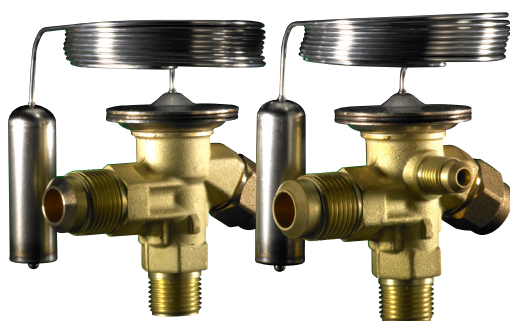


Data sheet

# Thermostatic expansion valves

## Type T2 / TE2



Thermostatic expansion valves regulate the injection of refrigerant liquid into evaporators.

Injection is controlled by the refrigerant superheat.

Therefore the valves are especially suitable for liquid injection in "dry" evaporators where the superheat at the evaporator outlet is proportional to the evaporator load.

### Features

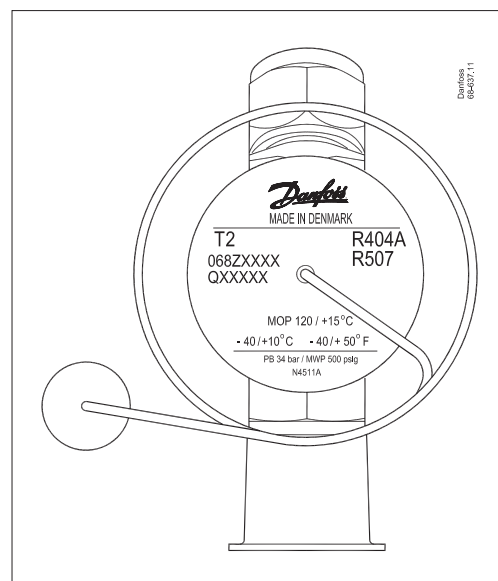
- Large temperature range
  - Equally applicable to freezing, refrigeration and air conditioning applications.
- Interchangeable orifice assembly
  - easy storage
  - easy capacity matching
  - better service.
  - easy cleaning and replacement of filter
- Rated capacities from 1 to 20.5 kW / 0.3 to 5.8 TR for R407C
- Can be supplied with MOP (Max. Operating Pressure).
  - Protects the compressor motor against excessive evaporating pressure during normal operation
- Stainless steel bulb and Danfoss patented bulb strap
  - Fast and easy to install
  - Good temperature transfer from pipe to bulb
- Valves for special temperature ranges can be supplied
- Design protected

## Identification

The thermostatic element has laser engraved data on top of the diaphragm. This engraving gives valve type (with code number), evaporating temperature range, MOP point, refrigerant, and max. working pressure. PS/MWP.

T2 = internal equalization  
TE2 = external equalization

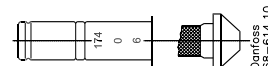
Production place and date  
N4511A =  
N = Nordborg, Denmark  
(BE = Wuqing, China)  
45 = week  
11 = 2011  
A = Monday



### Orifice assembly for T2 and TE2

The orifice assembly is marked with the orifice size (e.g. 06) and week stamp + last number in the year (e.g. 174).  
The orifice assembly number is also given on the lid of its plastic container.

Orifice assembly and filter for flare x flare version for T2 and TE2



### Capillary tube label for T2 and TE2

The label gives the orifice size (04) and consists of the lid of the orifice assembly plastic container. It can easily be fastened around the expansion valve capillary tube to clearly identify the valve size.

Capillary tube label T2 and TE2



## Technical data

### Max. temperature

Bulb, when valve is installed: 100 °C  
Bulb, element not mounted: 60 °C

### Max. test pressure

PT = 38 bar

### Min. temperature

T2 – TE2: -60 °C

### Max. working pressure

PS/MWP = 34 bar

### MOP-points

| Refrigerant | Range N<br>-40 °C – 10 °C                                                               | Range NM<br>-40 °C – -5 °C | Range NL<br>-40 °C – -15 °C | Range B<br>-60 °C – -25 °C |
|-------------|-----------------------------------------------------------------------------------------|----------------------------|-----------------------------|----------------------------|
|             | MOP-point in evaporating temperature $t_e$ and evaporating pressure $p_e$ <sup>1)</sup> |                            |                             |                            |
|             | 15 °C / 60 °F                                                                           | 0 °C / 32 °F               | -10 °C / 15 °F              | -20 °C / -4 °F             |
| R22         | 100 psig / 6.9 bar (abs)                                                                | 60 psig / 4.0 bar (abs)    | 35 psig / 2.4 bar (abs)     | 20 psig / 1.4 bar (abs)    |
| R407C       | 95 psig / 6.6 bar (abs)                                                                 | –                          | –                           | –                          |
| R134a       | 55 psig / 3.8 bar (abs)                                                                 | 30 psig / 2.0 bar (abs)    | 15 psig / 1.0 bar (abs)     | –                          |
| R404A/R507  | 120 psig / 8.3 bar (abs)                                                                | 75 psig / 5.2 bar (abs)    | 50 psig / 3.4 bar (abs)     | 30 psig / 2.1 bar (abs)    |

<sup>1)</sup> Pe in bar gauge

## Superheat

SS = static superheat  
OS = opening superheat  
SH = SS + OS = total superheat  
 $Q_{nom}$  = rated capacity  
 $Q_{max}$  = maximum capacity

Standard superheat setting SS is 4K for all standard valves.  
The opening superheat OS is 6 K from when opening begins to where the valve gives its rated capacity  $Q_{nom}$ .

Static superheat SS can be adjusted with setting spindle.

**Example**  
Static superheat SS = 5 K  
Opening superheat OS = 6 K  
Total superheat SH = 5 + 6 = 11 K

## Design Function

### General

T2 and TE2 valves have an interchangeable orifice assembly.

The orifice assembly is suitable for all versions of valve body and refrigerants and in all evaporating temperature ranges.

The charge in the thermostatic element depends on the refrigerant and evaporating temperature range.

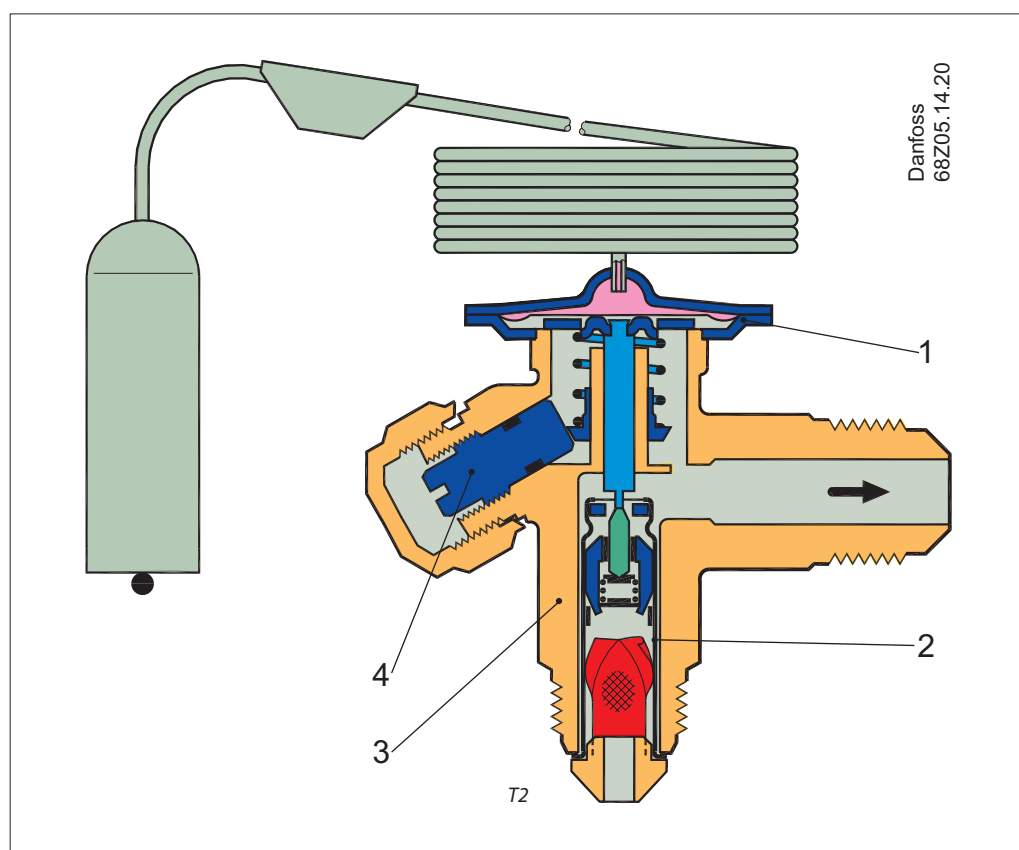
The valves are available with internal (T2) or external (TE2) pressure equalization.

External pressure equalization should always be used on systems with liquid distributors.

The bulb gives fast and precise reaction to temperature changes in the evaporator. The bulb is fixed with a Danfoss patented bulb strap for quick, easy and reliable connection. The valves are able to withstand the effects that normally occur with hot gas defrosting.

To ensure long operating life, the valve cone and seat are made of a special alloy with particularly good wear qualities.

1. Thermostatic element
2. Interchangeable orifice assembly
3. Valve body
4. Superheat setting spindle (see instructions)

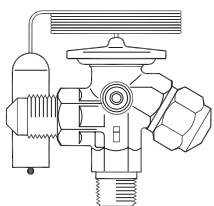
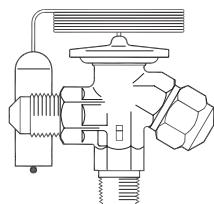


## Data sheet | Thermostatic expansion valves, type T2 / TE2

### Technical data and ordering

T2/TE2 Thermostatic element with bulb strap  
Flare x flare

Capillary tube: 1.5 m  
Range N = -40 – -10 °C  
Range B = -60 – -25 °C  
Range NM = -40 – -5 °C MOP 0 °C  
Range NL = -40 – -15 °C MOP -10 °C



| Refrigerant             | Type | Range     | MOP  | Pressure<br>equalization<br>Flare | Connection flare<br>inlet x outlet |       | Code no.<br>Multi pack |
|-------------------------|------|-----------|------|-----------------------------------|------------------------------------|-------|------------------------|
|                         |      | [°C]      | [°C] |                                   | [in]                               | [mm]  |                        |
| R22/R407C <sup>1)</sup> | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3206               |
|                         | T2   | -40 – -10 | 15   | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3208               |
|                         | T2   | -40 – -5  | 0    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3224               |
|                         | T2   | -40 – -15 | -10  | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3226               |
|                         | T2   | -60 – -25 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3207               |
|                         | T2   | -60 – -25 | -20  | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3228               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3209               |
|                         | TE2  | -40 – -10 | 15   | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3211               |
|                         | TE2  | -40 – -5  | 0    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3225               |
|                         | TE2  | -40 – -15 | -10  | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3227               |
|                         | TE2  | -60 – -25 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3210               |
|                         | TE2  | -60 – -25 | -20  | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3229               |
| R407C                   | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3496               |
|                         | T2   | -40 – -10 | 15   | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3516               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3501               |
|                         | TE2  | -40 – -10 | 15   | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3517               |
| R134a/R513A             | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3346               |
|                         | T2   | -40 – -10 | 15   | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3347               |
|                         | T2   | -40 – -5  | 0    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3393               |
|                         | T2   | -40 – -15 | -10  | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3369               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3348               |
|                         | TE2  | -40 – -10 | 15   | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3349               |
|                         | TE2  | -40 – -5  | 0    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3392               |
|                         | TE2  | -40 – -15 | -10  | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3370               |
| R404A/R507              | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3400               |
|                         | T2   | -40 – -10 | 15   | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3402               |
|                         | T2   | -40 – -5  | 0    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3406               |
|                         | T2   | -40 – -15 | -10  | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3408               |
|                         | T2   | -60 – -25 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3401               |
|                         | T2   | -60 – -25 | -20  | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3410               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3403               |
|                         | TE2  | -40 – -10 | 15   | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3405               |
|                         | TE2  | -40 – -5  | 0    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3407               |
|                         | TE2  | -40 – -15 | -10  | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3409               |
|                         | TE2  | -60 – -25 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3404               |
|                         | TE2  | -60 – -25 | -20  | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3411               |
| R407F/R407A             | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3715               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3714               |
| R448A/R449A             | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | –     | 068Z3727               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3728               |
|                         | T2   | -40 – -15 | -10  | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3675               |
|                         | T2   | -60 – -25 | -20  | –                                 | 3/8 x 1/2                          | 10x12 | 068Z3735               |
|                         | TE2  | -60 – -25 | -20  | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z3736               |
| R454C                   | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z7483               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z7485               |
| R455A                   | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z7496               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z7499               |
| R1234yf                 | T2   | -40 – -10 | –    | –                                 | 3/8 x 1/2                          | 10x12 | 068Z7487               |
|                         | TE2  | -40 – -10 | –    | 1/4 in / 6 mm                     | 3/8 x 1/2                          | 10x12 | 068Z7489               |

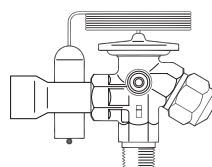
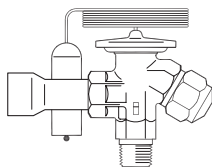
<sup>1)</sup> For R407C plants. Please select valves from the dedicated R407C program

