

|                                |                   |     |
|--------------------------------|-------------------|-----|
| DATA                           | 18.02.2019        |     |
| CUSTOMER                       |                   |     |
| REFERENCE                      |                   |     |
| <b>Evaporator Model</b>        | <b>SCE 143 2P</b> |     |
| Number of refrigerant circuits | 1                 |     |
| Requested capacity             | kW                | 140 |
| Margin of surface              | %                 | 0,0 |
| PED category                   | ---               |     |

| <b>INPUT DATA</b>       |                      | <b>TUBES SIDE</b> | <b>SHELL SIDE</b> |
|-------------------------|----------------------|-------------------|-------------------|
| <b>Refrigerant</b>      |                      | R22               |                   |
| Evaporating Temperature | °C                   | 2                 |                   |
| Evaporating Pressure    | bar A                | 5,312             |                   |
| Superheating            | K                    | 5                 |                   |
| Condensing Temperature  | °C                   | 40                |                   |
| Condensing Pressure     | bar A                | 15,336            |                   |
| Subcooling              | K                    | 5                 |                   |
| Pressure drop           | kPa                  | 15                |                   |
| <b>Fluid</b>            |                      |                   | WATER             |
| Inlet Temperature       | °C                   |                   | 12                |
| Outlet Temperature      | °C                   |                   | 7                 |
| Flow rate               | m <sup>3</sup> /h    |                   | 24,0              |
| Pressure drop           | kPa                  |                   | 43                |
| Fouling factor          | (m <sup>2</sup> K)/W |                   | 0,000043          |
| Velocity (Inside)       | m/s                  | 9,05              | 1,45              |
| Exchange coefficient    | W/(m <sup>2</sup> K) | 4450              | 8835              |
| DTML                    | °C                   |                   | 7,21              |

**WARNING**

No warnings

**DIMENSIONS**

|                    |                 |         |      |
|--------------------|-----------------|---------|------|
| Surface            | m <sup>2</sup>  | ---     | 8,49 |
| Weight             | kg              | 116     |      |
| Total volume       | dm <sup>3</sup> | 16      | 34   |
| Overall length     | mm              | 2115    |      |
| Shell diameter     | mm              | 194     |      |
| In/out connections | Gas/mm          | 35 / 54 | 3"   |

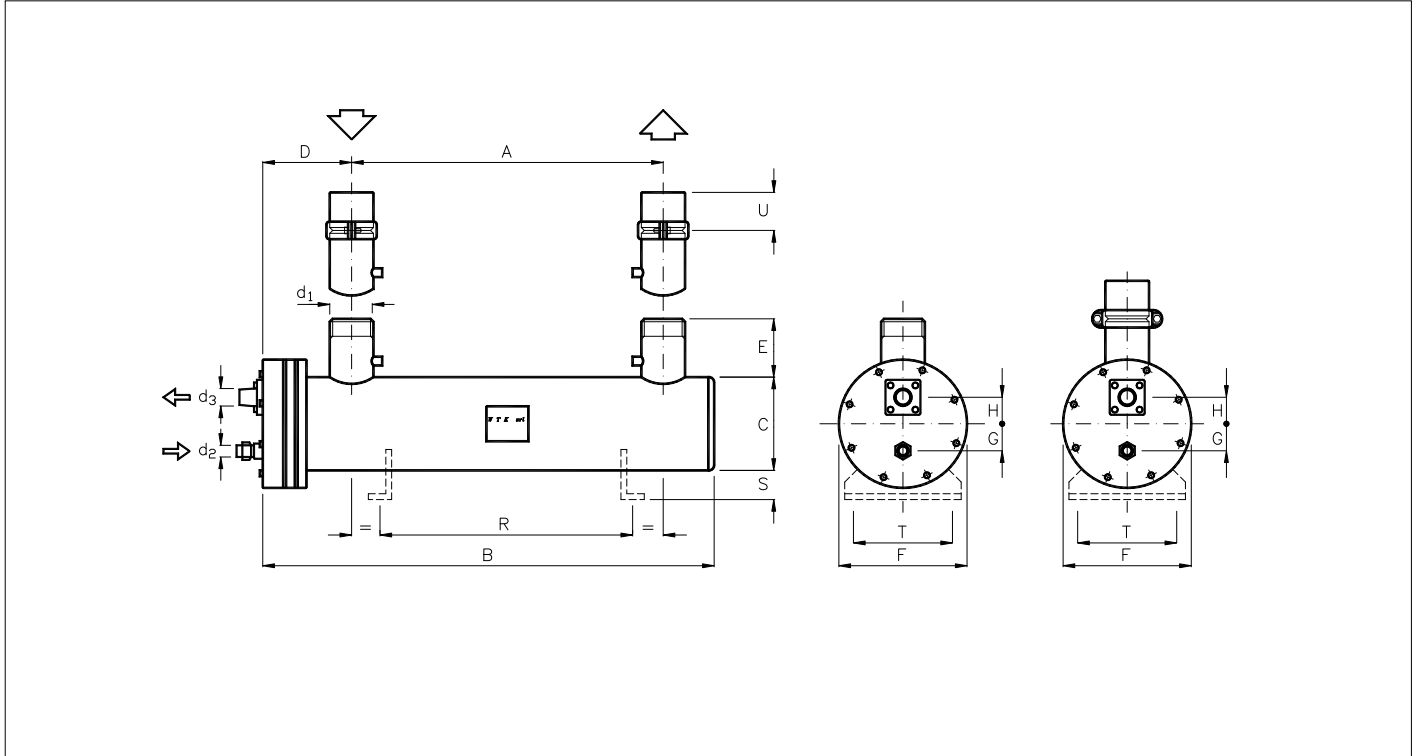
**OFFER**

|                |      |  |
|----------------|------|--|
| Unit net price | Euro |  |
|----------------|------|--|

**NOTES**

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|-----------|------------|
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| CUSTOMER  |            |
| REFERENCE |            |

**DRAWING**

**DIMENSIONS (mm)**
**DATA**

| Dimension | Value | Symbol | Value | Description                | Unit   | Value   |
|-----------|-------|--------|-------|----------------------------|--------|---------|
| A         | 1830  | L      | 0     | Surface                    | m?     | 8,49    |
| B         | 2115  | M      | 0     | Weight                     | kg     | 116     |
| C         | 194   | N      | 0     | Tubes volume (Refrig.)     | dm?    | 16      |
| D         | 178   | O      | 0     | Shell volume (Fluid)       | dm?    | 34      |
| E         | 130   | R      | 1500  | Refrig. connections In/Out | mm     | 35 / 54 |
| F         | 270   | S      | 60    | Shell connections          | Gas/mm | 3"      |
| G         | 50    | T      | 160   |                            |        |         |
| H         | 45    | U      | N/A   |                            |        |         |
| K         | 30    | X      | 0     |                            |        |         |

This software is only to be used as an assistance and does not replace the necessary specialist knowledge and experience when designing heat exchangers. We continuously work in order to improve and correct the software. Nevertheless we cannot guarantee its absolute infallibility. Therefore the use of the program is at the user's risk.