

ENGINEERING
TOMORROW

Danfoss

Catalogue | Standard MCHC condenser

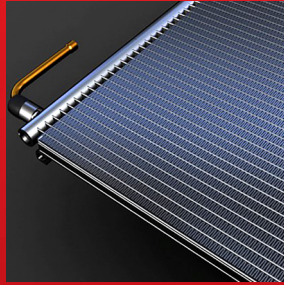
Save time and money with **MCHC** standard products

Micro-Channel Heat Exchanger

70%

Lower refrigerant
charge

Initial and lifetime
costs are significantly
reduced

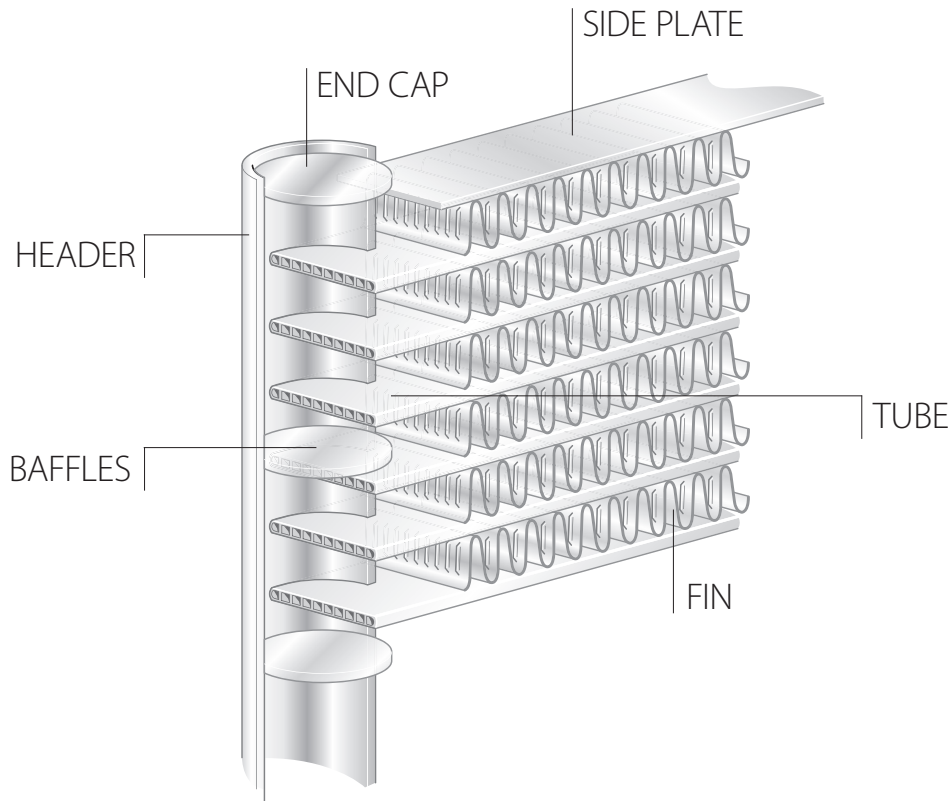




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Innovative Design



MCHEs have an ingeniously simple design - made entirely of all aluminium which is not only lightweight but also prevents galvanic corrosion. The refrigerant-carrying tubes are formed to optimise heat transfer, thus enabling the production of more compact, but equally effective cooling solutions. Meanwhile, their smart louvred fin design maximises surface contact, successfully reducing the air-side pressure loss, improving efficiency and reducing noise levels.

TUBE The ingenious design of the tubes gives superior heat transfer, which in turn enables a more compact but equally effective solution overall.

FIN A superior louvred fin design maximises the surface contact. This reduces the air-side pressure loss and improves efficiency, as well as reducing noise levels.

HEADER In combination with baffles, MCHE headers control the flow of refrigerant and enable optimisation of the velocity in all phases.

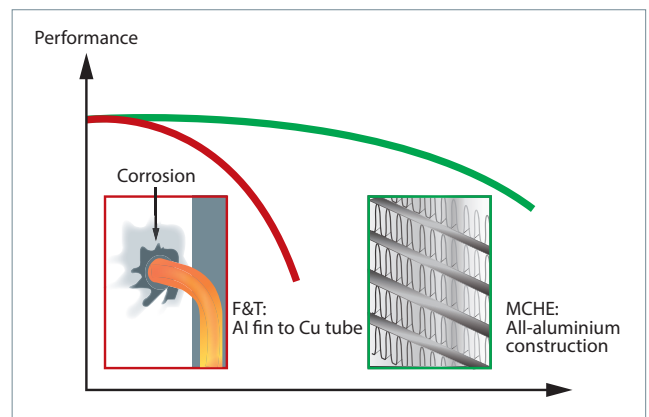
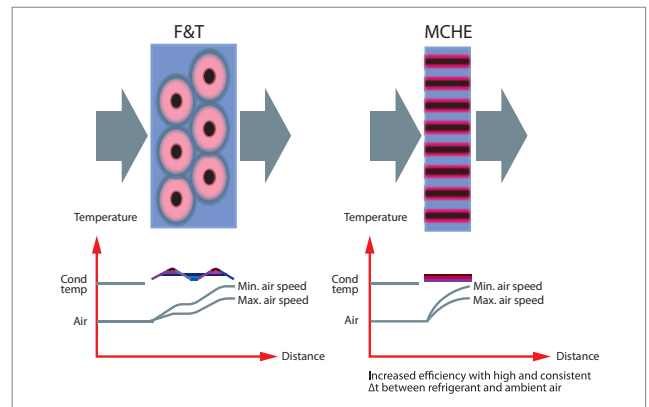
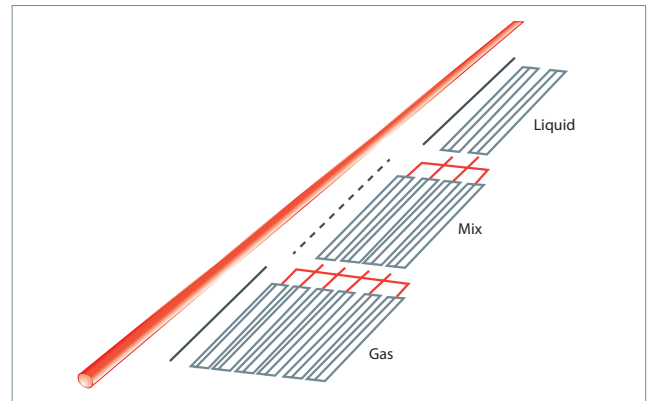
BAFFLE In combination with headers, MCHE baffles control the flow of refrigerant and enable optimisation of the velocity in all phases.

END CAP The end cap and the main body of the MCHE are brazed together to form one leak-free stable unit. Being made entirely of aluminium, the whole heat exchanger (including the end cap) is resistant to galvanic corrosion.

SIDE PLATE The side plates are used to protect the tube from being destroyed by external force and some codes are formed in a way that facilitates installation using U-bars.

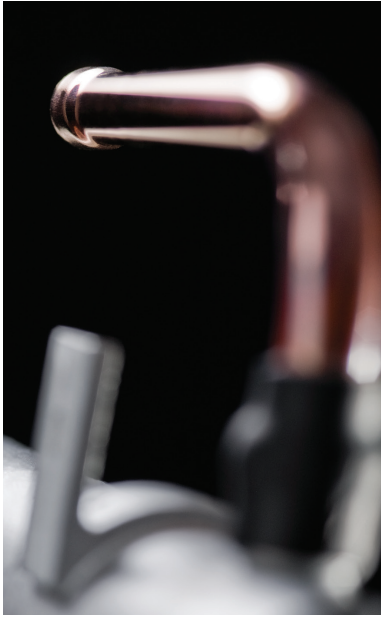
Advantages – Comparison With F&T Heat Exchanger

- 1 Greater refrigerant-side heat transfer efficiency
- 2 Greater air-side heat transfer efficiency
- 3 Lower hold-up volumes and refrigerant charge
- 4 Compact design and light weight
- 5 Better corrosion characteristic
- 6 Lower noise levels
- 7 Brazed tube to fin joint
- 8 Easy cleaning



| | |
|--|--|
| <p>F&T</p> <ul style="list-style-type: none"> • Dust removal difficult - heat transfer loss • High risk of damage during cleaning | <p>MCHE</p> <ul style="list-style-type: none"> • Dust removal easy • Immediate performance recovery |
|--|--|

Stay Safe With Our Standard



EASY FOR YOU

A quiet revolution is underway in the world of cooling. The introduction of MCHE condensers, which combine resource and energy efficiency with minimal use of refrigerants, is enabling the development of leaner, greener solutions. Understandably, MCHEs are in demand! Yet most MCHE suppliers today require a minimum order volume. What happens if you only need a few condensers, for example to try out in a prototype product or to fulfil a customised order of your own? With our standard MCHEs, it's simple.

THE SELECTED RANGE FOR COMMON APPLICATIONS

Select one of our standard MCHE products, which are optimised for specific applications, and you can buy any quantity of condensers, any time, large or small. Our factories are set up to produce a range of different application-specific MCHEs, which you can adjust to meet essential requirements with a minimum of effort.

THE SIMPLE GUIDE

Our standard products are adapted for use in the areas below (see details on page 4). Select which area is most relevant to your business, choose the desired size of condenser and the capacity in kilowatts required ...then simply place your order. With logistics centres in the US, Denmark and China, and manufacturing in China and Mexico we offer fast deliveries to any country or region.