# Data sheet | Thermostatic expansion valves, type T2 / TE2

## Technical data and ordering

T2/TE2 Thermostatic element with bulb strap  
Flare x solder

Capillary tube: 1.5 m  
Range N = -40 – 10 °C  
Range NL = -40 – -15 °C  
Range B = -60 – -25 °C



| Refrigerant             | Type | Range     | MOP  | Pressure equalization solder | Connection                      |        | Code no. Multi pack |
|-------------------------|------|-----------|------|------------------------------|---------------------------------|--------|---------------------|
|                         |      | [°C]      | [°C] |                              | inlet (Flare) × outlet (Solder) |        |                     |
|                         |      |           |      |                              | [in]                            | [mm]   |                     |
| R22/R407C <sup>1)</sup> | T2   | -40 – 10  | –    | –                            | 3/8 × 1/2                       | –      | 068Z3281            |
|                         | T2   | -40 – 10  | –    | –                            | –                               | 10×12  | 068Z3302            |
|                         | T2   | -40 – 10  | 15   | –                            | 3/8 × 1/2                       | –      | 068Z3287            |
|                         | T2   | -40 – 10  | 15   | –                            | –                               | 10×12  | 068Z3308            |
|                         | T2   | -40 – -15 | -10  | –                            | –                               | 10×12  | 068Z3366            |
|                         | T2   | -60 – -25 | –    | –                            | 3/8 × 1/2                       | –      | 068Z3357            |
|                         | T2   | -60 – -25 | –    | –                            | –                               | 10×12  | 068Z3361            |
|                         | T2   | -60 – -25 | -20  | –                            | 3/8 × 1/2                       | –      | 068Z3319            |
|                         | TE2  | -40 – 10  | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3284            |
|                         | TE2  | -40 – 10  | –    | 6 mm                         | –                               | 10×12  | 068Z3305            |
|                         | TE2  | -40 – 10  | 15   | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3290            |
|                         | TE2  | -40 – 10  | 15   | 6 mm                         | –                               | 10×12  | 068Z3311            |
|                         | TE2  | -40 – -15 | -10  | 6 mm                         | –                               | 10×12  | 068Z3367            |
|                         | TE2  | -60 – -25 | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3359            |
| R407C                   | TE2  | -60 – -25 | –    | 6 mm                         | –                               | 10×12  | 068Z3363            |
|                         | TE2  | -60 – -25 | -20  | –                            | 3/8 × 1/2                       | –      | 068Z3320            |
|                         | T2   | -40 – 10  | –    | –                            | –                               | 10×12  | 068Z3502            |
|                         | T2   | -40 – 10  | 15   | –                            | 3/8 × 1/2                       | –      | 068Z3329            |
|                         | T2   | -40 – 10  | 15   | –                            | –                               | 10×12  | 068Z3514            |
|                         | TE2  | -40 – 10  | –    | 1/4 in                       | 3/8 × 1/2                       | 1/2 in | 068Z3446            |
| R134a/R513A             | TE2  | -40 – 10  | –    | 6 mm                         | –                               | 10×12  | 068Z3503            |
|                         | TE2  | -40 – 10  | 15   | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3447            |
|                         | TE2  | -40 – 10  | 15   | 6 mm                         | –                               | 10×12  | 068Z3515            |
|                         | T2   | -40 – 10  | –    | –                            | 3/8 × 1/2                       | –      | 068Z3383            |
|                         | T2   | -40 – 10  | –    | –                            | –                               | 10×12  | 068Z3384            |
|                         | T2   | -40 – 10  | 15   | –                            | 3/8 × 1/2                       | –      | 068Z3387            |
| R404A/R507              | T2   | -40 – 10  | 15   | –                            | –                               | 10×12  | 068Z3388            |
|                         | TE2  | -40 – 10  | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3385            |
|                         | TE2  | -40 – 10  | –    | 6 mm                         | –                               | 10×12  | 068Z3386            |
|                         | TE2  | -40 – 10  | 15   | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3389            |
|                         | TE2  | -40 – 10  | 15   | 6 mm                         | –                               | 10×12  | 068Z3390            |
|                         | T2   | -40 – 10  | –    | –                            | 3/8 × 1/2                       | –      | 068Z3414            |
| R407F/R407A             | T2   | -40 – 10  | –    | –                            | –                               | 10×12  | 068Z3435            |
|                         | T2   | -40 – 10  | 15   | –                            | 3/8 × 1/2                       | –      | 068Z3416            |
|                         | T2   | -40 – 10  | 15   | –                            | –                               | 10×12  | 068Z3423            |
|                         | T2   | -40 – -15 | -10  | –                            | 3/8 × 1/2                       | –      | 068Z3429            |
|                         | T2   | -40 – -15 | -10  | –                            | –                               | 10×12  | 068Z3436            |
|                         | T2   | -60 – -25 | –    | –                            | 3/8 × 1/2                       | –      | 068Z3418            |
|                         | T2   | -60 – -25 | –    | –                            | –                               | 10×12  | 068Z3425            |
|                         | T2   | -60 – -25 | -20  | –                            | 3/8 × 1/2                       | –      | 068Z3420            |
|                         | T2   | -60 – -25 | -20  | –                            | –                               | 10×12  | 068Z3427            |
|                         | TE2  | -40 – 10  | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3415            |
|                         | TE2  | -40 – 10  | –    | 6 mm                         | –                               | 10×12  | 068Z3422            |
|                         | TE2  | -40 – 10  | 15   | 6 mm                         | –                               | 10×12  | 068Z3424            |
|                         | TE2  | -40 – 10  | 15   | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3417            |
|                         | TE2  | -40 – -15 | -10  | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3430            |
|                         | TE2  | -40 – -15 | -10  | 6 mm                         | –                               | 10×12  | 068Z3437            |
|                         | TE2  | -60 – -25 | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3419            |
|                         | TE2  | -60 – -25 | –    | 6 mm                         | –                               | 10×12  | 068Z3426            |
|                         | TE2  | -60 – -25 | -20  | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3421            |
| R448A/R449A             | TE2  | -60 – -25 | -20  | 6 mm                         | –                               | 10×12  | 068Z3428            |
|                         | T2   | -40 – 10  | –    | –                            | 3/8 × 1/2                       | –      | 068Z3716            |
|                         | TE2  | -40 – 10  | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3713            |
|                         | T2   | -40 – 10  | –    | –                            | 3/8 × 1/2                       | –      | 068Z3729            |
|                         | TE2  | -40 – 10  | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3730            |
|                         | T2   | -40 – -15 | -10  | –                            | 3/8 × 1/2                       | –      | 068Z3664            |
| R452A                   | T2   | -60 – -25 | -20  | –                            | 3/8 × 1/2                       | –      | 068Z3737            |
|                         | TE2  | -40 – -15 | -10  | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3665            |
|                         | TE2  | -60 – -25 | -20  | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3738            |
|                         | T2   | -40 – -15 | -10  | –                            | –                               | 10×12  | 068Z3674            |
|                         | TE2  | -60 – -25 | -20  | 6 mm                         | –                               | 10×12  | 068Z3672            |
|                         | T2   | -40 – 10  | –    | –                            | 3/8 × 1/2                       | –      | 068Z3806            |
| R452A                   | TE2  | -40 – 10  | –    | 1/4 in                       | 3/8 × 1/2                       | –      | 068Z3807            |
|                         | T2   | -40 – 10  | –    | –                            | –                               | 10×12  | 068Z3808            |
|                         | TE2  | -40 – 10  | –    | 6 mm                         | –                               | 10×12  | 068Z3809            |

<sup>1)</sup> For R407C plants, please select valves from the dedicated R407C program

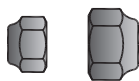
T2/TE2 Thermostatic element with bulb strap  
Flare x solder

Capillary tube: 1.5 m  
Range N = -40 – 10 °C  
Range NL = -40 – -15 °C  
Range B = -60 – -25 °C

| Refrigerant | Type | Range    | MOP  | Pressure<br>equalization<br>solder | Connection<br>inlet (Flare) x outlet (Solder) |       | Code no.<br>Multi pack |
|-------------|------|----------|------|------------------------------------|-----------------------------------------------|-------|------------------------|
|             |      | [°C]     | [°C] |                                    | [in]                                          | [mm]  |                        |
| R454C       | T2   | -40 – 10 | –    | –                                  | $\frac{3}{8} \times \frac{1}{2}$              | –     | 068Z7490               |
|             | T2   | -40 – 10 | –    | –                                  | –                                             | 10x12 | 068Z7484               |
|             | TE2  | -40 – 10 | –    | $\frac{1}{4}$ in                   | $\frac{3}{8} \times \frac{1}{2}$              | –     | 068Z7492               |
|             | TE2  | -40 – 10 | –    | 6 mm                               | –                                             | 10x12 | 068Z7486               |
| R455A       | T2   | -40 – 10 | –    | –                                  | $\frac{3}{8} \times \frac{1}{2}$              | –     | 068Z7494               |
|             | T2   | -40 – 10 | –    | –                                  | –                                             | 10x12 | 068Z7498               |
|             | TE2  | -40 – 10 | –    | $\frac{1}{4}$ in                   | $\frac{3}{8} \times \frac{1}{2}$              | –     | 068Z7501               |
|             | TE2  | -40 – 10 | –    | 6 mm                               | –                                             | 10x12 | 068Z7500               |
| R1234yf     | T2   | -40 – 10 | –    | –                                  | $\frac{3}{8} \times \frac{1}{2}$              | –     | 068Z7491               |
|             | T2   | -40 – 10 | –    | –                                  | –                                             | 10x12 | 068Z7488               |
|             | TE2  | -40 – 10 | –    | $\frac{1}{4}$ in                   | $\frac{3}{8} \times \frac{1}{2}$              | –     | 068Z7493               |
|             | TE2  | -40 – 10 | –    | 6 mm                               | –                                             | 10x12 | 068Z7495               |

## Data sheet | Thermostatic expansion valves, type T2 / TE2

### Flare connections



| Connection for copper tubing with outside diameter |      | Reducer for copper tubing with outside diameter |      | Code no. |
|----------------------------------------------------|------|-------------------------------------------------|------|----------|
| [in]                                               | [mm] | [in]                                            | [mm] |          |
| 1/4                                                | 6    | –                                               | –    | 011L1101 |
| 3/8                                                | 10   | –                                               | –    | 011L1135 |
| 1/2                                                | 12   | –                                               | –    | 011L1103 |
| –                                                  | –    | 1/4                                             | 6    | 011L1107 |

#### Example :

A TE2 thermostatic expansion valve consists of two elements + flare nuts if required:

- 1 thermostatic element
- 1 orifice assembly and flare nuts

When ordering one thermostatic expansion valve, TE2 with orifice 01, five code numbers are required:

- 1-off thermostatic element **068Z3209**
- 1-off orifice assembly 01 **068-2010**
- 1-off 3/8 in flare nut **011L1135**
- 1-off 1/2 in flare nut **011L1103**
- 1-off 1/4 in flare nut **011L1101**

The rated capacity is based on:  
Evaporating temperature  $t_e = 40^\circ\text{F}$   
Condensing temperature  $t_c = 100^\circ\text{F}$   
Refrigerant temperature ahead of valve  $t_i = 98^\circ\text{F}$

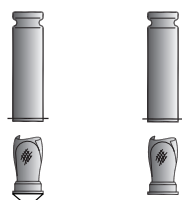
### Range N: -40 to 50 °F

| Orifice no. | Rated capacity in tons (TR) |       |       |       |            |       |       |       |       |       |       |         |
|-------------|-----------------------------|-------|-------|-------|------------|-------|-------|-------|-------|-------|-------|---------|
|             | R22                         | R407C | R134a | R513A | R404A R507 | R407A | R407F | R448A | R449A | R454C | R455A | R1234yf |
| 0X          | 0.25                        | 0.26  | 0.19  | 0.16  | 0.18       | 0.25  | 0.28  | 0.26  | 0.25  | 0.22  | 0.24  | 0.14    |
| 00          | 0.51                        | 0.51  | 0.34  | 0.29  | 0.37       | 0.49  | 0.56  | 0.51  | 0.49  | 0.42  | 0.47  | 0.25    |
| 01          | 1.0                         | 1.0   | 0.59  | 0.51  | 0.75       | 1.0   | 1.1   | 1.0   | 0.97  | 0.79  | 0.93  | 0.43    |
| 02          | 1.3                         | 1.4   | 0.73  | 0.62  | 1.0        | 1.3   | 1.5   | 1.4   | 1.3   | 1.0   | 1.3   | 0.53    |
| 03          | 2.3                         | 2.3   | 1.2   | 1.0   | 1.8        | 2.3   | 2.6   | 2.3   | 2.3   | 1.8   | 2.2   | 0.88    |
| 04          | 3.4                         | 3.5   | 1.8   | 1.5   | 2.8        | 3.5   | 4.1   | 3.6   | 3.5   | 2.6   | 3.3   | 1.3     |
| 05          | 4.8                         | 4.7   | 2.4   | 2.0   | 3.7        | 4.6   | 5.4   | 4.6   | 4.5   | 3.4   | 4.2   | 1.7     |
| 06          | 5.6                         | 5.6   | 2.9   | 2.5   | 4.4        | 5.6   | 6.5   | 5.7   | 5.5   | 4.2   | 5.2   | 2.1     |

The rated capacity is based on:  
Evaporating temperature  $t_e = 4.4^\circ\text{C}$   
Condensing temperature  $t_c = 38^\circ\text{C}$   
Refrigerant temperature ahead of valve  $t_i = 37^\circ\text{C}$

