 108  | 64                | 410  | 230/1/50                 | 3/4" M     | 393  | 525  | 521    | 34  | R513 A          |
| DW 14 ES  | 16                          | 232 | 2400                   | 144  | 85                | 570  | 230/1/50                 | 1" M       | 393  | 716  | 675    | 56  | R513 A          |
| DW 18 ES  | 16                          | 232 | 3000                   | 180  | 106               | 540  | 230/1/50                 | 1" M       | 393  | 716  | 675    | 57  | R513 A          |
| DW 21 ES  | 14                          | 203 | 3600                   | 216  | 127               | 700  | 230/1/50                 | 1" M       | 792  | 500  | 680    | 80  | R410 A          |
| DW 25 ES  | 14                          | 203 | 4200                   | 252  | 148               | 700  | 230/1/50                 | 1" M       | 792  | 500  | 680    | 80  | R410 A          |
| DW 34 ES  | 14                          | 203 | 5700                   | 342  | 201               | 890  | 230/1/50                 | 1" M       | 792  | 500  | 680    | 107 | R410 A          |
| DW 111 ES | 14                          | 203 | 18600                  | 1116 | 657               | 2800 | 400/3/50                 | 3" M       | 1330 | 850  | 1190   | 220 | R410 A          |
| DW 148 ES | 14                          | 203 | 24600                  | 1476 | 869               | 4600 | 400/3/50                 | 3" M       | 1330 | 850  | 1374   | 245 | R410 A          |
| DW 184 ES | 14                          | 203 | 30600                  | 1836 | 1081              | 6400 | 400/3/50                 | 3" M       | 1605 | 850  | 1375   | 315 | R410 A          |
| DW 220 ES | 14                          | 203 | 36600                  | 2196 | 1292              | 4800 | 400/3/50                 | DN 100     | 1054 | 1060 | 1660   | 325 | R410 A          |
| DW 274 ES | 14                          | 203 | 45600                  | 2736 | 1610              | 5300 | 400/3/50                 | DN 100     | 1256 | 1060 | 1685   | 390 | R410 A          |
| DW 313 ES | 14                          | 203 | 52200                  | 3132 | 1843              | 6600 | 400/3/50                 | DN 150     | 1258 | 1060 | 1685   | 410 | R410 A          |
| DW 364 ES | 14                          | 203 | 60600                  | 3636 | 2140              | 7400 | 400/3/50                 | DN 150     | 1594 | 1060 | 1660   | 460 | R410 A          |

 $Tested\ according\ to\ ISO\ 7183:2007\ and\ Cagi\ Pneurop\ PN8NTC2.\ Data\ refers\ to\ 50Hz\ air-cooled\ version.\ For\ water-cooled\ and\ 20-bar\ versions,\ refer\ to\ the\ data\ sheet.$ 



## REFERENCE CONDITIONS FOR DW 2-364 ES

Operating pressure: 7 bar. Operating temperature: 35°C. Ambient temperature: 25°C.

Pressure dew point: 3°C +/1°C.

## OPERATING LIMIT CONDITIONS FOR DW 2-34 ES

Max. operating pressure: 16 bar (DW 2-18 ES); 14 bar (DW 21-34 ES). Max. inlet temperature: 60°C.

Min./max. ambient temperature: 1°C/50°C.

## OPERATING LIMIT CONDITIONS FOR DW 111-184 ES

Max. operating pressure: 14 bar. Max. inlet temperature: 56°C.

Min./max. ambient temperature: 1°C/46°C.

## OPERATING LIMIT CONDITIONS FOR DW 220-364 ES

Max. operating pressure: 14 bar. Max. inlet temperature: 50°C.

Min./max. ambient temperature: 1°C/40°C.

#### CORRECTION FACTORS FOR CONDITIONS DIFFERING FROM THE REFERENCE CONDITIONS

| Correction factors for differ                       | ent am   | bient tei | mperatu | res  |      |      |      |      |      |      |     |
|---|----------|-----------|---------|------|------|------|------|------|------|------|-----|
| Ambient temperature °C                              | 25       | 30        | 35      | 40   | 45   | 50   |      |      |      |      |     |
| Multiplication factor                               | 1        | 0.95      | 0.88    | 0.81 | 0.74 | 0.67 |      |      |      |      |     |
| Correction factors for different inlet temperatures |          |           |         |      |      |      |      |      |      |      |     |
| Inlet temperature °C                                | 25       | 30        | 35      | 40   | 45   | 50   | 55   | 60   |      |      |     |
| Multiplication factor                               | 1.2      | 1.1       | 1       | 0.85 | 0.72 | 0.6  | 0.49 | 0.37 |      |      |     |
| Correction factors for differ                       | ent inle | t pressu  | ires    |      |      |      |      |      |      |      |     |
| Inlet pressure (bar)                                | 2        | 3         | 4       | 5    | 6    | 7    | 8    | 10   | 12   | 14   | 16  |
| Multiplication factor                               | 0.5      | 0.63      | 0.74    | 0.84 | 0.92 | 1    | 1.05 | 1.15 | 1.25 | 1.31 | 1.4 |