ENTIRETY

Draw on our broad experience of both the HVAC and refrigeration businesses. Our customers benefit from this knowledge in the form of superior heat exchanger products which enable the production of leaner, greener cooling systems. And we willingly share our expertise with MCHE customers around the world!

Your Demand – Our Supply



By greatly enhancing both efficiency and environmental performance, MicroChannel heat exchangers are completely changing the way we look at things. Choose from a range of standard products which give optimal results in your cooling application.

CHILLERS

MCHEx have a 70% lower refrigerant charge than F&T coils. When an MCHEx is used as your condenser, this leads to significantly more environmentally friendly systems. As a manufacturer, that means you can meet legal regulations, get environmental certification and take advantage of 'green' tax incentives.

CONDENSING UNITS

MCHEx' excellent heat transfer raises the efficiency of your products, making it possible to build a high-performance range with a slimmer design (using the same frontal area). With compact, energy-efficient products, you save on material, transport and storage costs. At the same time, you increase the attractiveness of your offering to customers.

INDOOR DISPLAYS/ICE MACHINES

In retail outlets for chilled food and drinks, every centimetre counts. Building cabinets with compact, efficient MCHEx lets you maximise the space available for product display while minimising the mechanical space requirement. Similarly, MCHEx enable a slimmer design for ice machines used in hotels or restaurants, where space is also at a premium.

RESIDENTIAL AC

MCHEx have a lower air side pressure loss than F&T coils, which means they function more quietly - as well as consuming less fan power. This is obviously a major advantage in residential applications, and ensures that as a manufacturer you are able to meet local market regulations with regard to noise levels. In addition, their 70% reduced refrigerant charge enables the design of more environmentally friendly AC systems.

AIR DRYERS

When MCHEx are used in air dryers, their high efficiency and compact nature let you reach out to new customers. MCHEx offer both lower energy consumption and lower refrigerant charge, so you can develop cost-effective solutions with a strong environmental profile.

CABINET COOLING

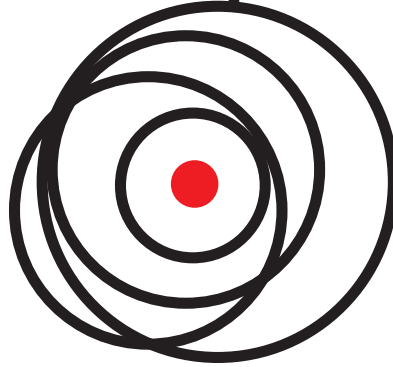
Safeguard your customers' most sensitive technologies with our innovative, reliable MCHEx. Their excellent heat transfer lets you produce compact, energy-efficient units. Combined with a low hold-up volume and reduced refrigerant charge, this also means a significant reduction in CO₂ footprint.

COMMERCIAL SPLIT/ROOF TOPS

MCHEx offer several major advantages over traditional heat exchanger technologies. Their 70% lower refrigerant charge makes your systems more cost-effective to produce and own, and reduces environmental impacts. In addition, systems using MCHEx weigh a lot less, which can make a big difference when positioning the unit on a roof top.

BizSpot

01 Choose your application



02 Define required size

03 Order from stock

The whole idea of developing standard product ranges is to help your business move swiftly and smoothly into the MCHE future. Our ready-made, optimised heat exchanger solutions help you speed up product development and streamline production. If you have any queries, please feel free to contact us and we will help you choose a product that's most suitable for your business.

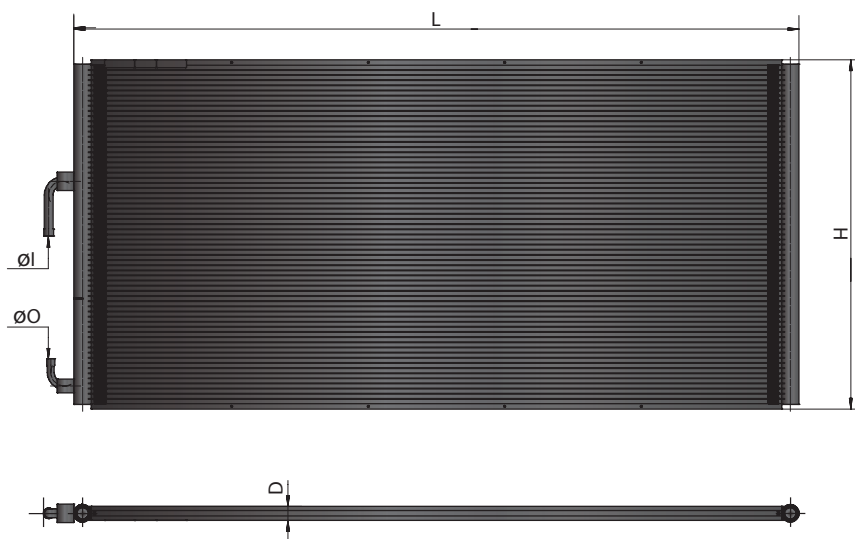
PERFORMANCE GUARANTEED

When you choose a new kind of heat exchanger for your application, you want to be sure it will perform smoothly. That's why, at our factories, we use every tool at our disposal to guarantee efficiency, quality, and ultimately the reliability of the product we deliver to you.

QUALITY ASSURED

In the production of MCHEs, we have adopted the high quality standards of the automotive industry. Every step in the production chain is quality-certified with ISO 9001 and IATF 16949. All the external parts used in our products are approved by third parties such as PED and UL.

Standard Condenser Catalogue



| Standard Type | Total Length | Total Height | Tube Width | Inlet ID | Outlet ID | Coil Weight [KG/LB] | Page |
|---------------|----------------|----------------|----------------|----------------|-----------------|------------------------|------|
| | [L] [mm/in] | [H] [mm/in] | [D] [mm/in] | [Φ] [mm/in] | [ΦO] [mm/in] | | |
| D1000-C | 332/13.07 | 300.7/11.84 | 16/0.63 | 6.15/0.24 | 6.15/0.24 | 0.823/1.81 | 8 |
| D1100-C | 387/15.24 | 347.7/13.69 | 16/0.63 | 6.15/0.24 | 6.15/0.24 | 1.071/2.36 | 10 |
| D1200-C | 462/18.19 | 432.3/17.02 | 16/0.63 | 8.2/0.32 | 6.15/0.24 | 1.534/3.37 | 12 |
| D1300-C | 552/21.73 | 516.9/20.35 | 16/0.63 | 9.7/0.38 | 8.2/0.32 | 2.22/4.88 | 14 |
| D1400-C | 800/31.5 | 770.7/30.34 | 16/0.63 | 9.7/0.38 | 9.7/0.38 | 4.51/9.92 | 16 |
| D1500-C | 1074/42.28 | 516.9/20.35 | 25.4/1 | 12.9/0.51 | 12.9/0.51 | 6.515/14.33 | 18 |
| D1600-C | 1300/51.18 | 639.1/25.16 | 16/0.63 | 12.9/0.51 | 12.9/0.51 | 6.012/13.23 | 20 |
| D1700-C | 1324/52.13 | 639.1/25.16 | 25.4/1 | 16.1/0.63 | 12.9/0.51 | 9.777/21.51 | 22 |
| D1800-C | 1074/42.28 | 1212.5/47.74 | 25.4/1 | 22.4/0.88 | 22.4/0.88 | 15.139/33.31 | 24 |
| D1900-C | 1274/50.16 | 1362.9/53.66 | 25.4/1 | 22.4/0.88 | 22.4/0.88 | 19.88/43.74 | 26 |
| D2000-C | 2000/78.74 | 1058.3/41.67 | 25.4/1 | 25.4/1(OD) | 22.4/0.88 | 26.273/57.8 | 28 |
| D2100-C | 332/13.07 | 240/9.45 | 16/0.63 | 6.15/0.24 | 6.15/0.24 | 0.643/0.29 | 30 |
| D2200-C | 552/21.73 | 240/9.45 | 16/0.63 | 6.15/0.24 | 6.15/0.24 | 1.011/0.46 | 32 |
| D2300-C | 802/31.57 | 240/9.45 | 16/0.63 | 9.7/0.38 | 8.2/0.32 | 1.391/0.63 | 34 |

