## Industrial water chillers

## COOLING CAPACITY



## STRUCTURE

In powder-coated steel sheet, RAL 7035 textured finish. Easily removed panels

## COMPRESSOR

Hermetic scroll compressor, cooled by the refrigerant, complete with thermal cut-out.

## REFRIGERATION CIRCUIT

Complete with charging port, liquid receiver, drier filter, thermostatic valve, high- and low-pressure pressure switch, R410A refrigerant. Optional 2-step cooling power regulation (standard on TALF8).

## EVAPORATOR

Brazed stainless-steel plate model.

## AIR CONDENSER

Microchannel condensing coil, complete with safety grille.

## AXIAL FAN

Axial fan, complete with thermal cut-out and safety grille.

## LIQUID CIRCUIT

Non-ferrous liquid circuit composed of stainless steel centrifugal electric
pump, storage tank made of plastic material complete with drain valve, electrical level indicator, 0-10 bar pressure gauge, differential pressure switch protecting the water flow, automatic by-pass and regulation sensor.

## ELECTRICAL PANEL

With main disconnect switch, relay motor protection, phase sequence relays.

## MANAGEMENT AND CONTROL

The TX350C control unit manages the operation of the chiller and provides complete operator alarm diagnostics. An on-off contact allows the machine to be switched on remotely. Illuminated control selector. RS485 connection. Possibility of remote display for machine regulation.

## PAINT/COATING

Standard colour: RAL 7035 textured.

## MAIN OPTIONS

FL - Flow switch with alarm contact
HR - Fluid heating element
OM - Unit built for outdoor operation down to $-10^{\circ} \mathrm{C}$ ambient temp.
OML - Unit built for outdoor operation down to $-20^{\circ} \mathrm{C}$ ambient temp.
FP - Polyurethane air filter
TD - Differential fluid temperature management (two sensors)
BGC - Hot gas bypass for +/-1 K temperature precision
LS - Liquid circuit for laser application

- HIGH-pressure pump version "H" - 5 bar


## DIMENSIONS



| Model |  | TALDO | TALD9 | TALE6 | TALF8 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rated Cooling Capacity* | w | 40000 | 47000 | 55000 | 67000 |
| Ambient temperature operating limits | ${ }^{\circ} \mathrm{C}$ | +15-+45 |  |  |  |
| Settable fluid temperature range | ${ }^{\circ} \mathrm{C}$ | +8-+25 |  |  |  |
| Fluid type |  | Water |  |  |  |
| Temperature precision | K | +/-2 |  |  |  |
| Refrigerant gas | HFC | R410A |  |  |  |
| Power supply |  |  |  |  |  |
| Supply voltage | V ph Hz | 400 V (+/-10\%) 3ph 50Hz |  |  |  |
| Secondary supply voltage | V | 24 VAC |  |  |  |
| Digital thermostat |  | TX350C |  |  |  |
| Compressor |  |  |  |  |  |
| Compressor type |  | Scroll |  |  |  |
| Quantity - Number of circuits | no. | 1-1 |  |  | 2-1 |
| Max. power draw | kW | 9.4 | 10.4 | 12.1 | 25.0 |
| Axial Fan |  |  |  |  |  |
| Fan type |  | Axial |  |  |  |
| Quantity | no. | 1 | 1 | 1 | 1 |
| Air flow rate | $\mathrm{m}_{3} / \mathrm{h}$ | 12600 | 14400 | 16000 | 24000 |
| Centrifugal Fan (optional) |  |  |  |  |  |
| Fan type |  | Centrifugal |  |  |  |
| Quantity | no. | 1 | 1 | 1 | 1 |
| Air flow rate | $\mathrm{m}_{3} / \mathrm{h}$ | 12600 | 14400 | 16000 | 24000 |
| Available head | Pa | 570 | 350 | 200 | 150 |
| Standard Pump |  |  |  |  |  |
| Pump type |  | Centrifugal |  |  |  |
| Quantity | no. | 1 | 1 | 1 | 1 |
| Nominal/max fluid flow rate | 1/min | 115-230 | 135-230 | 158-230 | 200-230 |
| Nominal available head | bar | 3.8 | 3.6 | 4.6 | 3.8 |
| High Pressure Pump |  |  |  |  |  |
| Pump type |  | Centrifugal |  |  |  |
| Quantity | no. | 1 | 1 | 1 | 1 |
| Nominal available head | bar | 6.5 | 6.2 | 6.7 | 5.7 |
| Storage tank capacity | 1 | 200 |  |  |  |
| IN/OUT liquid connections | inch | 11/2" |  |  |  |
| Net weight (approximate)*** | kg | 580 | 600 | 600 | 600 |
| Width - Depth - Height | mm | 945-1795-2138 |  |  |  |
| Sound pressure level** | dB(A) | 75 | 75 | 75 | 78 |
| * Data relates to operation under the following conditions: inlet/outlet temp. $20 / 15^{\circ} \mathrm{C}$, water without glycol, ambient temperature $32^{\circ} \mathrm{C}$. <br> ** Sound pressure level, measured in a free parallelepiped field at a distance of 1 m , per ISO 3746. <br> *** Weight includes pallets and packaging (where provided for), with refrigerant charge, storage tank empty, axial fans. <br> The electrical data refer to $\cos \varphi=0.8$. |  |  |  |  |  |


| Correction factors for calculating the cooling power |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water outlet temperature | Fw | ${ }^{\circ} \mathrm{C}$ |  |  |  |  | 8 | 10 | 15 | 20 | 25 |  |  |
|  |  | factor |  |  |  |  | 0.77 | 0.83 | 1 | 1.20 | 1.41 |  |  |
| Ambient Temperature | Fa | ${ }^{\circ} \mathrm{C}$ |  |  |  |  | 15 | 20 | 25 | 32 | 35 | 40 | 45 |
|  |  | factor |  |  |  |  | 1.27 | 1.2 | 1.13 | 1 | 0.95 | 0.86 | 0.80 |
| Percentage glycol by weight | Fg | \% | 0 | 10 | 15 | 20 | 25 | 30 | 35 | 40 |  |  |  |
|  |  | factor | 1 | 0.96 | 0.95 | 0.94 | 0.93 | 0.91 | 0.90 | 0.88 |  |  |  |
| Cooling power $=$ Nominal cooling power $\times \mathrm{Fw} \times \mathrm{Fa} \times \mathrm{Fg}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |

