



- Large condenser for high ambient temperatures
- Anti-recycle feature for compressor protection
- Low pressure drop across advanced heat exchangers saves energy
- The dryers have been designed for nominal standard inlet conditions as per ISO 7183 - 2007
- Dryer Quality class - ISO 8573 - 1 : 2010 (E) class -5-



Refrigeration Compressed Air Dryer

**Coldspell**

## Specification of Dryer

| Model          | Item Code | Flow in scfm | Power consumption (KW)<br>R134a/R407c | End connection | Dimension (mm) |      |      | Weight (kg) | Recommended Pre Filter**<br>5 Micron | Recommended Post Filter** |             |
|----------------|-----------|--------------|---------------------------------------|----------------|----------------|------|------|-------------|--------------------------------------|---------------------------|-------------|
|                |           |              |                                       |                | H              | W    | D    |             |                                      | 1 Micron                  | 0.01 Micron |
| Coldspell 20   | PH191     | 20           | 0.32/—                                | ¾" BSP         | 420            | 400  | 430  | 38          | T100PEA                              | T100XIA                   | T100YIA     |
| Coldspell 35   | PH209     | 35           | 0.32/—                                | ¾" BSP         | 420            | 400  | 430  | 38          | T100PEA                              | T100XIA                   | T100YIA     |
| Coldspell 40   | PH192     | 40           | 0.34/—                                | 1" BSP         | 525            | 450  | 475  | 48          | T100PEA                              | T100XIA                   | T100YIA     |
| Coldspell 50   | PH193     | 50           | 0.36/—                                | 1" BSP         | 525            | 450  | 475  | 48          | T100PEA                              | T100XIA                   | T100YIA     |
| Coldspell 60   | PH194     | 60           | 0.36/—                                | 1" BSP         | 525            | 450  | 475  | 48          | T100PEA                              | T100XIA                   | T100YIA     |
| Coldspell 80   | PH195     | 80           | 0.85/—                                | 1" BSP         | 675            | 485  | 525  | 65          | T250PEA                              | T250XIA                   | T250YIA     |
| Coldspell 100  | PH196     | 100          | 0.85/—                                | 1" BSP         | 675            | 485  | 525  | 65          | T250PEA                              | T250XIA                   | T250YIA     |
| Coldspell 150  | PH197     | 150          | 1.02/—                                | 1½" BSP        | 860            | 670  | 700  | 123         | T250PEA                              | T250XIA                   | T250YIA     |
| Coldspell 200  | PH198     | 200          | 2.4/1.7                               | 1½" BSP        | 860            | 670  | 700  | 129         | T600PEA                              | T600XIA                   | T600YIA     |
| Coldspell 250  | PH199     | 250          | 2.4/1.7                               | 1½" BSP        | 860            | 670  | 700  | 129         | T600PEA                              | T600XIA                   | T600YIA     |
| Coldspell 300  | PH169     | 300          | 2.3/—                                 | 2" BSP         | 1275           | 850  | 800  | 240         | T600PEA                              | T600XIA                   | T600YIA     |
| Coldspell 400  | PH170     | 400          | 2.5/—                                 | 2" BSP         | 1275           | 850  | 800  | 260         | T851PEA                              | T851XIA                   | T851YIA     |
| Coldspell 500  | PH171     | 500          | 3.0/—                                 | 2" BSP         | 1275           | 850  | 800  | 290         | T851PEA                              | T851XIA                   | T851YIA     |
| Coldspell 650  | PH186     | 650          | —/3.4                                 | 2" NB          | 1700           | 1100 | 1425 | 350         | T1210PEA                             | T1210XIA                  | T1210YIA    |
| Coldspell 800  | PH187     | 800          | —/4.4                                 | 3" NB          | 1700           | 1100 | 1425 | 490         | T1810PEA                             | T1810XIA                  | T1810YIA    |
| Coldspell 1000 | PH188     | 1000         | —/4.9                                 | 3" NB          | 1700           | 1100 | 1425 | 580         | T1810PEA                             | T1810XIA                  | T1810YIA    |
| Coldspell 1250 | PH189     | 1250         | —/5.6                                 | 4" NB          | 1700           | 1100 | 1425 | 620         | T2200PEA                             | T2200XIA                  | T2200YIA    |
| Coldspell 1500 | PH190     | 1500         | —/7.9                                 | 4" NB          | 1700           | 1100 | 1425 | 900         | T2600PEA                             | T2600XIA                  | T2600YIA    |
| Coldspell 2000 | PH203     | 2000         | —/10.5                                | 6" NB          | 1700           | 1100 | 1450 | 1020        | T3400PEA                             | T3400XIA                  | T3400YIA    |

For any other capacity, please contact us. Specifications are subject to change without notification.

Notes :

1) All models have air-cooled condenser as the default option. Water cooled option available on request.

2) Maximum working pressure: 16 bar

3) Refrigerants :

R134a: Coldspell 20 to 500;

R407C: Coldspell 200 to 250 and Coldspell 650 to 2000

4) \*\* To be ordered separately.

Coldspell 20

— Wheel type indicator

Coldspell 40 to 800

— LED display controller

Coldspell 1000 to 2000

— Advanced LCD display controller

## How to Order

|                                   |                     |                        |
|-----------------------------------|---------------------|------------------------|
| Requirement :                     | Inlet flow          | 100 scfm               |
|                                   | working pressure    | 5 Kg / cm <sup>2</sup> |
|                                   | Inlet temperature   | 45°C                   |
|                                   | Ambient temperature | 38°C                   |
| Referring tables :                | Factor Pi           | = 0.84                 |
|                                   | Factor Ti           | = 1                    |
|                                   | Factor Ta           | = 1                    |
| Dryer capacity                    | Flow                | = 100                  |
| required :                        | Pi x Ti x Ta        | 0.84 x 1 x 1           |
|                                   |                     | = 119 scfm             |
| Choose the nearest higher model : |                     | = Coldspell 150        |

## Correction Factor

|                                   |      |      |     |      |      |     |
|-----------------------------------|------|------|-----|------|------|-----|
| Air Inlet Temperature °C          | 30   | 38   | 45  | 50   | 55   | 60  |
| Correction Factor (Ti)            | 1.14 | 1.08 | 1.0 | 0.75 | 0.63 | 0.5 |
| Ambient Temperature °C            | 25   | 30   | 38  | 43   |      |     |
| Correction Factor (Ta)            | 1.36 | 1.18 | 1.0 | 0.86 |      |     |
| Inlet Pressure Kg/cm <sup>2</sup> | 3    | 5    | 7   | 9    | 12   |     |
| Correction Factor (Pi)            | 0.6  | 0.84 | 1.0 | 1.11 | 1.21 |     |

Rated nearest option B as per standard ISO 7183 - 2007



### Our Other Range of Products

• Timer based Auto Drain Valve • Level Sensing Auto Drain Valve • Desiccant Dryer (Heatless) • Desiccant Dryer (Heated) • Oxygen & Nitrogen Generators