Common Working Conditions

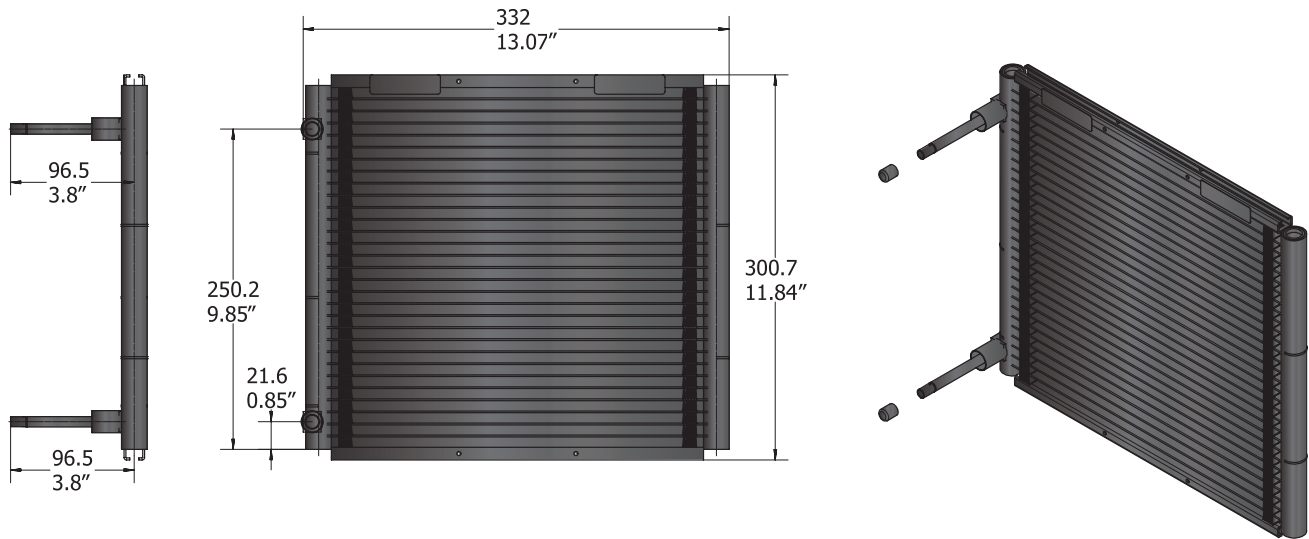
| Working conditions | Units | Contents |
|--|------------------|---|
| Typical refrigerant application | / | R410A / R134a / R404A / R407C R290 / R452B / R454B |
| Inlet air temperature | °C / °F | 35/95 |
| Inlet relative humidity | % | 50 |
| Sub cooling | K | 4 |
| Variable1: ($\Delta T=10$ K / 18 °F) | | |
| Condensing temperature | °C / °F | 45/113 |
| Inlet refrigerant temperature | °C / °F | 75/167 |
| Variable1: ($\Delta T=15$ K / 27 °F) | | |
| Condensing temperature | °C / °F | 50/122 |
| Inlet refrigerant temperature | °C / °F | 80/176 |
| Variable1: ($\Delta T=20$ K / 36 °F) | | |
| Condensing temperature | °C / °F | 55/131 |
| Inlet refrigerant temperature | °C / °F | 85/185 |
| Variable1: ($\Delta T=25$ K / 45 °F) | | |
| Condensing temperature | °C / °F | 60/140 |
| Inlet refrigerant temperature | °C / °F | 90/194 |
| Variable2: (air velocity) | [m/s] / [ft/min] | 1.0/197 |
| | | 1.5/295 |
| | | 2.0/394 |
| | | 2.5/492 |
| | | 3.0/591 |

Remarks: ΔT = Condense temp. – Inlet air temp.

D1000-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0111 | Platform | 2G16-23FPI |
| Coil length | 332 mm / 13.07 in | Coil height | 300.7 mm / 11.84 in |
| Inlet connection (ID) | 6.15 mm / 0.24 in | Outlet connection (ID) | 6.15 mm / 0.24 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. Of tubes | 29 | Pass distribution | 5 / 6 / 6 / 5 / 4 / 3 |
| Internal volume | 0.17 L / 10.37 in ³ | Coil weight | 0.823 Kg / 1.81 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-------------|--|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B Note: R32 is available for MCHEs, but if customers request special PS & TS, please confirm with engineering team | | |

Package

| | | | |
|-----------------|----------------|------------|----------------|
| Industrial pack | 021U0087(I/48) | Multi pack | 021U0080(M/24) |
|-----------------|----------------|------------|----------------|

Mounting Bars

Aluminum MCHEs expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data (Typical Refrigerant Application)

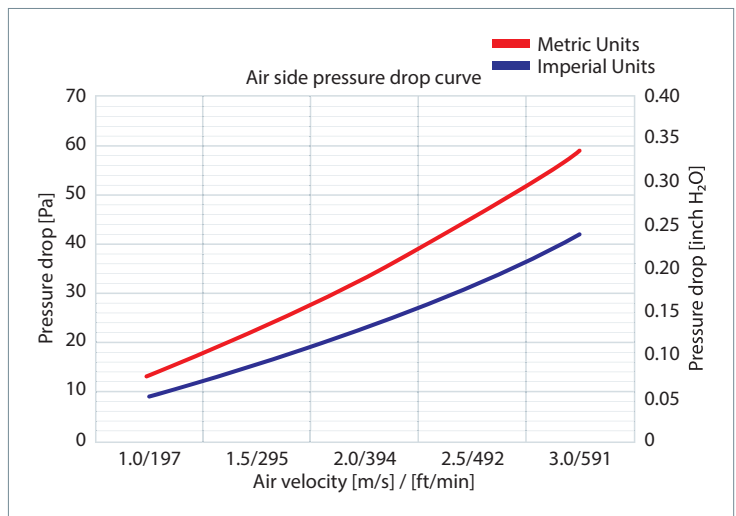
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 0.8/2.73 | 1.22/4.16 | 1.69/5.77 | 2.14/7.3 | 0.76/2.59 | 1.17/3.99 | 1.58/5.39 | 2.02/6.89 |
| 1.5/295 | 1.1/3.75 | 1.75/5.97 | 2.38/8.12 | 3.00/10.24 | 1.04/3.55 | 1.61/5.49 | 2.23/7.61 | 2.82/9.62 |
| 2.0/394 | 1.36/4.64 | 2.2/7.51 | 2.98/10.17 | 3.77/12.86 | 1.28/4.37 | 1.99/6.79 | 2.77/9.45 | 3.5/11.94 |
| 2.5/492 | 1.67/5.7 | 2.59/8.84 | 3.52/12.01 | 4.47/15.25 | 1.49/5.08 | 2.39/8.15 | 3.25/11.09 | 4.08/13.92 |
| 3.0/591 | 1.9/6.48 | 2.96/10.1 | 4.02/13.72 | 5.11/17.44 | 1.67/5.7 | 2.71/9.25 | 3.67/12.52 | 4.61/15.73 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 0.79/2.7 | 1.25/4.27 | 1.69/5.77 | 2.14/7.3 | 0.52/1.77 | 0.87/2.97 | 1.42/4.85 | 1.89/6.45 |
| 1.5/295 | 1.07/3.65 | 1.75/5.97 | 2.36/8.05 | 2.99/10.2 | 0.7/2.39 | 1.35/4.61 | 2.02/6.89 | 2.65/9.04 |
| 2.0/394 | 1.4/4.78 | 2.18/7.44 | 2.95/10.07 | 3.74/12.76 | 0.86/2.93 | 1.67/5.7 | 2.53/8.63 | 3.31/11.29 |
| 2.5/492 | 1.65/5.63 | 2.56/8.73 | 3.48/11.87 | 4.41/15.05 | 0.99/3.38 | 2.04/6.96 | 2.98/10.17 | 3.9/13.31 |
| 3.0/591 | 1.88/6.41 | 2.91/9.93 | 3.95/13.48 | 5.02/17.13 | 1.1/3.75 | 2.32/7.92 | 3.38/11.53 | 4.94/15.15 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 0.79/2.7 | 1.2/4.09 | 1.62/5.53 | 2.06/7.03 | 0.74/2.52 | 1.17/3.99 | 1.63/5.56 | 2.07/7.06 |
| 1.5/295 | 1.08/3.68 | 1.66/5.66 | 2.29/7.81 | 2.89/9.86 | 1.03/3.51 | 1.66/5.66 | 2.28/7.78 | 2.9/9.89 |
| 2.0/394 | 1.34/4.57 | 2.06/7.03 | 2.87/9.79 | 3.6/12.28 | 1.28/4.37 | 2.09/7.13 | 2.86/9.76 | 3.65/12.45 |
| 2.5/492 | 1.57/5.36 | 2.5/8.53 | 3.38/11.53 | 4.25/14.5 | 1.5/5.12 | 2.47/8.43 | 3.39/11.57 | 4.32/14.74 |
| 3.0/591 | 1.77/6.04 | 2.84/9.69 | 3.85/13.14 | 4.85/16.55 | 1.76/6.01 | 2.82/9.62 | 3.87/13.2 | 4.944/16.86 |