### Range N: -40 to 10 °C

| Orifice no. | Rated capacity in kW |       |       |       |            |       |       |       |       |       |       |         |
|-------------|----------------------|-------|-------|-------|------------|-------|-------|-------|-------|-------|-------|---------|
|             | R22                  | R407C | R134a | R513A | R404A R507 | R407A | R407F | R448A | R449A | R454C | R455A | R1234yf |
| 0X          | 0.90                 | 0.92  | 0.68  | 0.58  | 0.64       | 0.88  | 1.0   | 0.90  | 0.88  | 0.77  | 0.86  | 0.49    |
| 00          | 1.8                  | 1.8   | 1.2   | 1.0   | 1.3        | 1.7   | 2.0   | 1.8   | 1.7   | 1.5   | 1.7   | 0.87    |
| 01          | 3.5                  | 3.5   | 2.1   | 1.8   | 2.6        | 3.4   | 3.9   | 3.5   | 3.4   | 2.8   | 3.3   | 1.5     |
| 02          | 4.7                  | 4.8   | 2.6   | 2.2   | 3.7        | 4.7   | 5.4   | 4.8   | 4.6   | 3.6   | 4.4   | 1.8     |
| 03          | 8.0                  | 8.1   | 4.3   | 3.7   | 6.3        | 8.0   | 9.2   | 8.1   | 7.9   | 6.2   | 7.6   | 3.1     |
| 04          | 12.1                 | 12.4  | 6.4   | 5.4   | 9.9        | 12.4  | 14.3  | 12.6  | 12.1  | 9.3   | 11.5  | 4.6     |
| 05          | 16.7                 | 16.5  | 8.4   | 6.9   | 13.0       | 16.3  | 19.0  | 16.3  | 15.7  | 11.8  | 14.7  | 5.9     |
| 06          | 19.7                 | 19.7  | 10.1  | 8.6   | 15.5       | 19.6  | 22.9  | 19.8  | 19.1  | 14.8  | 18.3  | 7.3     |



1. Orifice assembly with filter
2. Orifice assembly with filter for solder adaptor



### Orifice assembly with filter

| Orifice no. | Code no. |
|-------------|----------|
| 0X          | 068-2002 |
| 00          | 068-2003 |
| 01          | 068-2010 |
| 02          | 068-2015 |
| 03          | 068-2006 |
| 04          | 068-2007 |
| 05          | 068-2008 |
| 06          | 068-2009 |

### Orifice assembly with filter for solder adaptor

| Orifice no. | Code no. |
|-------------|----------|
| 0X          | 068-2089 |
| 00          | 068-2090 |
| 01          | 068-2091 |
| 02          | 068-2092 |
| 03          | 068-2093 |
| 04          | 068-2094 |
| 05          | 068-2095 |
| 06          | 068-2096 |

### Filter

| Filter type          | Code no. Multi pack |
|----------------------|---------------------|
| For flare connection | 068-0003            |
| For solder adaptor   | 068-0015            |

The adaptor is for use with thermostatic expansion valves T2 and TE2. When the adaptor is fitted correctly it meets the sealing requirements of DS/EN ISO 14903: 2017. The flare orifice in T2 and TE2 can be used with a solder adaptor when the

orifice filter is replaced with a specific filter intended for solder adaptors. Only in this way the sealing requirements of DS/EN ISO 14903: 2017 can be fulfilled. Solder adaptors for filter driers (FSA) must not be used on the T2 inlet.

**Data sheet | Thermostatic expansion valves, type T2 / TE2**

**Solder adaptor**



The adaptor is for use with thermostatic expansion valves T2 and TE2 with flare x solder connections. When the adaptor is fitted correctly it meets the sealing requirements of DS/EN ISO 14903: 2017.

The adaptor offers the following advantages:

- The orifice assembly can be replaced.
- The filter can be cleaned or replaced.

When using the solder adaptor, a special orifice assembly is required. Please use the following tables to select both the appropriate adaptor and orifice assembly.

Only in this way can the sealing requirements of DS/EN ISO 14903: 2017 be fulfilled.

Solder adaptor for filter drier (FSA) may not be used in the T2 inlet.

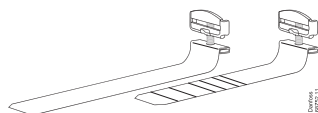
**Solder adaptor without orifice assembly and filter**

| Connection ODF solder | Code no. |
|-----------------------|----------|
| ¼ in                  | 068-2062 |
| 6 mm                  | 068-2063 |
| ¾ in                  | 068-2060 |
| 10 mm                 | 068-2061 |

**Filter for solder adaptor**

| Description                   | Code no. |
|-------------------------------|----------|
| Filter excl. orifice assembly | 068-0015 |

**Bulb strap (Danfoss patented)**



Each valve is delivered with a Danfoss patented bulb strap. Spares can be ordered.

| Description                       | Pack mode | Quantity / pack | Code no. |
|-----------------------------------|-----------|-----------------|----------|
| Bulb strap 0.4 mm Max. 28 mm tube | I         | 45              | 068U3505 |
| Bulb strap 0.4 mm Max. 50 mm tube | I         | 45              | 068U3506 |
| Bulb strap 0.4 mm Max. 28 mm tube | M         | 25              | 068U3507 |
| Bulb strap 0.4 mm Max. 50 mm tube | M         | 25              | 068U3508 |

**How to select a valve**

Example:

Refrigerant = R407C

Q (capacity) = 1.1kW

T<sub>cond</sub> (condensing temperature) = 25 °C

T<sub>evap</sub> (evaporator temperature) = -30 °C

T<sub>sub</sub> (subcooling temperature) = 2 K

D<sub>pd</sub> (distributer pressure drop) = 1 bar

Q (capacity) = 1.1kW

f<sub>sub</sub> (subcooling correction factor) = 0.98

f<sub>p</sub> (distribution correction factor) = 0.96

$$\frac{Q}{f_{sub} \times f_p} = \text{Selected capacity}$$

$$\frac{1.1}{0.98 \times 0.96} = 1.17 \text{ kW}$$

The selection will be:

TE2 orifice 00 (1.21 kW > 1.17 kW)

Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  |
| T2 / TE2   | 0X          | 25               | 0.76             | 0.83 | 0.88 | 0.90 |
| T2 / TE2   | 00          |                  | 0.99             | 1.21 | 1.42 | 1.60 |
| T2 / TE2   | 01          |                  | 1.41             | 1.80 | 2.27 | 2.77 |

**Subcooling correction factor 'f<sub>sub</sub>'**

| Subcooling [K]    | 2    | 4    | 10   | 15   |
|-------------------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.12 |

**Distributer correction factor 'f<sub>p</sub>' \*)**

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |
|-----------------------|-----|------------------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 |
|                       | 1.5 | 0.94             | 0.94 | 0.94 | 0.94 |
|                       | 2   | 0.92             | 0.92 | 0.92 | 0.92 |

\*) Calculated at 32 °C condensing temperature

**Capacity**

Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K

**R22**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |       |       |       |
|------------|-------------|------------------|------------------|------|------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20  | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |      |       |       |       |
| T2 / TE2   | 0X          | 25               | 0.75             | 0.82 | 0.86 | 0.86  | 0.81  | 0.68  |
| T2 / TE2   | 00          |                  | 0.95             | 1.18 | 1.39 | 1.53  | 1.55  | 1.37  |
| T2 / TE2   | 01          |                  | 1.32             | 1.72 | 2.18 | 2.63  | 2.91  | 2.78  |
| T2 / TE2   | 02          |                  | 1.49             | 1.98 | 2.57 | 3.24  | 3.82  | 3.88  |
| T2 / TE2   | 03          |                  | 2.49             | 3.32 | 4.32 | 5.43  | 6.40  | 6.57  |
| T2 / TE2   | 04          |                  | 3.59             | 4.79 | 6.35 | 8.16  | 9.72  | 9.88  |
| T2 / TE2   | 05          |                  | 4.69             | 6.25 | 8.30 | 10.80 | 13.10 | 13.50 |
| T2 / TE2   | 06          |                  | 5.53             | 7.36 | 9.73 | 12.70 | 15.40 | 16.00 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |       |       |       |       |
|------------|-------------|------------------|------------------|------|-------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20   | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |       |       |       |       |
| T2 / TE2   | 0X          | 35               | 0.78             | 0.86 | 0.91  | 0.93  | 0.92  | 0.85  |
| T2 / TE2   | 00          |                  | 0.99             | 1.23 | 1.47  | 1.67  | 1.77  | 1.72  |
| T2 / TE2   | 01          |                  | 1.37             | 1.80 | 2.31  | 2.86  | 3.33  | 3.50  |
| T2 / TE2   | 02          |                  | 1.56             | 2.08 | 2.74  | 3.54  | 4.38  | 4.92  |
| T2 / TE2   | 03          |                  | 2.62             | 3.51 | 4.62  | 5.96  | 7.39  | 8.35  |
| T2 / TE2   | 04          |                  | 3.85             | 5.12 | 6.83  | 8.98  | 11.20 | 12.70 |
| T2 / TE2   | 05          |                  | 5.03             | 6.68 | 8.93  | 11.90 | 15.30 | 17.50 |
| T2 / TE2   | 06          |                  | 5.89             | 7.82 | 10.40 | 13.90 | 17.90 | 20.70 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |       |       |       |       |
|------------|-------------|------------------|------------------|------|-------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20   | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |       |       |       |       |
| T2 / TE2   | 0X          | 45               | 0.80             | 0.88 | 0.94  | 0.97  | 0.98  | 0.95  |
| T2 / TE2   | 00          |                  | 1.01             | 1.26 | 1.52  | 1.75  | 1.90  | 1.94  |
| T2 / TE2   | 01          |                  | 1.41             | 1.85 | 2.39  | 3.00  | 3.59  | 3.96  |
| T2 / TE2   | 02          |                  | 1.61             | 2.14 | 2.84  | 3.72  | 4.74  | 5.60  |
| T2 / TE2   | 03          |                  | 2.71             | 3.64 | 4.82  | 6.32  | 8.08  | 9.63  |
| T2 / TE2   | 04          |                  | 4.06             | 5.37 | 7.14  | 9.47  | 12.20 | 14.50 |
| T2 / TE2   | 05          |                  | 5.30             | 7.01 | 9.37  | 12.60 | 16.70 | 20.30 |
| T2 / TE2   | 06          |                  | 6.19             | 8.18 | 10.90 | 14.70 | 19.50 | 24.00 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |       |       |       |       |
|------------|-------------|------------------|------------------|------|-------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20   | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |       |       |       |       |
| T2 / TE2   | 0X          | 55               | 0.79             | 0.88 | 0.94  | 0.98  | 1.00  | 0.99  |
| T2 / TE2   | 00          |                  | 1.01             | 1.26 | 1.53  | 1.77  | 1.95  | 2.04  |
| T2 / TE2   | 01          |                  | 1.42             | 1.87 | 2.42  | 3.06  | 3.71  | 4.19  |
| T2 / TE2   | 02          |                  | 1.63             | 2.18 | 2.89  | 3.81  | 4.92  | 5.95  |
| T2 / TE2   | 03          |                  | 2.76             | 3.70 | 4.93  | 6.51  | 8.46  | 10.30 |
| T2 / TE2   | 04          |                  | 4.23             | 5.53 | 7.32  | 9.68  | 12.50 | 15.30 |
| T2 / TE2   | 05          |                  | 5.52             | 7.24 | 9.64  | 13.00 | 17.30 | 21.70 |
| T2 / TE2   | 06          |                  | 6.42             | 8.43 | 11.20 | 15.10 | 20.30 | 25.80 |

Subcooling correction factor 'fsub'

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.05 | 1.10 | 1.14 | 1.19 | 1.23 | 1.28 | 1.32 | 1.36 | 1.41 |

Distributer correction factor 'fp' \*)

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.91 | 0.89 |
|                       | 1.5 | 0.93             | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.88 | 0.86 | 0.82 |
|                       | 2   | 0.91             | 0.91 | 0.90 | 0.90 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.84 | 0.81 | 0.76 |

\*) Calculated at 32 °C condensing temperature

**Capacity**
*Capacity in kW, range B -60 °C to -25 °C. Opening superheat sh= 6 K*
**R22**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|
|            |             |                  | -60              | -50  | -40  | -30  |
|            |             |                  | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.54             | 0.67 | 0.78 | 0.84 |
| T2 / TE2   | 00          |                  | 0.55             | 0.77 | 1.03 | 1.28 |
| T2 / TE2   | 01          |                  | 0.72             | 1.06 | 1.47 | 1.95 |
| T2 / TE2   | 02          |                  | 0.80             | 1.17 | 1.66 | 2.26 |
| T2 / TE2   | 03          |                  | 1.32             | 1.94 | 2.76 | 3.77 |
| T2 / TE2   | 04          |                  | 1.87             | 2.76 | 3.95 | 5.45 |
| T2 / TE2   | 05          |                  | 2.45             | 3.60 | 5.15 | 7.14 |
| T2 / TE2   | 06          |                  | 2.91             | 4.26 | 6.10 | 8.50 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|
|            |             |                  | -60              | -50  | -40  | -30  |
|            |             |                  | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.56             | 0.69 | 0.80 | 0.88 |
| T2 / TE2   | 00          |                  | 0.56             | 0.79 | 1.06 | 1.34 |
| T2 / TE2   | 01          |                  | 0.74             | 1.08 | 1.52 | 2.04 |
| T2 / TE2   | 02          |                  | 0.82             | 1.20 | 1.72 | 2.36 |
| T2 / TE2   | 03          |                  | 1.35             | 1.99 | 2.85 | 3.93 |
| T2 / TE2   | 04          |                  | 1.90             | 2.81 | 4.04 | 5.63 |
| T2 / TE2   | 05          |                  | 2.50             | 3.66 | 5.26 | 7.36 |
| T2 / TE2   | 06          |                  | 2.96             | 4.33 | 6.21 | 8.71 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|
|            |             |                  | -60              | -50  | -40  | -30  |
|            |             |                  | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.56             | 0.70 | 0.82 | 0.91 |
| T2 / TE2   | 00          |                  | 0.57             | 0.80 | 1.08 | 1.37 |
| T2 / TE2   | 01          |                  | 0.75             | 1.10 | 1.55 | 2.09 |
| T2 / TE2   | 02          |                  | 0.82             | 1.22 | 1.74 | 2.41 |
| T2 / TE2   | 03          |                  | 1.36             | 2.01 | 2.88 | 4.00 |
| T2 / TE2   | 04          |                  | 1.91             | 2.82 | 4.06 | 5.70 |
| T2 / TE2   | 05          |                  | 2.52             | 3.68 | 5.29 | 7.42 |
| T2 / TE2   | 06          |                  | 2.98             | 4.35 | 6.23 | 8.75 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|
|            |             |                  | -60              | -50  | -40  | -30  |
|            |             |                  | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.56             | 0.70 | 0.82 | 0.91 |
| T2 / TE2   | 00          |                  | 0.57             | 0.80 | 1.08 | 1.38 |
| T2 / TE2   | 01          |                  | 0.75             | 1.10 | 1.55 | 2.10 |
| T2 / TE2   | 02          |                  | 0.82             | 1.21 | 1.74 | 2.41 |
| T2 / TE2   | 03          |                  | 1.36             | 2.00 | 2.87 | 4.01 |
| T2 / TE2   | 04          |                  | 1.89             | 2.79 | 4.03 | 5.66 |
| T2 / TE2   | 05          |                  | 2.52             | 3.67 | 5.25 | 7.37 |
| T2 / TE2   | 06          |                  | 2.98             | 4.32 | 6.17 | 8.66 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.12 | 1.18 | 1.23 | 1.28 | 1.34 | 1.39 | 1.45 | 1.50 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.93 | 0.92 |
|                       | 1.5 | 0.94             | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
|                       | 2   | 0.92             | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.89 | 0.88 | 0.86 | 0.84 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R407C**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |       |       |       |       |
|------------|-------------|------------------|------------------|------|-------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20   | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |       |       |       |       |
| T2 / TE2   | 0X          | 25               | 0.76             | 0.83 | 0.88  | 0.90  | 0.88  | 0.81  |
| T2 / TE2   | 00          |                  | 0.99             | 1.21 | 1.42  | 1.60  | 1.69  | 1.63  |
| T2 / TE2   | 01          |                  | 1.41             | 1.80 | 2.27  | 2.77  | 3.19  | 3.31  |
| T2 / TE2   | 02          |                  | 1.59             | 2.06 | 2.67  | 3.40  | 4.18  | 4.64  |
| T2 / TE2   | 03          |                  | 2.65             | 3.44 | 4.46  | 5.73  | 7.07  | 7.85  |
| T2 / TE2   | 04          |                  | 3.86             | 4.98 | 6.44  | 8.35  | 10.60 | 12.50 |
| T2 / TE2   | 05          |                  | 5.04             | 6.52 | 8.46  | 11.00 | 14.00 | 16.30 |
| T2 / TE2   | 06          |                  | 5.94             | 7.71 | 10.10 | 13.20 | 16.80 | 19.40 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |       |       |       |       |
|------------|-------------|------------------|------------------|------|-------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20   | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |       |       |       |       |
| T2 / TE2   | 0X          | 35               | 0.76             | 0.84 | 0.90  | 0.94  | 0.95  | 0.92  |
| T2 / TE2   | 00          |                  | 0.99             | 1.22 | 1.45  | 1.67  | 1.81  | 1.85  |
| T2 / TE2   | 01          |                  | 1.40             | 1.81 | 2.32  | 2.88  | 3.43  | 3.76  |
| T2 / TE2   | 02          |                  | 1.59             | 2.08 | 2.72  | 3.54  | 4.48  | 5.28  |
| T2 / TE2   | 03          |                  | 2.66             | 3.48 | 4.57  | 5.98  | 7.62  | 8.98  |
| T2 / TE2   | 04          |                  | 3.93             | 5.10 | 6.65  | 8.74  | 11.40 | 14.20 |
| T2 / TE2   | 05          |                  | 5.13             | 6.66 | 8.73  | 11.50 | 15.10 | 18.60 |
| T2 / TE2   | 06          |                  | 6.01             | 7.85 | 10.40 | 13.80 | 18.10 | 22.20 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |       |       |       |       |
|------------|-------------|------------------|------------------|------|-------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20   | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |       |       |       |       |
| T2 / TE2   | 0X          | 45               | 0.73             | 0.82 | 0.89  | 0.94  | 0.97  | 0.97  |
| T2 / TE2   | 00          |                  | 0.95             | 1.19 | 1.43  | 1.67  | 1.85  | 1.94  |
| T2 / TE2   | 01          |                  | 1.36             | 1.77 | 2.28  | 2.88  | 3.50  | 3.97  |
| T2 / TE2   | 02          |                  | 1.55             | 2.04 | 2.69  | 3.54  | 4.58  | 5.58  |
| T2 / TE2   | 03          |                  | 2.60             | 3.42 | 4.53  | 6.01  | 7.82  | 9.52  |
| T2 / TE2   | 04          |                  | 3.89             | 5.07 | 6.66  | 8.83  | 11.70 | 15.00 |
| T2 / TE2   | 05          |                  | 5.06             | 6.62 | 8.73  | 11.70 | 15.60 | 19.80 |
| T2 / TE2   | 06          |                  | 5.90             | 7.76 | 10.30 | 13.90 | 18.70 | 23.60 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |       |       |       |
|------------|-------------|------------------|------------------|------|------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20  | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |      |       |       |       |
| T2 / TE2   | 0X          | 55               | 0.68             | 0.77 | 0.85 | 0.91  | 0.95  | 0.96  |
| T2 / TE2   | 00          |                  | 0.89             | 1.12 | 1.37 | 1.61  | 1.81  | 1.93  |
| T2 / TE2   | 01          |                  | 1.27             | 1.67 | 2.18 | 2.78  | 3.43  | 3.96  |
| T2 / TE2   | 02          |                  | 1.46             | 1.93 | 2.57 | 3.42  | 4.49  | 5.58  |
| T2 / TE2   | 03          |                  | 2.46             | 3.27 | 4.36 | 5.84  | 7.71  | 9.60  |
| T2 / TE2   | 04          |                  | 3.74             | 4.90 | 6.48 | 8.65  | 11.60 | 15.10 |
| T2 / TE2   | 05          |                  | 4.85             | 6.39 | 8.49 | 11.40 | 15.40 | 20.00 |
| T2 / TE2   | 06          |                  | 5.61             | 7.45 | 9.99 | 13.60 | 18.50 | 24.00 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.12 | 1.18 | 1.23 | 1.28 | 1.34 | 1.39 | 1.45 | 1.50 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.93 | 0.92 |
|                       | 1.5 | 0.94             | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
|                       | 2   | 0.92             | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.91 | 0.90 | 0.89 | 0.88 | 0.86 | 0.84 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R134a**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.48             | 0.54 | 0.59 | 0.62 | 0.61 | 0.54 |
| T2 / TE2   | 00          |                  | 0.52             | 0.67 | 0.82 | 0.95 | 1.03 | 0.98 |
| T2 / TE2   | 01          |                  | 0.70             | 0.92 | 1.19 | 1.48 | 1.72 | 1.77 |
| T2 / TE2   | 02          |                  | 0.78             | 1.03 | 1.35 | 1.73 | 2.08 | 2.24 |
| T2 / TE2   | 03          |                  | 1.31             | 1.72 | 2.27 | 2.89 | 3.49 | 3.76 |
| T2 / TE2   | 04          |                  | 1.89             | 2.49 | 3.28 | 4.21 | 5.15 | 5.69 |
| T2 / TE2   | 05          |                  | 2.50             | 3.28 | 4.33 | 5.57 | 6.80 | 7.48 |
| T2 / TE2   | 06          |                  | 2.98             | 3.93 | 5.20 | 6.69 | 8.16 | 8.96 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |       |
|------------|-------------|------------------|------------------|------|------|------|------|-------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10    |
|            |             |                  | Capacity [kW]    |      |      |      |      |       |
| T2 / TE2   | 0X          | 35               | 0.49             | 0.57 | 0.63 | 0.67 | 0.69 | 0.66  |
| T2 / TE2   | 00          |                  | 0.54             | 0.69 | 0.86 | 1.03 | 1.17 | 1.22  |
| T2 / TE2   | 01          |                  | 0.72             | 0.96 | 1.25 | 1.60 | 1.95 | 2.20  |
| T2 / TE2   | 02          |                  | 0.81             | 1.07 | 1.43 | 1.87 | 2.36 | 2.79  |
| T2 / TE2   | 03          |                  | 1.36             | 1.80 | 2.40 | 3.14 | 3.96 | 4.69  |
| T2 / TE2   | 04          |                  | 2.02             | 2.64 | 3.51 | 4.60 | 5.85 | 7.07  |
| T2 / TE2   | 05          |                  | 2.66             | 3.48 | 4.62 | 6.06 | 7.72 | 9.31  |
| T2 / TE2   | 06          |                  | 3.15             | 4.14 | 5.51 | 7.24 | 9.24 | 11.10 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |       |
|------------|-------------|------------------|------------------|------|------|------|------|-------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10    |
|            |             |                  | Capacity [kW]    |      |      |      |      |       |
| T2 / TE2   | 0X          | 45               | 0.49             | 0.57 | 0.64 | 0.69 | 0.73 | 0.74  |
| T2 / TE2   | 00          |                  | 0.54             | 0.70 | 0.88 | 1.07 | 1.25 | 1.36  |
| T2 / TE2   | 01          |                  | 0.73             | 0.97 | 1.28 | 1.66 | 2.08 | 2.46  |
| T2 / TE2   | 02          |                  | 0.82             | 1.09 | 1.46 | 1.93 | 2.51 | 3.11  |
| T2 / TE2   | 03          |                  | 1.38             | 1.83 | 2.45 | 3.25 | 4.22 | 5.24  |
| T2 / TE2   | 04          |                  | 2.10             | 2.73 | 3.63 | 4.80 | 6.24 | 7.89  |
| T2 / TE2   | 05          |                  | 2.76             | 3.59 | 4.76 | 6.31 | 8.23 | 10.40 |
| T2 / TE2   | 06          |                  | 3.25             | 4.24 | 5.64 | 7.51 | 9.82 | 12.40 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |       |       |
|------------|-------------|------------------|------------------|------|------|------|-------|-------|
|            |             |                  | -40              | -30  | -20  | -10  | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |      |      |       |       |
| T2 / TE2   | 0X          | 55               | 0.47             | 0.56 | 0.63 | 0.69 | 0.74  | 0.76  |
| T2 / TE2   | 00          |                  | 0.53             | 0.69 | 0.87 | 1.07 | 1.27  | 1.43  |
| T2 / TE2   | 01          |                  | 0.72             | 0.95 | 1.26 | 1.65 | 2.11  | 2.57  |
| T2 / TE2   | 02          |                  | 0.81             | 1.08 | 1.45 | 1.94 | 2.55  | 3.24  |
| T2 / TE2   | 03          |                  | 1.38             | 1.82 | 2.44 | 3.27 | 4.30  | 5.50  |
| T2 / TE2   | 04          |                  | 2.14             | 2.77 | 3.66 | 4.85 | 6.38  | 8.25  |
| T2 / TE2   | 05          |                  | 2.81             | 3.63 | 4.80 | 6.37 | 8.40  | 10.90 |
| T2 / TE2   | 06          |                  | 3.30             | 4.26 | 5.65 | 7.54 | 10.00 | 13.00 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.12 | 1.18 | 1.23 | 1.29 | 1.34 | 1.40 | 1.45 | 1.50 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.93             | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 | 0.87 | 0.83 |
|                       | 1.5 | 0.90             | 0.89 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 | 0.84 | 0.82 | 0.79 | 0.74 |
|                       | 2   | 0.86             | 0.86 | 0.85 | 0.85 | 0.84 | 0.83 | 0.82 | 0.81 | 0.79 | 0.76 | 0.71 | 0.62 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R404A**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |       |       |       |
|------------|-------------|------------------|------------------|------|------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20  | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |      |       |       |       |
| T2 / TE2   | 0X          | 25               | 0.55             | 0.61 | 0.64 | 0.65  | 0.62  | 0.54  |
| T2 / TE2   | 00          |                  | 0.72             | 0.92 | 1.09 | 1.21  | 1.22  | 1.08  |
| T2 / TE2   | 01          |                  | 1.00             | 1.38 | 1.81 | 2.20  | 2.40  | 2.25  |
| T2 / TE2   | 02          |                  | 1.12             | 1.58 | 2.17 | 2.79  | 3.25  | 3.22  |
| T2 / TE2   | 03          |                  | 1.86             | 2.65 | 3.65 | 4.72  | 5.49  | 5.42  |
| T2 / TE2   | 04          |                  | 2.68             | 3.83 | 5.36 | 7.12  | 8.53  | 8.69  |
| T2 / TE2   | 05          |                  | 3.51             | 5.04 | 7.06 | 9.38  | 11.20 | 11.30 |
| T2 / TE2   | 06          |                  | 4.15             | 5.99 | 8.43 | 11.20 | 13.40 | 13.30 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |       |       |       |
|------------|-------------|------------------|------------------|------|------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20  | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |      |       |       |       |
| T2 / TE2   | 0X          | 35               | 0.52             | 0.59 | 0.64 | 0.67  | 0.68  | 0.64  |
| T2 / TE2   | 00          |                  | 0.67             | 0.88 | 1.08 | 1.25  | 1.34  | 1.29  |
| T2 / TE2   | 01          |                  | 0.95             | 1.33 | 1.79 | 2.28  | 2.64  | 2.70  |
| T2 / TE2   | 02          |                  | 1.07             | 1.53 | 2.15 | 2.90  | 3.59  | 3.89  |
| T2 / TE2   | 03          |                  | 1.78             | 2.57 | 3.64 | 4.93  | 6.11  | 6.57  |
| T2 / TE2   | 04          |                  | 2.60             | 3.75 | 5.37 | 7.45  | 9.53  | 10.60 |
| T2 / TE2   | 05          |                  | 3.40             | 4.93 | 7.07 | 9.82  | 12.50 | 13.70 |
| T2 / TE2   | 06          |                  | 4.00             | 5.83 | 8.40 | 11.70 | 14.90 | 16.30 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |       |       |       |
|------------|-------------|------------------|------------------|------|------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20  | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |      |       |       |       |
| T2 / TE2   | 0X          | 45               | 0.46             | 0.54 | 0.60 | 0.65  | 0.68  | 0.67  |
| T2 / TE2   | 00          |                  | 0.61             | 0.81 | 1.01 | 1.20  | 1.34  | 1.38  |
| T2 / TE2   | 01          |                  | 0.86             | 1.22 | 1.68 | 2.19  | 2.66  | 2.87  |
| T2 / TE2   | 02          |                  | 0.97             | 1.41 | 2.02 | 2.81  | 3.64  | 4.16  |
| T2 / TE2   | 03          |                  | 1.63             | 2.38 | 3.43 | 4.80  | 6.23  | 7.06  |
| T2 / TE2   | 04          |                  | 2.43             | 3.50 | 5.08 | 7.26  | 9.74  | 11.40 |
| T2 / TE2   | 05          |                  | 3.17             | 4.60 | 6.69 | 9.58  | 12.90 | 14.90 |
| T2 / TE2   | 06          |                  | 3.71             | 5.41 | 7.92 | 11.40 | 15.40 | 17.70 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |       |       |       |
|------------|-------------|------------------|------------------|------|------|-------|-------|-------|
|            |             |                  | -40              | -30  | -20  | -10   | 0     | 10    |
|            |             |                  | Capacity [kW]    |      |      |       |       |       |
| T2 / TE2   | 0X          | 55               | 0.39             | 0.47 | 0.54 | 0.59  | 0.62  | 0.64  |
| T2 / TE2   | 00          |                  | 0.52             | 0.70 | 0.89 | 1.07  | 1.23  | 1.30  |
| T2 / TE2   | 01          |                  | 0.74             | 1.06 | 1.47 | 1.96  | 2.44  | 2.73  |
| T2 / TE2   | 02          |                  | 0.85             | 1.23 | 1.78 | 2.52  | 3.35  | 3.96  |
| T2 / TE2   | 03          |                  | 1.43             | 2.09 | 3.03 | 4.32  | 5.78  | 6.76  |
| T2 / TE2   | 04          |                  | 2.17             | 3.10 | 4.50 | 6.51  | 8.98  | 10.90 |
| T2 / TE2   | 05          |                  | 2.83             | 4.07 | 5.92 | 8.61  | 11.90 | 14.40 |
| T2 / TE2   | 06          |                  | 3.29             | 4.77 | 6.99 | 10.30 | 14.30 | 17.20 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.97 | 1.00 | 1.09 | 1.16 | 1.23 | 1.30 | 1.38 | 1.45 | 1.52 | 1.59 | 1.65 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.92 | 0.91 |
|                       | 1.5 | 0.94             | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 | 0.86 |
|                       | 2   | 0.92             | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.84 | 0.80 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range B, -60 °C to -25 °C, opening superheat sh= 6 K*
**R404A**

| Valve type | Orifice no. | Cond. temp.<br>[°C] | Evaporating [°C] |      |      |      |
|------------|-------------|---------------------|------------------|------|------|------|
|            |             |                     | -60              | -50  | -40  | -30  |
|            |             |                     | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 25                  | 0.44             | 0.51 | 0.58 | 0.63 |
| T2 / TE2   | 00          |                     | 0.50             | 0.65 | 0.83 | 1.02 |
| T2 / TE2   | 01          |                     | 0.68             | 0.90 | 1.22 | 1.62 |
| T2 / TE2   | 02          |                     | 0.75             | 1.00 | 1.39 | 1.91 |
| T2 / TE2   | 03          |                     | 1.22             | 1.64 | 2.30 | 3.22 |
| T2 / TE2   | 04          |                     | 1.69             | 2.31 | 3.23 | 4.46 |
| T2 / TE2   | 05          |                     | 2.20             | 3.02 | 4.22 | 5.82 |
| T2 / TE2   | 06          |                     | 2.60             | 3.55 | 4.98 | 6.92 |

| Valve type | Orifice no. | Cond. temp.<br>[°C] | Evaporating [°C] |      |      |      |
|------------|-------------|---------------------|------------------|------|------|------|
|            |             |                     | -60              | -50  | -40  | -30  |
|            |             |                     | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 35                  | 0.41             | 0.49 | 0.56 | 0.62 |
| T2 / TE2   | 00          |                     | 0.47             | 0.61 | 0.80 | 1.00 |
| T2 / TE2   | 01          |                     | 0.64             | 0.86 | 1.18 | 1.59 |
| T2 / TE2   | 02          |                     | 0.70             | 0.96 | 1.34 | 1.88 |
| T2 / TE2   | 03          |                     | 1.16             | 1.58 | 2.24 | 3.18 |
| T2 / TE2   | 04          |                     | 1.72             | 2.31 | 3.22 | 4.47 |
| T2 / TE2   | 05          |                     | 2.23             | 3.01 | 4.19 | 5.83 |
| T2 / TE2   | 06          |                     | 2.63             | 3.51 | 4.90 | 6.87 |

| Valve type | Orifice no. | Cond. temp.<br>[°C] | Evaporating [°C] |      |      |      |
|------------|-------------|---------------------|------------------|------|------|------|
|            |             |                     | -60              | -50  | -40  | -30  |
|            |             |                     | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 45                  | 0.36             | 0.44 | 0.52 | 0.58 |
| T2 / TE2   | 00          |                     | 0.41             | 0.55 | 0.73 | 0.93 |
| T2 / TE2   | 01          |                     | 0.56             | 0.77 | 1.08 | 1.48 |
| T2 / TE2   | 02          |                     | 0.63             | 0.86 | 1.23 | 1.76 |
| T2 / TE2   | 03          |                     | 1.04             | 1.44 | 2.07 | 2.99 |
| T2 / TE2   | 04          |                     | 1.68             | 2.20 | 3.04 | 4.23 |
| T2 / TE2   | 05          |                     | 2.16             | 2.84 | 3.94 | 5.52 |
| T2 / TE2   | 06          |                     | 2.57             | 3.30 | 4.57 | 6.46 |

| Valve type | Orifice no. | Cond. temp.<br>[°C] | Evaporating [°C] |      |      |      |
|------------|-------------|---------------------|------------------|------|------|------|
|            |             |                     | -60              | -50  | -40  | -30  |
|            |             |                     | Capacity [kW]    |      |      |      |
| T2 / TE2   | 0X          | 55                  | 0.29             | 0.36 | 0.44 | 0.50 |
| T2 / TE2   | 00          |                     | 0.33             | 0.46 | 0.62 | 0.81 |
| T2 / TE2   | 01          |                     | 0.46             | 0.64 | 0.92 | 1.29 |
| T2 / TE2   | 02          |                     | 0.51             | 0.73 | 1.06 | 1.54 |
| T2 / TE2   | 03          |                     | 0.86             | 1.22 | 1.80 | 2.65 |
| T2 / TE2   | 04          |                     | 1.56             | 1.96 | 2.67 | 3.73 |
| T2 / TE2   | 05          |                     | 1.98             | 2.50 | 3.44 | 4.85 |
| T2 / TE2   | 06          |                     | 2.39             | 2.93 | 3.97 | 5.63 |

**Subcooling correction factor 'fsub'**

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.97 | 1.00 | 1.10 | 1.19 | 1.27 | 1.35 | 1.43 | 1.52 | 1.60 | 1.68 | 1.76 |

**Distributor correction factor 'fp' \*)**

| Pressure drop<br>[bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |
|--------------------------|-----|------------------|------|------|------|------|------|------|------|
|                          |     | -60              | -55  | -50  | -45  | -40  | -35  | -30  | -25  |
| "Pressure drop<br>[bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                          | 1   | 0.97             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
|                          | 1.5 | 0.95             | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
|                          | 2   | 0.93             | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 |

\*) Calculated at 32 °C condensing temperature

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R407F**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.84             | 0.92 | 0.96 | 0.98 | 0.95 | 0.86 |
| T2 / TE2   | 00          |                  | 1.1              | 1.4  | 1.6  | 1.8  | 1.8  | 1.7  |
| T2 / TE2   | 01          |                  | 1.6              | 2.0  | 2.6  | 3.1  | 3.6  | 3.6  |
| T2 / TE2   | 02          |                  | 1.8              | 2.3  | 3.0  | 3.9  | 4.8  | 5.1  |
| T2 / TE2   | 03          |                  | 2.9              | 3.9  | 5.1  | 6.6  | 8.1  | 8.7  |
| T2 / TE2   | 04          |                  | 4.3              | 5.6  | 7.4  | 9.6  | 12.2 | 14.0 |
| T2 / TE2   | 05          |                  | 5.6              | 7.4  | 9.7  | 12.7 | 16.1 | 18.1 |
| T2 / TE2   | 06          |                  | 6.6              | 8.7  | 11.6 | 15.2 | 19.3 | 21.5 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.85             | 0.93 | 0.99 | 1.0  | 1.0  | 0.98 |
| T2 / TE2   | 00          |                  | 1.1              | 1.4  | 1.6  | 1.9  | 2.0  | 2.0  |
| T2 / TE2   | 01          |                  | 1.6              | 2.1  | 2.7  | 3.3  | 3.9  | 4.1  |
| T2 / TE2   | 02          |                  | 1.8              | 2.4  | 3.1  | 4.1  | 5.2  | 5.9  |
| T2 / TE2   | 03          |                  | 3.0              | 4.0  | 5.3  | 7.0  | 8.8  | 10.0 |
| T2 / TE2   | 04          |                  | 4.4              | 5.8  | 7.7  | 10.2 | 13.3 | 16.0 |
| T2 / TE2   | 05          |                  | 5.8              | 7.6  | 10.1 | 13.5 | 17.5 | 20.9 |
| T2 / TE2   | 06          |                  | 6.7              | 9.0  | 12.0 | 16.1 | 21.0 | 24.8 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.83             | 0.92 | 0.99 | 1.0  | 1.1  | 1.0  |
| T2 / TE2   | 00          |                  | 1.1              | 1.4  | 1.6  | 1.9  | 2.0  | 2.1  |
| T2 / TE2   | 01          |                  | 1.5              | 2.0  | 2.6  | 3.3  | 4.0  | 4.4  |
| T2 / TE2   | 02          |                  | 1.8              | 2.3  | 3.1  | 4.1  | 5.3  | 6.3  |
| T2 / TE2   | 03          |                  | 3.0              | 4.0  | 5.3  | 7.1  | 9.1  | 10.7 |
| T2 / TE2   | 04          |                  | 4.4              | 5.9  | 7.8  | 10.4 | 13.8 | 17.1 |
| T2 / TE2   | 05          |                  | 5.8              | 7.6  | 10.2 | 13.8 | 18.3 | 22.4 |
| T2 / TE2   | 06          |                  | 6.7              | 8.9  | 12.1 | 16.4 | 21.9 | 26.6 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.79             | 0.89 | 0.96 | 1.0  | 1.0  | 1.0  |
| T2 / TE2   | 00          |                  | 1.0              | 1.3  | 1.6  | 1.8  | 2.0  | 2.1  |
| T2 / TE2   | 01          |                  | 1.5              | 2.0  | 2.6  | 3.3  | 3.9  | 4.4  |
| T2 / TE2   | 02          |                  | 1.7              | 2.3  | 3.0  | 4.1  | 5.3  | 6.4  |
| T2 / TE2   | 03          |                  | 2.9              | 3.8  | 5.2  | 7.0  | 9.1  | 10.9 |
| T2 / TE2   | 04          |                  | 4.3              | 5.7  | 7.7  | 10.3 | 13.8 | 17.4 |
| T2 / TE2   | 05          |                  | 5.6              | 7.5  | 10.1 | 13.7 | 18.4 | 22.9 |
| T2 / TE2   | 06          |                  | 6.5              | 8.7  | 11.9 | 16.3 | 22.1 | 27.4 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 1    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.96 | 1.00 | 1.07 | 1.14 | 1.20 | 1.26 | 1.33 | 1.40 | 1.47 | 1.54 | 1.65 |

*Distributer correction factor 'fp'\*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 1.00             | 0.93 | 0.91 | 0.88 | 0.87 | 0.82 | 0.79 | 0.76 | 0.73 | 0.69 | 0.65 | 0.91 |
|                       | 1.5 | 1.04             | 0.91 | 0.88 | 0.84 | 0.82 | 0.77 | 0.74 | 0.69 | 0.64 | 0.60 | 0.57 | 0.86 |
|                       | 2   | 1.07             | 0.93 | 0.85 | 0.81 | 0.77 | 0.72 | 0.67 | 0.63 | 0.58 | 0.54 | 0.50 | 0.80 |

*\*) Calculated at 32 °C condensing temperature*

## Capacity

Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K

# R407A

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.74             | 0.81 | 0.86 | 0.87 | 0.85 | 0.77 |
| T2 / TE2   | 00          |                  | 0.97             | 1.2  | 1.4  | 1.6  | 1.7  | 1.6  |
| T2 / TE2   | 01          |                  | 1.4              | 1.8  | 2.3  | 2.8  | 3.2  | 3.2  |
| T2 / TE2   | 02          |                  | 1.6              | 2.1  | 2.7  | 3.5  | 4.3  | 4.6  |
| T2 / TE2   | 03          |                  | 2.6              | 3.4  | 4.6  | 5.9  | 7.3  | 7.8  |
| T2 / TE2   | 04          |                  | 3.8              | 5.0  | 6.6  | 8.6  | 11.0 | 12.6 |
| T2 / TE2   | 05          |                  | 5.0              | 6.5  | 8.6  | 11.4 | 14.5 | 16.4 |
| T2 / TE2   | 06          |                  | 5.8              | 7.7  | 10.3 | 13.6 | 17.3 | 19.4 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.74             | 0.82 | 0.88 | 0.91 | 0.91 | 0.88 |
| T2 / TE2   | 00          |                  | 0.97             | 1.2  | 1.4  | 1.7  | 1.8  | 1.8  |
| T2 / TE2   | 01          |                  | 1.4              | 1.8  | 2.3  | 2.9  | 3.4  | 3.7  |
| T2 / TE2   | 02          |                  | 1.6              | 2.1  | 2.8  | 3.6  | 4.6  | 5.3  |
| T2 / TE2   | 03          |                  | 2.6              | 3.5  | 4.7  | 6.2  | 7.8  | 9.0  |
| T2 / TE2   | 04          |                  | 3.9              | 5.1  | 6.8  | 9.0  | 11.9 | 14.4 |
| T2 / TE2   | 05          |                  | 5.0              | 6.7  | 8.9  | 12.0 | 15.7 | 18.7 |
| T2 / TE2   | 06          |                  | 5.9              | 7.9  | 10.6 | 14.3 | 18.8 | 22.2 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.72             | 0.80 | 0.87 | 0.91 | 0.93 | 0.92 |
| T2 / TE2   | 00          |                  | 0.94             | 1.2  | 1.4  | 1.7  | 1.8  | 1.9  |
| T2 / TE2   | 01          |                  | 1.3              | 1.8  | 2.3  | 2.9  | 3.5  | 3.9  |
| T2 / TE2   | 02          |                  | 1.5              | 2.0  | 2.7  | 3.7  | 4.7  | 5.6  |
| T2 / TE2   | 03          |                  | 2.6              | 3.4  | 4.6  | 6.2  | 8.1  | 9.5  |
| T2 / TE2   | 04          |                  | 3.8              | 5.1  | 6.8  | 9.2  | 12.2 | 15.2 |
| T2 / TE2   | 05          |                  | 5.0              | 6.6  | 8.9  | 12.1 | 16.2 | 19.9 |
| T2 / TE2   | 06          |                  | 5.8              | 7.8  | 10.6 | 14.5 | 19.4 | 23.7 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.67             | 0.76 | 0.83 | 0.88 | 0.91 | 0.92 |
| T2 / TE2   | 00          |                  | 0.88             | 1.1  | 1.4  | 1.6  | 1.8  | 1.9  |
| T2 / TE2   | 01          |                  | 1.3              | 1.7  | 2.2  | 2.8  | 3.5  | 3.9  |
| T2 / TE2   | 02          |                  | 1.4              | 1.9  | 2.6  | 3.5  | 4.6  | 5.6  |
| T2 / TE2   | 03          |                  | 2.4              | 3.3  | 4.5  | 6.1  | 8.0  | 9.6  |
| T2 / TE2   | 04          |                  | 3.7              | 4.9  | 6.6  | 9.0  | 12.1 | 15.4 |
| T2 / TE2   | 05          |                  | 4.8              | 6.4  | 8.7  | 11.9 | 16.1 | 20.3 |
| T2 / TE2   | 06          |                  | 5.5              | 7.5  | 10.3 | 14.2 | 19.4 | 24.2 |

Subcooling correction factor 'fsub'

| Subcooling [K]    | 1    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.96 | 1.00 | 1.08 | 1.14 | 1.21 | 1.28 | 1.35 | 1.42 | 1.50 | 1.57 | 1.65 |

Distributor correction factor 'fp'\*)

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.97             | 0.93 | 0.92 | 0.89 | 0.86 | 0.83 | 0.80 | 0.78 | 0.74 | 0.72 | 0.67 | 0.91 |
|                       | 1.5 | 1.01             | 0.92 | 0.88 | 0.85 | 0.81 | 0.78 | 0.73 | 0.71 | 0.67 | 0.63 | 0.59 | 0.86 |
|                       | 2   | 1.01             | 0.90 | 0.86 | 0.82 | 0.77 | 0.74 | 0.69 | 0.63 | 0.59 | 0.56 | 0.52 | 0.80 |

\*) Calculated at 32 °C condensing temperature

**Capacity**

Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K

**R448A**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.77             | 0.83 | 0.87 | 0.88 | 0.86 | 0.79 |
| T2 / TE2   | 00          |                  | 1.05             | 1.25 | 1.44 | 1.60 | 1.67 | 1.59 |
| T2 / TE2   | 01          |                  | 1.51             | 1.90 | 2.35 | 2.82 | 3.19 | 3.25 |
| T2 / TE2   | 02          |                  | 1.72             | 2.19 | 2.78 | 3.50 | 4.22 | 4.58 |
| T2 / TE2   | 03          |                  | 2.86             | 3.65 | 4.67 | 5.90 | 7.14 | 7.73 |
| T2 / TE2   | 04          |                  | 4.17             | 5.30 | 6.77 | 8.67 | 10.9 | 12.4 |
| T2 / TE2   | 05          |                  | 5.45             | 6.93 | 8.87 | 11.3 | 14.1 | 15.8 |
| T2 / TE2   | 06          |                  | 6.45             | 8.26 | 10.6 | 13.7 | 17.1 | 19.1 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.77             | 0.84 | 0.89 | 0.92 | 0.93 | 0.90 |
| T2 / TE2   | 00          |                  | 1.05             | 1.26 | 1.48 | 1.67 | 1.79 | 1.81 |
| T2 / TE2   | 01          |                  | 1.51             | 1.91 | 2.40 | 2.94 | 3.43 | 3.70 |
| T2 / TE2   | 02          |                  | 1.72             | 2.21 | 2.84 | 3.64 | 4.54 | 5.23 |
| T2 / TE2   | 03          |                  | 2.88             | 3.70 | 4.78 | 6.16 | 7.70 | 8.87 |
| T2 / TE2   | 04          |                  | 4.24             | 5.42 | 6.99 | 9.08 | 11.7 | 14.1 |
| T2 / TE2   | 05          |                  | 5.53             | 7.08 | 9.15 | 11.9 | 15.2 | 18.1 |
| T2 / TE2   | 06          |                  | 6.52             | 8.40 | 10.9 | 14.3 | 18.5 | 22.0 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.75             | 0.82 | 0.88 | 0.93 | 0.95 | 0.94 |
| T2 / TE2   | 00          |                  | 1.01             | 1.23 | 1.46 | 1.67 | 1.83 | 1.90 |
| T2 / TE2   | 01          |                  | 1.47             | 1.87 | 2.37 | 2.94 | 3.51 | 3.90 |
| T2 / TE2   | 02          |                  | 1.67             | 2.16 | 2.81 | 3.65 | 4.64 | 5.52 |
| T2 / TE2   | 03          |                  | 2.82             | 3.64 | 4.75 | 6.20 | 7.91 | 9.41 |
| T2 / TE2   | 04          |                  | 4.20             | 5.39 | 6.99 | 9.18 | 12.0 | 14.9 |
| T2 / TE2   | 05          |                  | 5.47             | 7.03 | 9.16 | 12.0 | 15.7 | 19.2 |
| T2 / TE2   | 06          |                  | 6.41             | 8.31 | 10.9 | 14.5 | 19.0 | 23.4 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.70             | 0.78 | 0.84 | 0.89 | 0.93 | 0.94 |
| T2 / TE2   | 00          |                  | 0.95             | 1.17 | 1.39 | 1.61 | 1.79 | 1.89 |
| T2 / TE2   | 01          |                  | 1.38             | 1.77 | 2.26 | 2.84 | 3.44 | 3.90 |
| T2 / TE2   | 02          |                  | 1.58             | 2.06 | 2.70 | 3.54 | 4.56 | 5.54 |
| T2 / TE2   | 03          |                  | 2.68             | 3.49 | 4.59 | 6.04 | 7.82 | 9.51 |
| T2 / TE2   | 04          |                  | 4.06             | 5.23 | 6.82 | 9.01 | 11.9 | 15.1 |
| T2 / TE2   | 05          |                  | 5.26             | 6.81 | 8.92 | 11.8 | 15.6 | 19.4 |
| T2 / TE2   | 06          |                  | 6.13             | 8.00 | 10.6 | 14.2 | 19.0 | 23.8 |

Subcooling correction factor 'fsub'

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.13 | 1.19 | 1.25 | 1.31 | 1.37 | 1.42 | 1.48 | 1.54 |

Distributer correction factor 'fp' \*)

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 |
|                       | 1.5 | 0.95             | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 | 0.90 | 0.89 |
|                       | 2   | 0.93             | 0.93 | 0.92 | 0.92 | 0.92 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.87 | 0.85 |

\*) Calculated at 32 °C condensing temperature

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R449A**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.76             | 0.82 | 0.85 | 0.87 | 0.85 | 0.78 |
| T2 / TE2   | 00          |                  | 1.05             | 1.24 | 1.42 | 1.57 | 1.63 | 1.56 |
| T2 / TE2   | 01          |                  | 1.53             | 1.90 | 2.32 | 2.76 | 3.12 | 3.17 |
| T2 / TE2   | 02          |                  | 1.74             | 2.19 | 2.76 | 3.43 | 4.11 | 4.45 |
| T2 / TE2   | 03          |                  | 2.91             | 3.66 | 4.63 | 5.79 | 6.95 | 7.52 |
| T2 / TE2   | 04          |                  | 4.24             | 5.33 | 6.75 | 8.54 | 10.6 | 12.0 |
| T2 / TE2   | 05          |                  | 5.55             | 6.98 | 8.84 | 11.2 | 13.7 | 15.3 |
| T2 / TE2   | 06          |                  | 6.59             | 8.32 | 10.6 | 13.5 | 16.6 | 18.5 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |       |      |      |
|------------|-------------|------------------|------------------|------|------|-------|------|------|
|            |             |                  | -40              | -30  | -20  | -10   | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |       |      |      |
| T2 / TE2   | 0X          | 35               | 0.76             | 0.82 | 0.87 | 0.90  | 0.91 | 0.88 |
| T2 / TE2   | 00          |                  | 1.05             | 1.25 | 1.45 | 1.63  | 1.75 | 1.77 |
| T2 / TE2   | 01          |                  | 1.53             | 1.91 | 2.36 | 2.87  | 3.34 | 3.61 |
| T2 / TE2   | 02          |                  | 1.74             | 2.20 | 2.81 | 3.56  | 4.40 | 5.07 |
| T2 / TE2   | 03          |                  | 2.92             | 3.70 | 4.73 | 6.03  | 7.48 | 8.60 |
| T2 / TE2   | 04          |                  | 4.30             | 5.43 | 6.93 | 8.92  | 11.4 | 13.6 |
| T2 / TE2   | 05          |                  | 5.61             | 7.10 | 9.09 | 11.67 | 14.8 | 17.4 |
| T2 / TE2   | 06          |                  | 6.63             | 8.43 | 10.9 | 14.1  | 17.9 | 21.2 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.74             | 0.81 | 0.87 | 0.91 | 0.93 | 0.93 |
| T2 / TE2   | 00          |                  | 1.01             | 1.22 | 1.43 | 1.63 | 1.79 | 1.86 |
| T2 / TE2   | 01          |                  | 1.48             | 1.86 | 2.33 | 2.87 | 3.41 | 3.80 |
| T2 / TE2   | 02          |                  | 1.69             | 2.15 | 2.77 | 3.56 | 4.49 | 5.35 |
| T2 / TE2   | 03          |                  | 2.84             | 3.63 | 4.68 | 6.05 | 7.66 | 9.10 |
| T2 / TE2   | 04          |                  | 4.23             | 5.37 | 6.91 | 8.99 | 11.6 | 14.4 |
| T2 / TE2   | 05          |                  | 5.51             | 7.02 | 9.06 | 11.8 | 15.2 | 18.5 |
| T2 / TE2   | 06          |                  | 6.49             | 8.31 | 10.8 | 14.2 | 18.4 | 22.6 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.69             | 0.76 | 0.82 | 0.87 | 0.91 | 0.92 |
| T2 / TE2   | 00          |                  | 0.95             | 1.15 | 1.36 | 1.57 | 1.74 | 1.85 |
| T2 / TE2   | 01          |                  | 1.39             | 1.76 | 2.22 | 2.76 | 3.34 | 3.80 |
| T2 / TE2   | 02          |                  | 1.59             | 2.04 | 2.64 | 3.44 | 4.41 | 5.36 |
| T2 / TE2   | 03          |                  | 2.69             | 3.46 | 4.49 | 5.87 | 7.54 | 9.15 |
| T2 / TE2   | 04          |                  | 4.06             | 5.18 | 6.71 | 8.78 | 11.5 | 14.5 |
| T2 / TE2   | 05          |                  | 5.27             | 6.76 | 8.78 | 11.5 | 15.0 | 18.7 |
| T2 / TE2   | 06          |                  | 6.17             | 7.96 | 10.4 | 13.9 | 18.3 | 22.9 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.13 | 1.19 | 1.25 | 1.31 | 1.37 | 1.43 | 1.49 | 1.55 |

*Distributer correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.93 |
|                       | 1.5 | 0.95             | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 |
|                       | 2   | 0.93             | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.88 | 0.87 | 0.84 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R452A**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.57             | 0.63 | 0.68 | 0.70 | 0.68 | 0.60 |
| T2 / TE2   | 00          |                  | 0.75             | 0.96 | 1.15 | 1.29 | 1.32 | 1.22 |
| T2 / TE2   | 01          |                  | 1.05             | 1.45 | 1.91 | 2.35 | 2.60 | 2.53 |
| T2 / TE2   | 02          |                  | 1.17             | 1.66 | 2.29 | 2.98 | 3.53 | 3.64 |
| T2 / TE2   | 03          |                  | 1.94             | 2.78 | 3.85 | 5.04 | 5.97 | 6.11 |
| T2 / TE2   | 04          |                  | 2.79             | 4.01 | 5.66 | 7.60 | 9.27 | 9.80 |
| T2 / TE2   | 05          |                  | 3.66             | 5.28 | 7.45 | 10.0 | 12.2 | 12.7 |
| T2 / TE2   | 06          |                  | 4.33             | 6.27 | 8.89 | 12.0 | 14.5 | 15.0 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.54             | 0.62 | 0.68 | 0.71 | 0.73 | 0.69 |
| T2 / TE2   | 00          |                  | 0.70             | 0.93 | 1.14 | 1.33 | 1.44 | 1.41 |
| T2 / TE2   | 01          |                  | 0.99             | 1.40 | 1.89 | 2.42 | 2.83 | 2.95 |
| T2 / TE2   | 02          |                  | 1.12             | 1.61 | 2.27 | 3.08 | 3.86 | 4.26 |
| T2 / TE2   | 03          |                  | 1.86             | 2.70 | 3.84 | 5.24 | 6.56 | 7.18 |
| T2 / TE2   | 04          |                  | 2.72             | 3.94 | 5.67 | 7.92 | 10.2 | 11.6 |
| T2 / TE2   | 05          |                  | 3.56             | 5.17 | 7.46 | 10.4 | 13.4 | 15.0 |
| T2 / TE2   | 06          |                  | 4.19             | 6.12 | 8.87 | 12.5 | 16.1 | 17.8 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.49             | 0.57 | 0.64 | 0.69 | 0.73 | 0.73 |
| T2 / TE2   | 00          |                  | 0.64             | 0.85 | 1.07 | 1.28 | 1.44 | 1.49 |
| T2 / TE2   | 01          |                  | 0.91             | 1.29 | 1.78 | 2.34 | 2.85 | 3.11 |
| T2 / TE2   | 02          |                  | 1.03             | 1.49 | 2.14 | 2.99 | 3.90 | 4.51 |
| T2 / TE2   | 03          |                  | 1.72             | 2.52 | 3.64 | 5.11 | 6.68 | 7.65 |
| T2 / TE2   | 04          |                  | 2.56             | 3.70 | 5.39 | 7.73 | 10.4 | 12.4 |
| T2 / TE2   | 05          |                  | 3.35             | 4.86 | 7.09 | 10.2 | 13.8 | 16.2 |
| T2 / TE2   | 06          |                  | 3.91             | 5.72 | 8.40 | 12.2 | 16.5 | 19.2 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.42             | 0.51 | 0.58 | 0.63 | 0.67 | 0.69 |
| T2 / TE2   | 00          |                  | 0.56             | 0.75 | 0.95 | 1.15 | 1.32 | 1.42 |
| T2 / TE2   | 01          |                  | 0.79             | 1.14 | 1.58 | 2.11 | 2.63 | 2.97 |
| T2 / TE2   | 02          |                  | 0.91             | 1.32 | 1.91 | 2.71 | 3.62 | 4.31 |
| T2 / TE2   | 03          |                  | 1.53             | 2.24 | 3.25 | 4.65 | 6.24 | 7.35 |
| T2 / TE2   | 04          |                  | 2.33             | 3.33 | 4.82 | 7.00 | 9.70 | 11.9 |
| T2 / TE2   | 05          |                  | 3.04             | 4.36 | 6.35 | 9.26 | 12.9 | 15.7 |
| T2 / TE2   | 06          |                  | 3.53             | 5.11 | 7.50 | 11.0 | 15.5 | 18.7 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.97 | 1.00 | 1.09 | 1.16 | 1.23 | 1.30 | 1.38 | 1.45 | 1.52 | 1.59 | 1.66 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.92 |
|                       | 1.5 | 0.95             | 0.95 | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
|                       | 2   | 0.93             | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.90 | 0.90 | 0.88 | 0.87 | 0.84 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R454C**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.60             | 0.68 | 0.73 | 0.76 | 0.75 | 0.71 |
| T2 / TE2   | 00          |                  | 0.73             | 0.93 | 1.1  | 1.3  | 1.4  | 1.4  |
| T2 / TE2   | 01          |                  | 1.0              | 1.3  | 1.7  | 2.2  | 2.6  | 2.7  |
| T2 / TE2   | 02          |                  | 1.1              | 1.5  | 2.0  | 2.6  | 3.3  | 3.7  |
| T2 / TE2   | 03          |                  | 1.9              | 2.5  | 3.4  | 4.4  | 5.5  | 6.3  |
| T2 / TE2   | 04          |                  | 2.8              | 3.7  | 4.9  | 6.4  | 8.2  | 9.8  |
| T2 / TE2   | 05          |                  | 3.5              | 4.7  | 6.2  | 8.1  | 10.4 | 12.3 |
| T2 / TE2   | 06          |                  | 4.3              | 5.8  | 7.6  | 10.0 | 12.9 | 15.4 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.59             | 0.68 | 0.74 | 0.79 | 0.80 | 0.78 |
| T2 / TE2   | 00          |                  | 0.71             | 0.92 | 1.1  | 1.3  | 1.5  | 1.5  |
| T2 / TE2   | 01          |                  | 0.99             | 1.3  | 1.8  | 2.2  | 2.7  | 3.0  |
| T2 / TE2   | 02          |                  | 1.1              | 1.5  | 2.0  | 2.7  | 3.4  | 4.1  |
| T2 / TE2   | 03          |                  | 1.9              | 2.5  | 3.4  | 4.5  | 5.8  | 7.0  |
| T2 / TE2   | 04          |                  | 2.8              | 3.7  | 5.0  | 6.6  | 8.6  | 10.8 |
| T2 / TE2   | 05          |                  | 3.5              | 4.7  | 6.3  | 8.4  | 11.0 | 13.7 |
| T2 / TE2   | 06          |                  | 4.3              | 5.8  | 7.7  | 10.3 | 13.6 | 17.1 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.56             | 0.65 | 0.73 | 0.78 | 0.81 | 0.81 |
| T2 / TE2   | 00          |                  | 0.68             | 0.88 | 1.1  | 1.3  | 1.5  | 1.6  |
| T2 / TE2   | 01          |                  | 0.94             | 1.3  | 1.7  | 2.2  | 2.7  | 3.1  |
| T2 / TE2   | 02          |                  | 1.1              | 1.5  | 2.0  | 2.6  | 3.4  | 4.3  |
| T2 / TE2   | 03          |                  | 1.8              | 2.5  | 3.3  | 4.5  | 5.8  | 7.3  |
| T2 / TE2   | 04          |                  | 2.7              | 3.6  | 4.9  | 6.5  | 8.7  | 11.2 |
| T2 / TE2   | 05          |                  | 3.4              | 4.6  | 6.2  | 8.3  | 11.1 | 14.2 |
| T2 / TE2   | 06          |                  | 4.1              | 5.6  | 7.6  | 10.3 | 13.8 | 17.8 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.51             | 0.61 | 0.68 | 0.74 | 0.78 | 0.80 |
| T2 / TE2   | 00          |                  | 0.62             | 0.82 | 1.0  | 1.3  | 1.4  | 1.6  |
| T2 / TE2   | 01          |                  | 0.86             | 1.2  | 1.6  | 2.1  | 2.6  | 3.1  |
| T2 / TE2   | 02          |                  | 0.97             | 1.4  | 1.9  | 2.5  | 3.3  | 4.2  |
| T2 / TE2   | 03          |                  | 1.6              | 2.3  | 3.1  | 4.3  | 5.7  | 7.2  |
| T2 / TE2   | 04          |                  | 2.5              | 3.4  | 4.7  | 6.3  | 8.5  | 11.1 |
| T2 / TE2   | 05          |                  | 3.1              | 4.3  | 5.9  | 8.0  | 10.8 | 14.1 |
| T2 / TE2   | 06          |                  | 3.8              | 5.2  | 7.2  | 9.8  | 13.4 | 17.6 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.13 | 1.19 | 1.25 | 1.33 | 1.39 | 1.45 | 1.51 | 1.58 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.96             | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.93 | 0.92 |
|                       | 1.5 | 0.94             | 0.94 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
|                       | 2   | 0.92             | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.87 | 0.84 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R455A**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.68             | 0.76 | 0.82 | 0.85 | 0.85 | 0.81 |
| T2 / TE2   | 00          |                  | 0.84             | 1.1  | 1.3  | 1.5  | 1.6  | 1.6  |
| T2 / TE2   | 01          |                  | 1.2              | 1.6  | 2.1  | 2.6  | 3.1  | 3.3  |
| T2 / TE2   | 02          |                  | 1.3              | 1.8  | 2.4  | 3.2  | 4.0  | 4.7  |
| T2 / TE2   | 03          |                  | 2.2              | 3.0  | 4.0  | 5.3  | 6.8  | 8.0  |
| T2 / TE2   | 04          |                  | 3.3              | 4.4  | 5.8  | 7.7  | 10.2 | 12.7 |
| T2 / TE2   | 05          |                  | 4.1              | 5.5  | 7.4  | 9.8  | 13.0 | 15.9 |
| T2 / TE2   | 06          |                  | 4.9              | 6.7  | 9.0  | 12.1 | 16.2 | 19.8 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.66             | 0.75 | 0.83 | 0.87 | 0.89 | 0.87 |
| T2 / TE2   | 00          |                  | 0.82             | 1.1  | 1.3  | 1.5  | 1.7  | 1.7  |
| T2 / TE2   | 01          |                  | 1.2              | 1.6  | 2.1  | 2.6  | 3.2  | 3.6  |
| T2 / TE2   | 02          |                  | 1.3              | 1.8  | 2.4  | 3.2  | 4.2  | 5.1  |
| T2 / TE2   | 03          |                  | 2.2              | 3.0  | 4.0  | 5.4  | 7.1  | 8.6  |
| T2 / TE2   | 04          |                  | 3.3              | 4.4  | 5.9  | 7.9  | 10.6 | 13.6 |
| T2 / TE2   | 05          |                  | 4.1              | 5.5  | 7.4  | 10.0 | 13.5 | 17.1 |
| T2 / TE2   | 06          |                  | 4.9              | 6.6  | 9.0  | 12.4 | 16.8 | 21.4 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.63             | 0.72 | 0.80 | 0.86 | 0.89 | 0.89 |
| T2 / TE2   | 00          |                  | 0.77             | 1.0  | 1.3  | 1.5  | 1.7  | 1.8  |
| T2 / TE2   | 01          |                  | 1.1              | 1.5  | 2.0  | 2.6  | 3.2  | 3.6  |
| T2 / TE2   | 02          |                  | 1.2              | 1.7  | 2.3  | 3.1  | 4.1  | 5.1  |
| T2 / TE2   | 03          |                  | 2.1              | 2.9  | 3.9  | 5.3  | 7.1  | 8.8  |
| T2 / TE2   | 04          |                  | 3.1              | 4.3  | 5.7  | 7.8  | 10.5 | 13.8 |
| T2 / TE2   | 05          |                  | 3.9              | 5.3  | 7.3  | 9.9  | 13.5 | 17.5 |
| T2 / TE2   | 06          |                  | 4.6              | 6.4  | 8.8  | 12.2 | 16.9 | 21.9 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.57             | 0.67 | 0.75 | 0.81 | 0.85 | 0.87 |
| T2 / TE2   | 00          |                  | 0.70             | 0.93 | 1.2  | 1.4  | 1.6  | 1.7  |
| T2 / TE2   | 01          |                  | 0.99             | 1.4  | 1.9  | 2.4  | 3.0  | 3.6  |
| T2 / TE2   | 02          |                  | 1.1              | 1.6  | 2.2  | 3.0  | 4.0  | 5.0  |
| T2 / TE2   | 03          |                  | 1.9              | 2.7  | 3.7  | 5.1  | 6.8  | 8.6  |
| T2 / TE2   | 04          |                  | 2.9              | 4.0  | 5.5  | 7.5  | 10.2 | 13.5 |
| T2 / TE2   | 05          |                  | 3.6              | 5.0  | 6.9  | 9.5  | 13.1 | 17.2 |
| T2 / TE2   | 06          |                  | 4.2              | 6.0  | 8.3  | 11.7 | 16.4 | 21.6 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.13 | 1.19 | 1.25 | 1.33 | 1.39 | 1.45 | 1.52 | 1.58 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.97             | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 |
|                       | 1.5 | 0.95             | 0.95 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.91 |
|                       | 2   | 0.93             | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N -40 °C to 10 °C. Opening superheat sh= 6 K*
**R1234yf**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.34             | 0.39 | 0.44 | 0.46 | 0.46 | 0.41 |
| T2 / TE2   | 00          |                  | 0.37             | 0.49 | 0.61 | 0.72 | 0.78 | 0.75 |
| T2 / TE2   | 01          |                  | 0.50             | 0.68 | 0.89 | 1.1  | 1.3  | 1.4  |
| T2 / TE2   | 02          |                  | 0.56             | 0.76 | 1.0  | 1.3  | 1.6  | 1.7  |
| T2 / TE2   | 03          |                  | 0.94             | 1.3  | 1.7  | 2.2  | 2.7  | 2.9  |
| T2 / TE2   | 04          |                  | 1.4              | 1.9  | 2.5  | 3.2  | 3.9  | 4.3  |
| T2 / TE2   | 05          |                  | 1.7              | 2.4  | 3.2  | 4.1  | 5.0  | 5.5  |
| T2 / TE2   | 06          |                  | 2.2              | 2.9  | 3.9  | 5.0  | 6.2  | 6.8  |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.33             | 0.39 | 0.45 | 0.49 | 0.50 | 0.49 |
| T2 / TE2   | 00          |                  | 0.37             | 0.49 | 0.62 | 0.75 | 0.86 | 0.90 |
| T2 / TE2   | 01          |                  | 0.50             | 0.68 | 0.91 | 1.2  | 1.4  | 1.6  |
| T2 / TE2   | 02          |                  | 0.55             | 0.76 | 1.0  | 1.4  | 1.7  | 2.1  |
| T2 / TE2   | 03          |                  | 0.93             | 1.3  | 1.7  | 2.3  | 2.9  | 3.5  |
| T2 / TE2   | 04          |                  | 1.4              | 1.9  | 2.5  | 3.4  | 4.3  | 5.2  |
| T2 / TE2   | 05          |                  | 1.8              | 2.4  | 3.2  | 4.3  | 5.5  | 6.6  |
| T2 / TE2   | 06          |                  | 2.2              | 3.0  | 4.0  | 5.3  | 6.8  | 8.3  |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.31             | 0.38 | 0.44 | 0.49 | 0.52 | 0.53 |
| T2 / TE2   | 00          |                  | 0.35             | 0.47 | 0.61 | 0.75 | 0.88 | 0.97 |
| T2 / TE2   | 01          |                  | 0.47             | 0.65 | 0.88 | 1.2  | 1.5  | 1.8  |
| T2 / TE2   | 02          |                  | 0.53             | 0.73 | 1.0  | 1.4  | 1.8  | 2.2  |
| T2 / TE2   | 03          |                  | 0.89             | 1.2  | 1.7  | 2.3  | 3.0  | 3.7  |
| T2 / TE2   | 04          |                  | 1.3              | 1.8  | 2.5  | 3.4  | 4.4  | 5.6  |
| T2 / TE2   | 05          |                  | 1.7              | 2.3  | 3.2  | 4.3  | 5.6  | 7.2  |
| T2 / TE2   | 06          |                  | 2.1              | 2.9  | 3.9  | 5.3  | 7.0  | 8.9  |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.28             | 0.35 | 0.42 | 0.47 | 0.51 | 0.53 |
| T2 / TE2   | 00          |                  | 0.31             | 0.43 | 0.57 | 0.72 | 0.86 | 0.98 |
| T2 / TE2   | 01          |                  | 0.42             | 0.60 | 0.83 | 1.1  | 1.4  | 1.8  |
| T2 / TE2   | 02          |                  | 0.48             | 0.68 | 0.95 | 1.3  | 1.7  | 2.2  |
| T2 / TE2   | 03          |                  | 0.81             | 1.1  | 1.6  | 2.2  | 2.9  | 3.8  |
| T2 / TE2   | 04          |                  | 1.2              | 1.7  | 2.4  | 3.2  | 4.3  | 5.7  |
| T2 / TE2   | 05          |                  | 1.6              | 2.2  | 3.0  | 4.1  | 5.5  | 7.2  |
| T2 / TE2   | 06          |                  | 1.9              | 2.7  | 3.7  | 5.1  | 6.8  | 9.0  |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.97 | 1.00 | 1.08 | 1.14 | 1.20 | 1.26 | 1.35 | 1.41 | 1.48 | 1.54 | 1.60 |

*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
|                       | 1   | 0.93             | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.91 | 0.90 | 0.88 | 0.86 | 0.83 |
|                       | 1.5 | 0.90             | 0.89 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 | 0.86 | 0.84 | 0.82 | 0.78 | 0.73 |
|                       | 2   | 0.86             | 0.86 | 0.85 | 0.85 | 0.84 | 0.83 | 0.82 | 0.80 | 0.78 | 0.75 | 0.70 | 0.61 |

*\*) Calculated at 32 °C condensing temperature*

**Capacity**
*Capacity in kW, range N, -40°C to 10°C, opening superheat sh= 6 K*
**R513A**

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 25               | 0.39             | 0.46 | 0.51 | 0.54 | 0.53 | 0.47 |
| T2 / TE2   | 00          |                  | 0.42             | 0.55 | 0.70 | 0.83 | 0.91 | 0.86 |
| T2 / TE2   | 01          |                  | 0.55             | 0.76 | 1.0  | 1.3  | 1.5  | 1.6  |
| T2 / TE2   | 02          |                  | 0.62             | 0.85 | 1.1  | 1.5  | 1.8  | 2.0  |
| T2 / TE2   | 03          |                  | 1.0              | 1.4  | 1.9  | 2.5  | 3.1  | 3.3  |
| T2 / TE2   | 04          |                  | 1.5              | 2.1  | 2.8  | 3.6  | 4.5  | 5.0  |
| T2 / TE2   | 05          |                  | 1.9              | 2.6  | 3.5  | 4.6  | 5.7  | 6.4  |
| T2 / TE2   | 06          |                  | 2.4              | 3.2  | 4.4  | 5.7  | 7.1  | 7.9  |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 35               | 0.39             | 0.46 | 0.52 | 0.57 | 0.59 | 0.58 |
| T2 / TE2   | 00          |                  | 0.41             | 0.56 | 0.72 | 0.88 | 1.0  | 1.1  |
| T2 / TE2   | 01          |                  | 0.55             | 0.77 | 1.0  | 1.4  | 1.7  | 1.9  |
| T2 / TE2   | 02          |                  | 0.61             | 0.86 | 1.2  | 1.6  | 2.0  | 2.4  |
| T2 / TE2   | 03          |                  | 1.0              | 1.4  | 2.0  | 2.6  | 3.4  | 4.1  |
| T2 / TE2   | 04          |                  | 1.5              | 2.1  | 2.9  | 3.9  | 5.0  | 6.2  |
| T2 / TE2   | 05          |                  | 2.0              | 2.7  | 3.7  | 4.9  | 6.4  | 7.8  |
| T2 / TE2   | 06          |                  | 2.4              | 3.3  | 4.5  | 6.1  | 7.9  | 9.8  |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 45               | 0.37             | 0.45 | 0.51 | 0.57 | 0.61 | 0.62 |
| T2 / TE2   | 00          |                  | 0.40             | 0.54 | 0.71 | 0.88 | 1.0  | 1.2  |
| T2 / TE2   | 01          |                  | 0.54             | 0.75 | 1.0  | 1.4  | 1.7  | 2.1  |
| T2 / TE2   | 02          |                  | 0.60             | 0.84 | 1.2  | 1.6  | 2.1  | 2.6  |
| T2 / TE2   | 03          |                  | 1.0              | 1.4  | 2.0  | 2.7  | 3.5  | 4.5  |
| T2 / TE2   | 04          |                  | 1.5              | 2.1  | 2.9  | 3.9  | 5.2  | 6.7  |
| T2 / TE2   | 05          |                  | 2.0              | 2.7  | 3.7  | 5.0  | 6.7  | 8.5  |
| T2 / TE2   | 06          |                  | 2.4              | 3.3  | 4.6  | 6.2  | 8.3  | 10.7 |

| Valve type | Orifice no. | Cond. temp. [°C] | Evaporating [°C] |      |      |      |      |      |
|------------|-------------|------------------|------------------|------|------|------|------|------|
|            |             |                  | -40              | -30  | -20  | -10  | 0    | 10   |
|            |             |                  | Capacity [kW]    |      |      |      |      |      |
| T2 / TE2   | 0X          | 55               | 0.35             | 0.42 | 0.49 | 0.55 | 0.59 | 0.63 |
| T2 / TE2   | 00          |                  | 0.38             | 0.52 | 0.68 | 0.85 | 1.0  | 1.2  |
| T2 / TE2   | 01          |                  | 0.51             | 0.72 | 0.99 | 1.3  | 1.7  | 2.1  |
| T2 / TE2   | 02          |                  | 0.57             | 0.81 | 1.1  | 1.6  | 2.1  | 2.7  |
| T2 / TE2   | 03          |                  | 0.98             | 1.4  | 1.9  | 2.6  | 3.5  | 4.6  |
| T2 / TE2   | 04          |                  | 1.5              | 2.1  | 2.9  | 3.9  | 5.2  | 6.8  |
| T2 / TE2   | 05          |                  | 1.9              | 2.7  | 3.7  | 5.0  | 6.6  | 8.7  |
| T2 / TE2   | 06          |                  | 2.3              | 3.2  | 4.5  | 6.1  | 8.2  | 10.8 |

*Subcooling correction factor 'fsub'*

| Subcooling [K]    | 2    | 4    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| Correction factor | 0.98 | 1.00 | 1.07 | 1.13 | 1.18 | 1.24 | 1.31 | 1.37 | 1.43 | 1.49 | 1.55 |

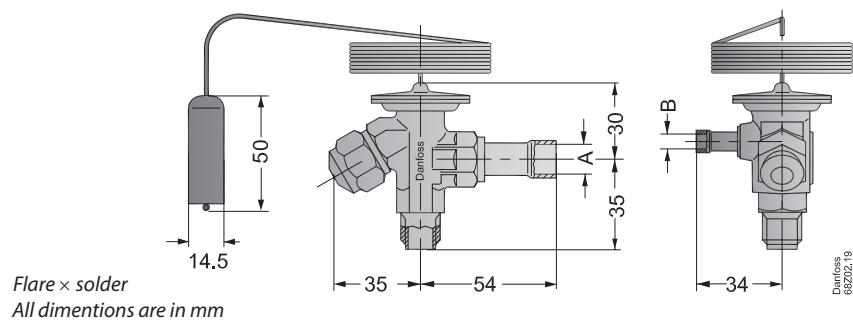
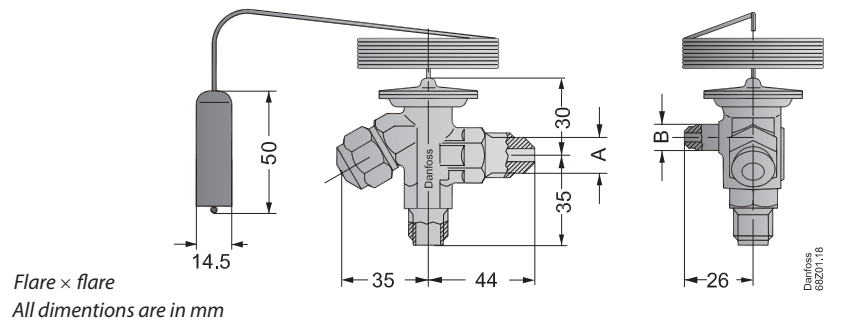
*Distributor correction factor 'fp' \*)*

| Pressure drop [bar]   |     | Evaporating [°C] |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | -40              | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    | 10   | 15   |
| "Pressure drop [bar]" | 0   | 1.00             | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
|                       | 1   | 0.94             | 0.93 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.91 | 0.90 | 0.89 | 0.87 | 0.84 |
|                       | 1.5 | 0.90             | 0.90 | 0.90 | 0.89 | 0.89 | 0.88 | 0.88 | 0.86 | 0.85 | 0.83 | 0.80 | 0.75 |
|                       | 2   | 0.87             | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 | 0.83 | 0.81 | 0.79 | 0.77 | 0.72 | 0.64 |

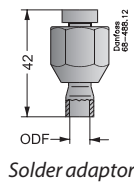
*\*) Calculated at 32 °C condensing temperature*

## Dimensions and weights

T2 and TE2



|                | Outlet                      | Equalization               | Weight    |
|----------------|-----------------------------|----------------------------|-----------|
|                | A                           | B                          | [kg / lb] |
| Flare x flare  | 1/2" flare                  | 1/4" flare                 | 0.3 / 0.7 |
| Flare x solder | 1/2" solder<br>12 mm solder | 1/4" solder<br>6 mm solder | 0.3 / 0.7 |



| Solder ODF |      | Weight      |
|------------|------|-------------|
| [in]       | [mm] | [kg / lb]   |
| 1/4        | 6    | 0.05 / 0.11 |
| 3/8        | 10   | 0.05 / 0.11 |