

# Technical specification

## Brazed Plate Heat Exchanger



Project ref: Alfa Laval  
 Line ref:  
 Model: CB60-30H-F  
 Item Id: 3287079135  
 No of units: 1

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 Date: 2019-07-11

|  |      | Hot side<br>S4 -> S3 | Cold Side<br>S2 -> S1 |
|--|------|----------------------|-----------------------|
| <b>Process data</b>                      |      |                      |                       |
| Capacity:                                | kW   | 15.0                 |                       |
| Fluid:                                   |      | R407C                | Water                 |
| Mass flow rate:                          | kg/h | 387                  | 2 588                 |
| Inlet temperature:                       | °C   | 70,0                 | 55,0                  |
| Outlet temperature:                      | °C   | 61,0                 | 60,0                  |
| Condensing temperature (dew):            |      | 65,0                 |                       |
| Condensing pressure:                     | bara | 28,32                |                       |
| Outlet quality:                          |      | 0                    |                       |
| Total pressure drop calculated (allowed) | kPa  | 1,5 (30,00)          | 18,6 (80,00)          |
| Connection velocity in/out:              | m/s  | 2,11/0,27            | 1,76/1,76             |
| Margin calculated (specified):           | %    | 23(15)               |                       |

| <b>Heat exchanger specification</b>        |                 |                                    |     |
|--|-----------------|------------------------------------|-----|
| Relative directions of fluids:             |                 | Countercurrent                     |     |
| Number of plates:                          |                 | 30                                 |     |
| Channel volume:                            | dm <sup>3</sup> | 1,4                                | 1,5 |
| Number of circuits:                        |                 | 1                                  | 1   |
| Design pressure at -196 °C                 | bar             | 40                                 | 40  |
| Design pressure at 225 °C                  | bar             | 32                                 | 32  |
| Design temperature (min/max):              | °C              | -196 / 225                         |     |
| Pressure vessel code:                      |                 | PED                                |     |
| Material Channel plates / Sealing:         |                 | ALLOY 316 / Cu                     |     |
| Connection S4 (Hot-In):                    |                 | Soldering 1 1/8"                   |     |
| Connection S3 (Hot-Out):                   |                 | Soldering 1 1/8"                   |     |
| Connection S2 (Cold-In):                   |                 | Threaded (External) 1" ISO 228/1-G |     |
| Connection S1 (Cold-Out):                  |                 | Threaded (External) 1" ISO 228/1-G |     |
| Unit dimensions (length x width x height): | mm              | 124 x 113 x 527                    |     |
| Net weight, empty / operating:             | kg              | 7,5 / 9,58                         |     |
| Packed length x width x height:            | mm              | 160,0 x 125 x 579,0                |     |
| Packed weight:                             | kg              | 7,66                               |     |

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