Air-side Pressure Drop Data

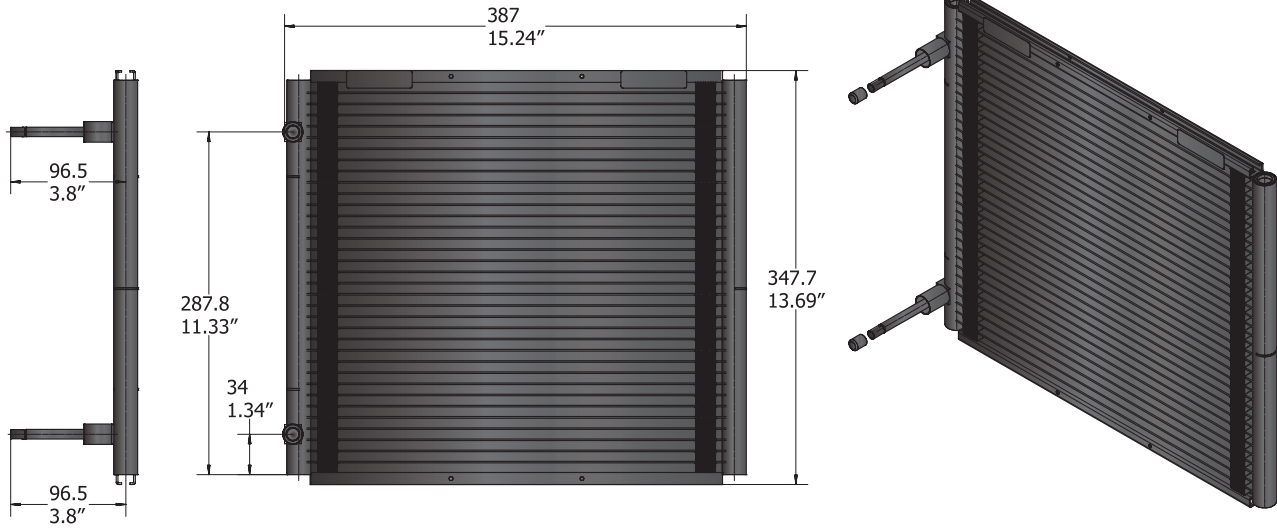
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 284.97/167.63 |
| 1.5/295 | 22.5/0.09 | 427.45/251.44 |
| 2.0/394 | 33.10/0.13 | 569.93/335.25 |
| 2.5/492 | 45.2/0.18 | 712.42/419.07 |
| 3.0/591 | 58.8/0.24 | 854.9/502.88 |



D1100-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0121 | Platform | 2G16-23FPI |
| Coil length | 387 mm / 15.24 in | Coil height | 347.7 mm / 13.69 in |
| Inlet connection (ID) | 6.15 mm / 0.24 in | Outlet connection (ID) | 6.15 mm / 0.24 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. of tubes | 34 | Pass distribution | 8 / 10 / 9 / 7 |
| Internal volume | 0.22 L / 13.43 in ³ | Coil weight | 1.085 Kg / 2.4 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1 : R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2 : R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| | Note : R32 is available for MCHEs, but if customers request special PS & TS, please confirm with engineering team |

Package

| | | | |
|-----------------|----------------|------------|----------------|
| Industrial pack | 021U0088(I/48) | Multi pack | 021U0081(M/24) |
|-----------------|----------------|------------|----------------|

Mounting Bars

Aluminum MCHEs expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data (Typical Refrigerant Application)

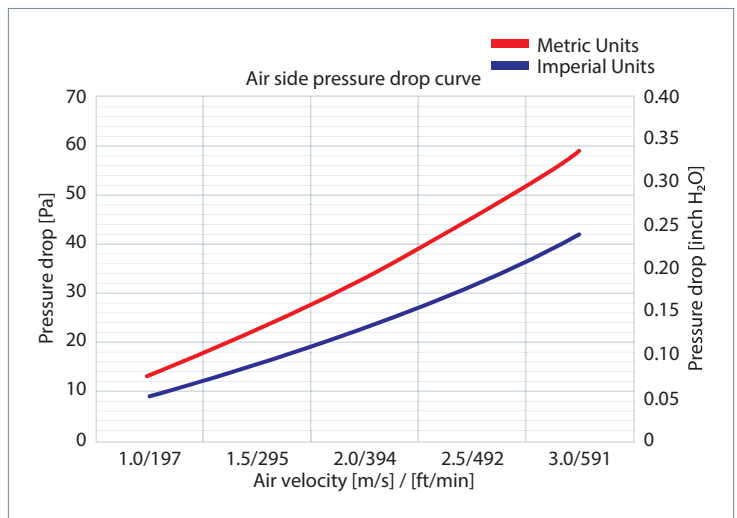
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.1/3.75 | 1.69/5.77 | 2.29/7.81 | 2.96/10.1 | 1.05/3.58 | 1.63/5.56 | 2.2/7.51 | 2.77/9.45 |
| 1.5/295 | 1.51/5.15 | 2.34/7.98 | 3.28/11.19 | 4.16/14.19 | 1.44/4.91 | 2.24/7.64 | 3.03/10.34 | 3.83/13.07 |
| 2.0/394 | 1.87/6.38 | 2.98/10.17 | 4.11/14.02 | 5.24/17.88 | 1.77/6.04 | 2.76/9.42 | 3.75/12.8 | 4.88/16.65 |
| 2.5/492 | 2.19/7.47 | 3.57/12.18 | 4.88/16.65 | 6.21/21.19 | 2.06/7.03 | 3.22/10.99 | 4.39/14.98 | 5.74/19.58 |
| 3.0/591 | 2.48/8.46 | 4.07/13.89 | 5.58/19.04 | 7.11/24.26 | 2.32/7.92 | 3.64/12.42 | 5.14/17.54 | 6.49/22.14 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.09/3.72 | 1.68/5.73 | 2.34/7.98 | 2.97/10.13 | 0.71/2.42 | 1.36/4.64 | 1.97/6.72 | 2.58/8.8 |
| 1.5/295 | 1.48/5.05 | 2.3/7.85 | 3.27/11.16 | 4.16/14.19 | 0.96/3.28 | 1.87/6.38 | 2.72/9.28 | 3.66/12.49 |
| 2.0/394 | 1.81/6.18 | 3/10.24 | 4.1/13.99 | 5.22/17.81 | 1.17/3.99 | 2.31/7.88 | 3.37/11.5 | 4.59/15.66 |
| 2.5/492 | 2.11/7.2 | 3.54/12.08 | 4.84/16.51 | 6.17/21.05 | 1.35/4.61 | 2.7/9.21 | 4.11/14.02 | 5.42/18.49 |
| 3.0/591 | 2.37/8.09 | 4.03/13.75 | 5.52/18.83 | 7.03/23.99 | 1.51/5.15 | 3.06/10.44 | 4.69/16 | 6.18/21.09 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.06/3.62 | 1.64/5.6 | 2.2/7.51 | 2.77/9.45 | 1.02/3.48 | 1.62/5.53 | 2.22/7.57 | 2.85/9.72 |
| 1.5/295 | 1.46/4.98 | 2.26/7.71 | 3.05/10.41 | 3.85/13.14 | 1.41/4.81 | 2.24/7.64 | 3.11/10.61 | 4.02/13.72 |
| 2.0/394 | 1.81/6.18 | 2.81/9.59 | 3.8/12.97 | 4.94/16.86 | 1.75/5.97 | 2.79/9.52 | 3.95/13.48 | 5.06/17.26 |
| 2.5/492 | 2.12/7.23 | 3.29/11.23 | 4.61/15.73 | 5.83/19.89 | 2.05/6.99 | 3.28/11.19 | 4.68/15.97 | 6/20.47 |
| 3.0/591 | 2.39/8.15 | 3.73/12.73 | 5.25/17.91 | 6.65/22.69 | 2.32/7.92 | 3.87/13.2 | 5.35/18.25 | 6.86/23.41 |

Air-side Pressure Drop Data

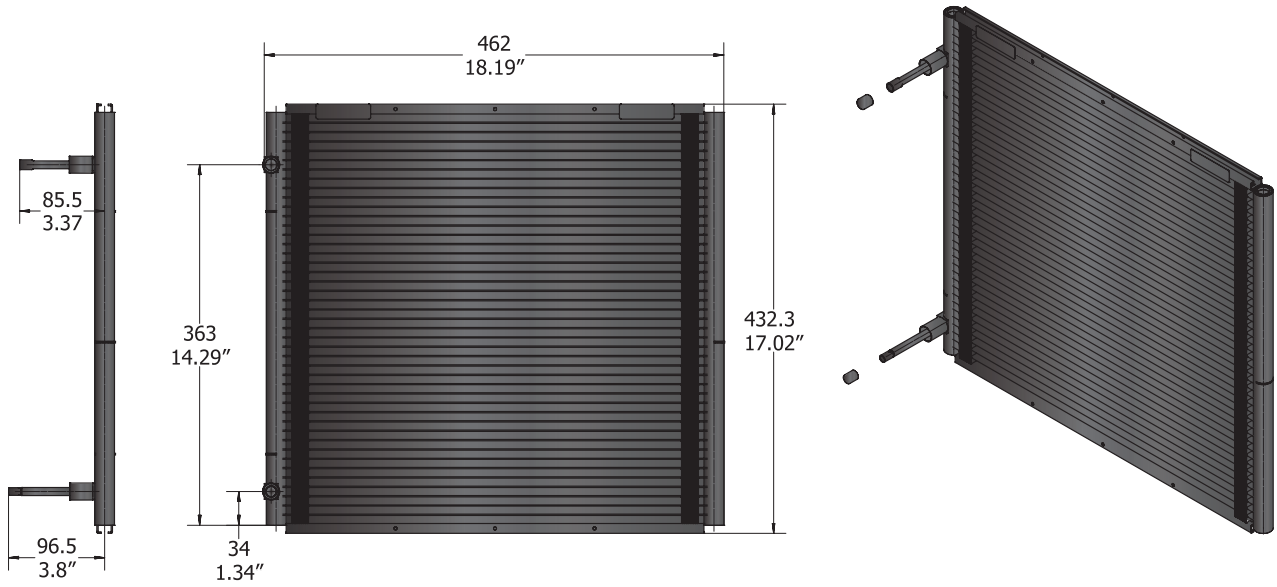
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 397.56/233.86 |
| 1.5/295 | 22.5/0.09 | 596.35/350.79 |
| 2.0/394 | 33.10/0.13 | 795.13/467.72 |
| 2.5/492 | 45.2/0.18 | 993.91/548.65 |
| 3.0/591 | 58.8/0.24 | 1192.7/701.59 |



