



# Circulation Cooler oil and emulsion - compact version

## HYFRA alpha-C series

- Plug and play unit: easy to connect
- Compact Design due to micro channel technology
- Optimized design: up to 16kW in a 0,5 m<sup>3</sup> cube
- Energy efficient: low power consumption
- Environmental friendly: 60% less refrigerant use



Energy  
efficiency  
Environment

5  16 kW



*efficient process cooling – made in Germany*

# HYFRA alpha-C - Plug'n'Play circulation chiller

## TECHNICAL DATA

|                     |                |           | alpha-C 5              | alpha-C 7 | alpha-C 9 | alpha-C 13 | alpha-C 16 |
|---------------------|----------------|-----------|------------------------|-----------|-----------|------------|------------|
| ambient temp.<br>°C | emulsion<br>°C | oil<br>°C | cooling capacity<br>kW |           |           |            |            |
| 32                  | 10             | 15        | 3,2                    | 5,2       | 6,6       | 9,7        | 11,8       |
|                     | 15             | 20        | 4,0                    | 6,2       | 7,8       | 11,5       | 13,9       |
|                     | 20             | 25        | 4,5                    | 6,9       | 8,7       | 12,6       | 15,4       |
| 37                  | 10             | 15        | 2,8                    | 5,1       | 6,0       | 9,1        | 10,9       |
|                     | 15             | 20        | 3,6                    | 6,1       | 7,2       | 10,7       | 13,0       |
|                     | 20             | 25        | 4,1                    | 6,7       | 7,9       | 11,8       | 14,4       |
| 42                  | 10             | 15        | 3,2                    | 4,7       | 5,9       | 8,7        | 9,1        |
|                     | 15             | 20        | 3,4                    | 5,7       | 7,1       | 10,2       | 11,4       |
|                     | 20             | 25        | 3,9                    | 6,4       | 7,9       | 11,2       | 13,0       |

## EMULSION

| refrigerant                           |       | R134a           | R410A |     |     |      |
|---------------------------------------|-------|-----------------|-------|-----|-----|------|
| refrigerant charge                    | kg    | 0,9             | 0,9   | 0,9 | 1,0 | 1,0  |
| sound pressure level at user side*(1) | dB(A) | 71              |       |     |     | 74   |
| power consumption max. *(2)           | kW    | 3,7             | 4,1   | 4,7 | 6,1 | 6,8  |
| current consumption max. *(2)         | A     | 7,0             | 7,8   | 8,1 | 8,8 | 13,4 |
| condenser                             |       | 1               |       |     |     |      |
| air flow rate max.                    | m³/h  | 3300            |       |     |     | 4500 |
| medium pressure                       | bar   | 1,0             |       |     |     |      |
| nominal flow                          | m³/h  | 3,5             |       |     |     |      |
| connection inlet/outlet               | inch  | 1 1/4           |       |     |     |      |
| A / B / C                             | mm    | 710 / 710 / 930 |       |     |     |      |
| weight (approx. )                     | kg    | 119             | 117   | 119 | 125 | 125  |

## OIL

| refrigerant                           |       | R134a           | R410A |     |     |      |
|---------------------------------------|-------|-----------------|-------|-----|-----|------|
| refrigerant charge                    | kg    | 0,9             | 0,9   | 0,9 | 1,0 | 1,0  |
| sound pressure level at user side*(1) | dB(A) | 71              |       |     |     | 74   |
| power consumption max. *(2)           | kW    | 4,1             | 4,5   | 5,1 | 6,5 | 7,5  |
| current consumption max. *(2)         | A     | 8,0             | 8,8   | 9,1 | 9,8 | 14,4 |
| condenser                             |       | 1               |       |     |     |      |
| air flow rate max.                    | m³/h  | 3300            |       |     |     | 4500 |
| medium pressure                       | bar   | 1,5             |       |     |     |      |
| nominal flow                          | m³/h  | 5               |       |     |     |      |
| connection inlet/outlet               | inch  | 1 1/2           |       |     |     |      |
| A / B / C                             | mm    | 710 / 710 / 930 |       |     |     |      |
| weight (approx. )                     | kg    | 119             | 117   | 119 | 125 | 125  |

\*(1) sound pressure level measured in free field at a distance of 1m with tolerance of +/- 1dB(A)

\*(2) at 42°C ambient temperature and 20°C medium temperature

Technical data temporarily  
Max. viscosity ISO VG 32

## TECHNICAL DESCRIPTION:

- Cooling for Emulsion / Oil / Water
- Stainless steel frame and heat exchanger
- Particular economical and low noise Scroll compressors
- Full aluminum Micro-Channel Condenser
- Free programmable temperature control with digital thermostat +/- 1,0 K
- External ON/OFF with potential free digital IN
- Sealed medium circuit to protect against dust and dirt
- Flow control switch in return to improve safety control
- Common alarm

## OPTIONS:

- DC-control voltage
- All common power supplies possible
- More powerful air fan for higher exhaust air pressure
- Harting- or Wieland connectors
- Smaller temperature hysteresis
- Air IN filter
- Ambient temperature for more than > 42° C
- Gear pump
- Refrigerant R134a
- Water cooled condenser
- Differential control
- Speed controlled compressor, pump and/or fan

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