D1200-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0131 | Platform | 2G16-23FPI |
| Coil length | 462 mm / 18.19 in | Coil height | 432.3 mm / 17.02 in |
| Inlet connection (ID) | 8.2 mm / 0.32 in | Outlet connection (ID) | 6.15 mm / 0.24 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. of tubes | 43 | Pass distribution | 10 / 14 / 12 / 7 |
| Internal volume | 0.3 L / 18.31 in ³ | Coil weight | 1.556 Kg / 3.4 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| | Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |

Package

| | | | |
|-----------------|----------------|------------|----------------|
| Industrial pack | 021U0089(I/32) | Multi pack | 021U0082(M/16) |
|-----------------|----------------|------------|----------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data (Typical Refrigerant Application)

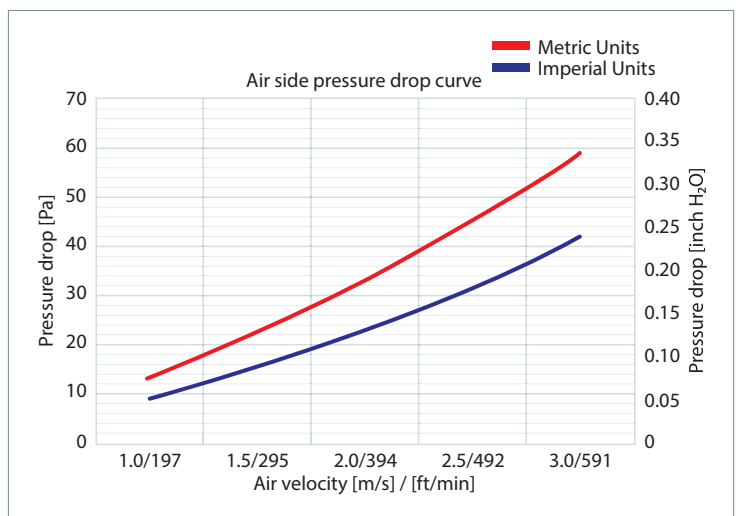
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.72/5.87 | 2.64/9.01 | 3.63/12.39 | 4.59/15.66 | 1.64/5.6 | 2.53/8.63 | 3.4/11.6 | 4.34/14.81 |
| 1.5/295 | 2.37/8.09 | 3.76/12.83 | 5.09/17.37 | 6.45/22.01 | 2.24/7.64 | 3.46/11.81 | 4.77/16.28 | 6.03/20.57 |
| 2.0/394 | 2.93/10 | 4.71/16.07 | 6.39/21.8 | 8.1/27.64 | 2.75/9.38 | 4.26/14.54 | 5.94/20.27 | 7.49/25.56 |
| 2.5/492 | 3.58/12.21 | 5.58/19.04 | 7.57/25.83 | 9.6/32.76 | 3.19/10.88 | 4.96/16.92 | 6.94/23.68 | 8.73/29.79 |
| 3.0/591 | 4.08/13.92 | 6.35/21.67 | 8.64/29.48 | 10.97/37.43 | 3.58/12.21 | 5.77/19.69 | 7.84/26.75 | 9.85/33.61 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.69/5.77 | 2.69/9.18 | 3.64/12.42 | 4.6/15.7 | 1.11/3.79 | 2.12/7.23 | 3.06/10.44 | 4.06/13.85 |
| 1.5/295 | 2.3/7.85 | 3.75/12.8 | 5.08/17.33 | 6.43/21.94 | 1.51/5.15 | 2.92/9.96 | 4.33/14.77 | 5.68/19.38 |
| 2.0/394 | 2.99/10.2 | 4.68/15.97 | 6.34/21.63 | 8.03/27.4 | 1.84/6.28 | 3.59/12.25 | 5.42/18.49 | 7.09/24.19 |
| 2.5/492 | 3.53/12.04 | 5.5/18.77 | 7.47/25.49 | 9.47/32.31 | 2.11/7.2 | 4.2/14.33 | 6.39/21.8 | 8.36/28.52 |
| 3.0/591 | 4.01/13.68 | 6.24/21.29 | 8.49/28.97 | 10.76/36.71 | 2.36/8.05 | 4.97/16.96 | 7.25/24.74 | 9.51/32.45 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.65/5.63 | 2.54/8.67 | 3.42/11.67 | 4.35/14.84 | 1.6/5.46 | 2.52/8.6 | 3.49/11.91 | 4.44/15.15 |
| 1.5/295 | 2.28/7.78 | 3.51/11.98 | 4.83/16.48 | 6.09/20.78 | 2.21/7.54 | 3.54/12.08 | 4.9/16.72 | 6.23/21.26 |
| 2.0/394 | 2.82/9.62 | 4.35/14.84 | 6.05/20.64 | 7.62/26.00 | 2.74/9.35 | 4.48/15.29 | 6.14/20.95 | 7.83/26.72 |
| 2.5/492 | 3.3/11.26 | 5.26/17.95 | 7.13/24.33 | 8.98/30.64 | 3.22/10.99 | 5.29/18.05 | 7.27/24.81 | 9.28/31.66 |
| 3.0/591 | 3.72/12.69 | 5.99/20.44 | 8.11/27.67 | 10.21/34.84 | 3.64/12.42 | 6.04/20.61 | 8.31/28.35 | 10.6/36.17 |

Air-side Pressure Drop Data

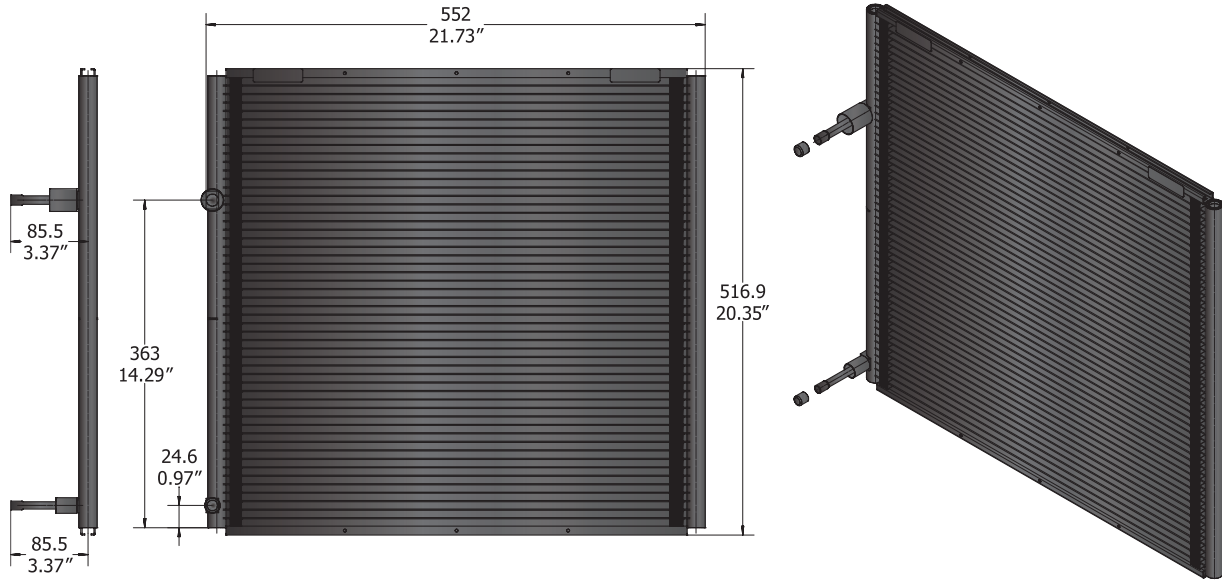
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 611.52/359.72 |
| 1.5/295 | 22.5/0.09 | 917.29/539.78 |
| 2.0/394 | 33.10/0.13 | 1223.05/719.44 |
| 2.5/492 | 45.2/0.18 | 1528.81/899.30 |
| 3.0/591 | 58.8/0.24 | 1834.57/1079.16 |



D1300-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0141 | Platform | 2G16-23FPI |
| Coil length | 552 mm / 21.73 in | Coil height | 516.9 mm / 20.35 in |
| Inlet connection (ID) | 9.7 mm / 0.38 in | Outlet connection (ID) | 8.2 mm / 0.32 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. of tubes | 52 | Pass distribution | 28 / 24 |
| Internal volume | 0.4 L / 24.41 in ³ | Coil weight | 2.174 Kg / 4.8 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |
|-------------|--|

Package

| | | | |
|-----------------|----------------|------------|----------------|
| Industrial pack | 021U0090(I/32) | Multi pack | 021U0083(M/16) |
|-----------------|----------------|------------|----------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data (Typical Refrigerant Application)

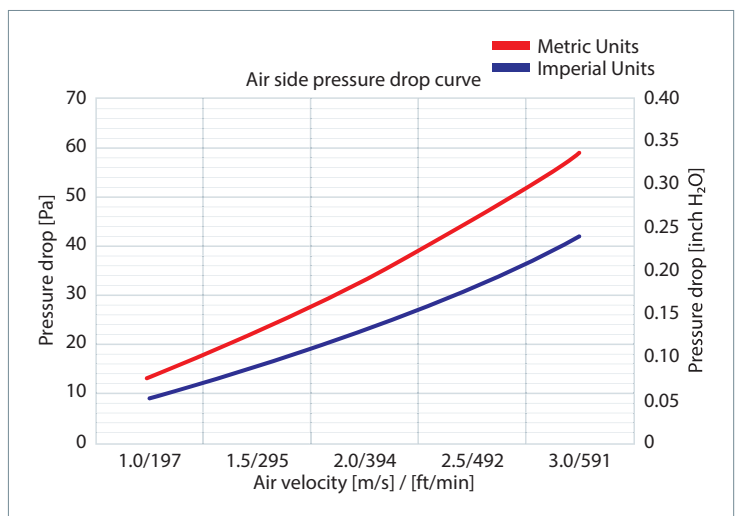
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 2.08/7.1 | 3.73/12.73 | 5.08/17.33 | 6.42/21.91 | 2.3/7.85 | 3.61/12.32 | 4.91/16.75 | 6.2/21.15 |
| 1.5/295 | 3.27/11.16 | 5.15/17.57 | 7.02/23.95 | 9.23/31.49 | 3.15/10.75 | 4.98/16.99 | 6.78/23.13 | 8.57/29.24 |
| 2.0/394 | 4.05/13.82 | 6.39/21.8 | 9.04/30.84 | 11.61/39.61 | 3.89/13.27 | 6.16/21.02 | 8.41/28.69 | 10.65/36.34 |
| 2.5/492 | 4.75/16.21 | 7.49/25.56 | 10.74/36.64 | 13.79/47.05 | 4.54/15.49 | 7.22/24.63 | 9.85/33.61 | 12.49/42.62 |
| 3.0/591 | 5.37/18.32 | 8.49/28.97 | 12.49/42.62 | 15.79/53.88 | 5.13/17.5 | 8.16/27.84 | 11.18/38.15 | 14.41/49.17 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 2.37/8.09 | 3.71/12.66 | 5.04/17.2 | 6.55/22.35 | 1.44/4.91 | 2.98/10.17 | 4.37/14.91 | 5.74/19.58 |
| 1.5/295 | 3.23/11.02 | 5.08/17.33 | 6.91/23.58 | 9.27/31.63 | 1.87/6.38 | 4.1/13.99 | 6.03/20.57 | 7.95/27.13 |
| 2.0/394 | 3.96/13.51 | 6.26/21.36 | 9.07/30.95 | 11.65/39.75 | 2.51/8.56 | 5.08/17.33 | 7.49/25.56 | 9.88/33.71 |
| 2.5/492 | 4.61/15.73 | 7.29/24.87 | 10.75/36.68 | 13.79/47.05 | 2.93/10 | 5.93/20.23 | 8.78/29.96 | 11.67/39.82 |
| 3.0/591 | 5.18/17.67 | 8.31/28.35 | 12.28/41.9 | 15.77/53.81 | 3.27/11.16 | 6.7/22.86 | 9.94/33.92 | 13.73/46.85 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 2.14/7.3 | 3.61/12.32 | 4.92/16.79 | 6.19/21.12 | 2.01/6.86 | 3.56/12.15 | 4.91/16.75 | 6.26/21.36 |
| 1.5/295 | 3.18/10.85 | 4.99/17.03 | 6.8/23.2 | 8.59/29.31 | 3.03/10.34 | 4.93/16.82 | 6.81/23.24 | 8.69/29.65 |
| 2.0/394 | 3.94/13.44 | 6.2/21.15 | 8.47/28.9 | 10.7/36.51 | 3.77/12.86 | 6.13/20.92 | 8.48/28.93 | 11.2/38.21 |
| 2.5/492 | 4.63/15.8 | 7.28/24.84 | 9.95/33.95 | 12.58/42.92 | 4.43/15.12 | 7.21/24.6 | 9.97/34.02 | 13.29/45.35 |
| 3.0/591 | 5.24/17.88 | 8.25/28.15 | 11.3/38.56 | 14.87/50.74 | 5.02/17.13 | 8.19/27.94 | 11.78/40.19 | 15.22/51.93 |

Air-side Pressure Drop Data

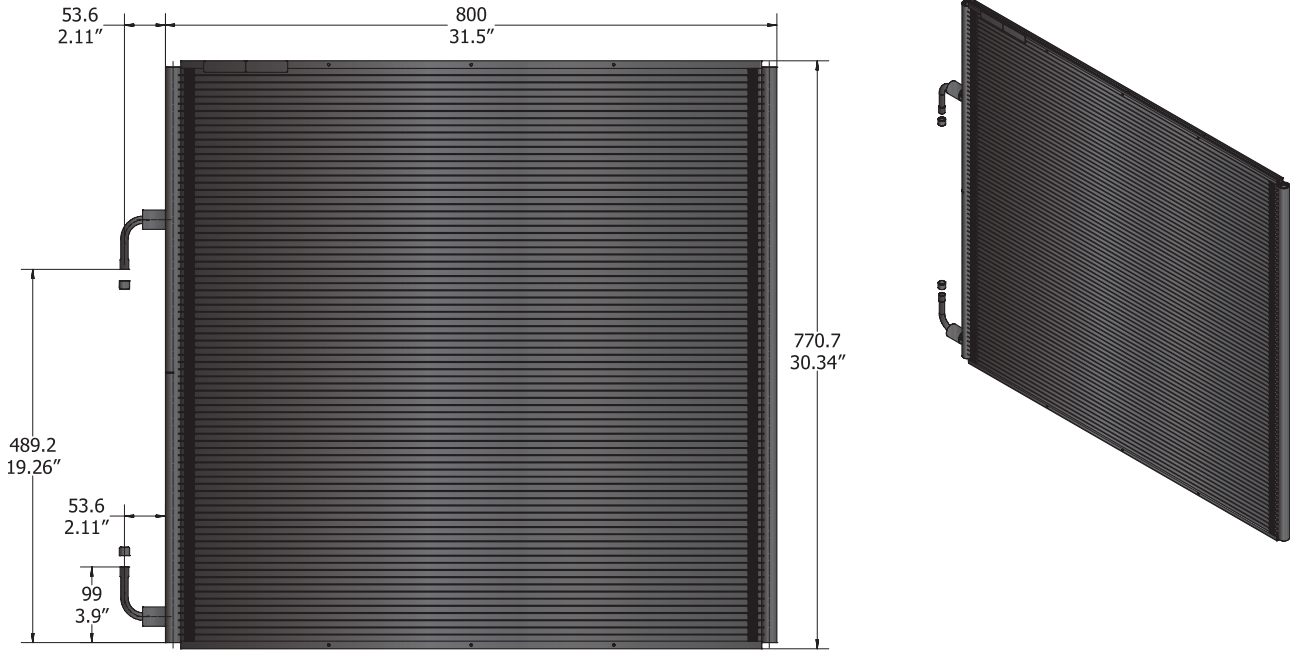
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 898/528.24 |
| 1.5/295 | 22.5/0.09 | 1347/792.35 |
| 2.0/394 | 33.10/0.13 | 1796/1056.47 |
| 2.5/492 | 45.2/0.18 | 2245/1320.59 |
| 3.0/591 | 58.8/0.24 | 2694/1584.71 |



D1400-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0151 | Platform | 2G16-23FPI |
| Coil length | 800 mm / 31.5 in | Coil height | 770.7 mm / 30.34 in |
| Inlet connection (ID) | 9.7 mm / 0.38 in | Outlet connection (ID) | 9.7 mm / 0.38 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. of tubes | 79 | Pass distribution | 42 / 37 |
| Internal volume | 0.74 L / 45.16 in ³ | Coil weight | 4.54 Kg / 10 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| | Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |

Package

| | | | |
|-----------------|----------------|------------|---------------|
| Industrial pack | 021U0091(I/15) | Multi pack | 021U0084(M/8) |
|-----------------|----------------|------------|---------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCH to move in two dimensions;

Performance Data (Typical Refrigerant Application)

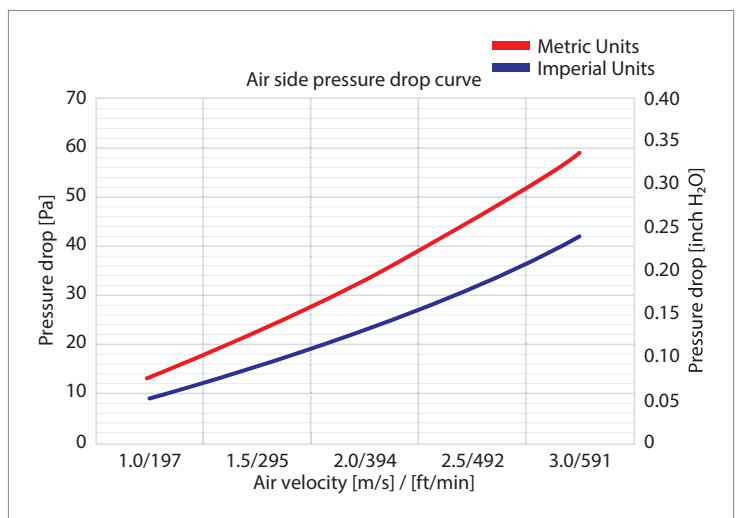
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 5.64/19.24 | 8.69/29.65 | 11.73/40.02 | 15.15/51.69 | 5.43/18.53 | 8.36/28.52 | 11.27/38.45 | 14.17/48.35 |
| 1.5/295 | 7.79/26.58 | 12.02/41.01 | 16.76/57.19 | 21.29/72.64 | 7.43/25.35 | 11.5/39.24 | 15.55/53.06 | 19.57/66.77 |
| 2.0/394 | 9.66/32.96 | 14.93/50.94 | 21.05/71.82 | 26.75/91.27 | 9.15/31.22 | 14.2/48.45 | 19.23/65.61 | 24.77/84.52 |
| 2.5/492 | 11.32/38.62 | 18.26/62.3 | 24.93/85.06 | 31.72/108.23 | 10.65/36.34 | 16.56/56.5 | 22.49/76.74 | 29.08/99.22 |
| 3.0/591 | 12.82/43.74 | 20.86/71.17 | 28.5/97.24 | 36.26/123.72 | 11.98/40.88 | 18.69/63.77 | 26.17/89.29 | 32.96/112.46 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 5.58/19.04 | 8.62/29.41 | 11.99/40.91 | 15.2/51.86 | 3.68/12.56 | 7/23.88 | 10.13/34.56 | 13.24/45.17 |
| 1.5/295 | 7.64/26.07 | 11.82/40.33 | 16.76/57.19 | 21.26/72.54 | 5/17.06 | 9.66/32.96 | 14.01/47.8 | 18.6/63.46 |
| 2.0/394 | 9.39/32.04 | 15.35/52.37 | 20.95/71.48 | 26.63/90.86 | 6.12/20.88 | 11.94/40.74 | 17.39/59.33 | 23.44/79.98 |
| 2.5/492 | 10.91/37.22 | 18.11/61.79 | 24.72/84.34 | 31.42/107.21 | 7.1/24.23 | 13.95/47.6 | 20.87/71.21 | 27.68/94.44 |
| 3.0/591 | 12.27/41.87 | 20.6/70.29 | 28.15/96.05 | 35.78/122.08 | 7.92/27.02 | 15.79/53.88 | 23.91/81.58 | 31.53/107.58 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 5.57/19 | 8.53/29.1 | 11.49/39.2 | 14.44/49.27 | 5.24/17.88 | 8.32/28.39 | 11.36/38.76 | 14.56/49.68 |
| 1.5/295 | 7.68/26.2 | 11.81/40.3 | 15.94/54.39 | 20.04/68.38 | 7.26/24.77 | 11.54/39.37 | 15.79/53.88 | 20.56/70.15 |
| 2.0/394 | 9.49/32.38 | 14.67/50.05 | 19.83/67.66 | 25.58/87.28 | 9.02/30.78 | 14.37/49.03 | 20.15/68.75 | 25.84/88.17 |
| 2.5/492 | 11.13/37.98 | 17.22/58.75 | 23.29/79.47 | 30.23/103.14 | 10.58/36.1 | 16.9/57.66 | 23.94/81.68 | 30.64/104.54 |
| 3.0/591 | 12.6/42.99 | 19.51/66.57 | 27.21/92.84 | 34.45/117.54 | 11.99/40.91 | 19.81/67.59 | 27.35/93.32 | 35.04/119.56 |

Air-side Pressure Drop Data

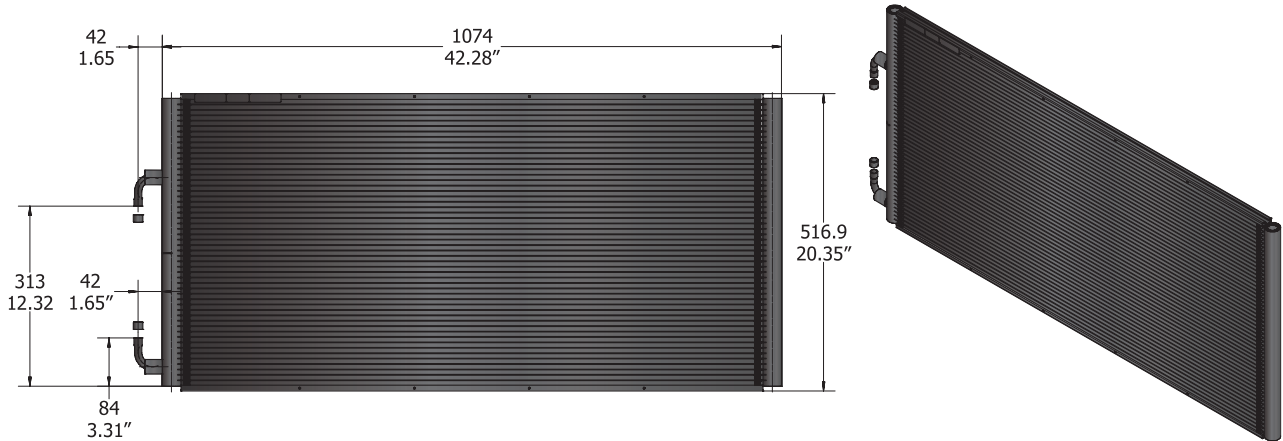
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 2026.89/1192.29 |
| 1.5/295 | 22.5/0.09 | 3040.33/1788.43 |
| 2.0/394 | 33.10/0.13 | 4053.78/2384.58 |
| 2.5/492 | 45.2/0.18 | 5067.2/2980.72 |
| 3.0/591 | 58.8/0.24 | 6080.67/3576.86 |



D1500-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0081 / DF0082 | Platform | 2G25-23FPI |
| Coil length | 1074 mm / 42.28 in | Coil height | 516.9 mm / 20.35 in |
| Inlet connection (ID) | 12.9 mm / 0.51 in | Outlet connection (ID) | 12.9 mm / 0.51 in |
| Tube width | 25.4 mm / 1 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 25.4 mm / 1 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 32 mm / 1.26 in |
| Num. of tubes | 52 | Pass distribution | 28 / 24 |
| Internal volume | 1.15 L / 70.18 in ³ | Coil weight | 6.5 Kg / 14.33 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4045 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|---------------------------------------|----|--------|
| PED | PED Cat I (Group 2)/ Cat II (Group 1) | UL | UL 207 |
|-----|---------------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |
|-------------|--|

Package

| | | | |
|--------------------------|---------------------------------|---------------------------|---------------------------------|
| DF0081 / Cat I (Group 2) | 021U0098(I/24) / 021U0095(M/16) | DF0082 / Cat II (Group 1) | 021U0624(I/24) / 021U0623(M/16) |
|--------------------------|---------------------------------|---------------------------|---------------------------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data (Typical Refrigerant Application)

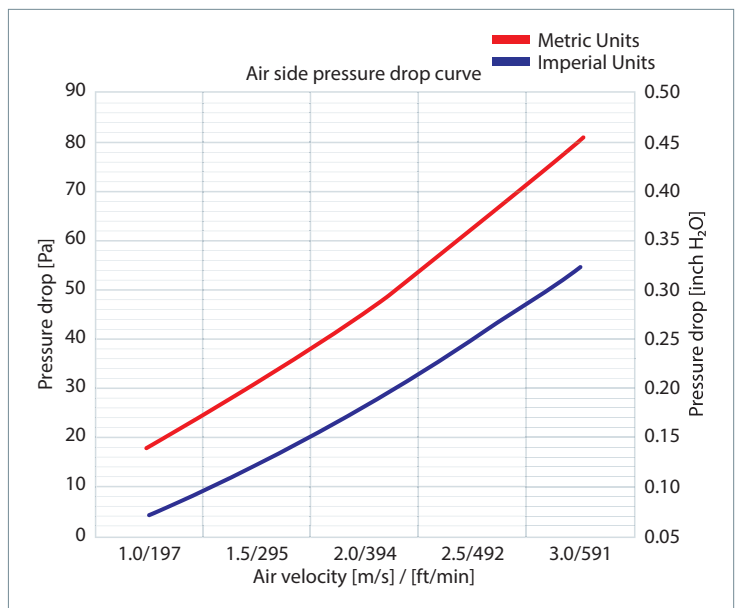
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 5.54/18.9 | 8.24/28.11 | 11.33/38.66 | 14.41/49.17 | 5.31/18.12 | 8.1/27.64 | 10.85/37.02 | 13.62/46.47 |
| 1.5/295 | 7.9/26.95 | 12.05/41.11 | 16.47/56.2 | 20.79/70.94 | 7.48/25.52 | 11.46/39.1 | 15.41/52.58 | 19.36/66.06 |
| 2.0/394 | 10.03/34.22 | 15.33/52.31 | 21.12/72.06 | 26.68/91.03 | 9.4/32.07 | 14.45/49.3 | 19.49/66.5 | 24.86/84.82 |
| 2.5/492 | 11.97/40.84 | 18.78/64.08 | 25.42/86.73 | 32.13/109.63 | 11.11/37.91 | 17.14/58.48 | 23.12/78.89 | 29.46/100.52 |
| 3.0/591 | 13.75/46.92 | 21.73/74.14 | 29.41/100.35 | 37.22/126.99 | 12.67/43.23 | 19.58/66.81 | 26.92/91.85 | 33.71/115.02 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 5.52/18.83 | 8.41/28.69 | 11.29/38.52 | 14.45/49.3 | 3.7/12.62 | 6.85/10.17 | 6.85/23.37 | 12.74/43.47 |
| 1.5/295 | 7.8/26.61 | 11.92/40.67 | 16.47/56.2 | 20.78/70.9 | 5.19/17.71 | 9.73/33.2 | 13.99/47.73 | 18.19/62.06 |
| 2.0/394 | 9.82/33.51 | 15.57/53.12 | 21.01/71.69 | 26.53/90.52 | 6.51/22.21 | 12.32/42.04 | 17.74/60.53 | 23.5/80.18 |
| 2.5/492 | 11.64/39.72 | 18.6/63.46 | 25.17/85.88 | 31.79/108.47 | 7.69/26.24 | 14.68/50.09 | 21.2/72.33 | 28.18/96.15 |
| 3.0/591 | 13.28/45.31 | 21.41/73.05 | 28.97/98.85 | 36.63/124.98 | 8.75/29.86 | 16.84/57.46 | 24.93/85.06 | 32.48/110.82 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R454B | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 5.09/17.37 | 7.99/27.26 | 10.87/37.09 | 13.77/46.98 | 5.15/17.57 | 8.04/27.43 | 10.94/37.33 | 13.83/47.19 |
| 1.5/295 | 7.27/24.81 | 11.44/39.03 | 15.58/53.16 | 20.01/68.27 | 7.36/25.11 | 11.52/39.31 | 15.66/53.43 | 20.11/68.62 |
| 2.0/394 | 9.24/31.53 | 14.57/49.71 | 20.2/68.92 | 25.67/87.59 | 9.35/31.9 | 14.68/50.09 | 20.3/69.26 | 25.79/88.00 |
| 2.5/492 | 11.05/37.7 | 17.46/59.57 | 24.28/82.84 | 30.91/105.46 | 11.18/38.15 | 17.59/60.02 | 24.44/83.39 | 31.08/106.04 |
| 3.0/591 | 12.72/43.4 | 20.4/69.6 | 28.1/95.88 | 35.81/122.18 | 12.87/43.91 | 20.7/70.63 | 28.29/96.53 | 35.98/122.76 |

Air-side Pressure Drop Data

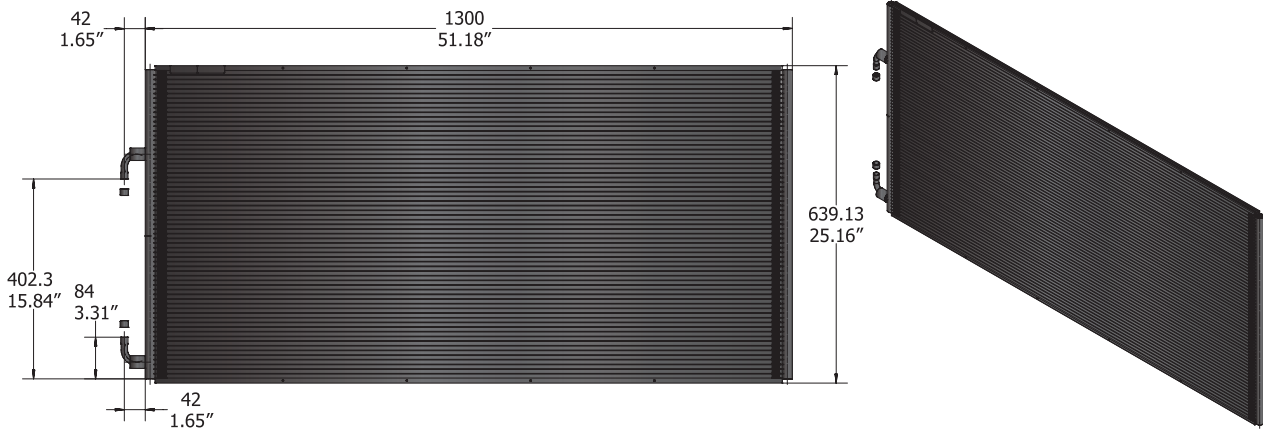
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 18.3/0.07 | 1788.84/1052.26 |
| 1.5/295 | 30.6/0.12 | 2683.26/1578.39 |
| 2.0/394 | 45.1/0.18 | 3577.68/2104.52 |
| 2.5/492 | 61.8/0.25 | 4472.1/2630.65 |
| 3.0/591 | 80.6/0.32 | 5366.52/3156.78 |



D1600-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0161 | Platform | 2G16-23FPI |
| Coil length | 1300 mm / 51.18 in | Coil height | 639.1 mm / 25.16 in |
| Inlet connection (ID) | 12.9mm / 0.51 in | Outlet connection (ID) | 12.9 mm / 0.51 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. of tubes | 65 | Pass distribution | 35 / 30 |
| Internal volume | 0.84 L / 51.26 in ³ | Coil weight | 6.1 Kg / 13.5 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|-------------|---|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |
|-------------|---|

Package

| | | | |
|-----------------|----------------|------------|---------------|
| Industrial pack | 021U0099(I/15) | Multi pack | 021U0096(M/8) |
|-----------------|----------------|------------|---------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCH to move in two dimensions;

Performance Data (Typical Refrigerant Application)

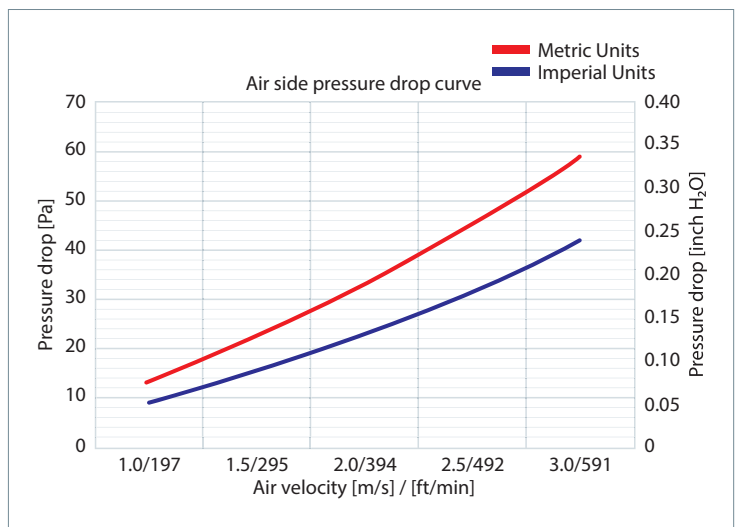
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 7.99/27.26 | 12.15/41.46 | 16.6/56.64 | 20.93/71.41 | 7.42/25.32 | 11.33/38.66 | 15.26/52.07 | 19.4/66.19 |
| 1.5/295 | 11.02/37.6 | 17.16/58.55 | 23.13/78.92 | 29.19/99.6 | 10/34.12 | 15.36/52.41 | 20.98/71.58 | 26.13/89.16 |
| 2.0/394 | 13.64/46.54 | 21.4/73.02 | 28.84/98.4 | 36.4/124.2 | 12.12/41.35 | 18.68/63.74 | 25.15/85.81 | 31.71/108.19 |
| 2.5/492 | 16.41/55.99 | 25.12/85.71 | 33.89/115.63 | 42.78/145.97 | 13.91/47.46 | 21.48/73.29 | 28.81/98.3 | 36.32/123.92 |
| 3.0/591 | 18.6/63.46 | 28.48/97.17 | 38.39/130.99 | 48.49/165.45 | 15.44/52.68 | 24.27/82.81 | 31.89/108.81 | 40.24/137.3 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 7.83/26.72 | 12.23/41.73 | 16.46/56.16 | 20.74/70.76 | 5.22/17.81 | 9.77/33.34 | 14.03/47.87 | 18.43/62.88 |
| 1.5/295 | 10.65/36.34 | 16.83/57.42 | 22.68/77.38 | 28.59/97.55 | 7.02/23.95 | 13.39/45.69 | 19.51/66.57 | 25.43/86.77 |
| 2.0/394 | 13.62/46.47 | 20.74/70.76 | 27.92/95.26 | 35.26/120.31 | 8.51/29.04 | 16.45/56.13 | 24.08/82.16 | 31.39/107.1 |
| 2.5/492 | 15.73/53.67 | 24.09/82.2 | 32.46/110.75 | 40.98/139.82 | 9.75/33.27 | 19.53/66.64 | 28.01/95.57 | 36.55/124.71 |
| 3.0/591 | 17.67/60.29 | 27.03/92.23 | 36.41/124.23 | 45.97/156.85 | 10.81/36.88 | 21.85/74.55 | 31.46/107.34 | 41.05/140.06 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 7.63/26.03 | 11.61/39.61 | 15.56/53.09 | 19.76/67.42 | 7.44/25.39 | 11.63/39.68 | 15.97/54.49 | 20.24/69.06 |
| 1.5/295 | 10.46/35.69 | 15.97/54.49 | 21.79/74.35 | 27.19/92.77 | 10.29/35.11 | 16.39/55.92 | 22.26/75.95 | 28.25/96.39 |
| 2.0/394 | 12.89/43.98 | 19.7/67.22 | 26.72/91.17 | 33.58/114.57 | 12.76/43.54 | 20.37/69.5 | 27.75/94.68 | 35.19/120.07 |
| 2.5/492 | 14.99/51.15 | 23.45/80.01 | 31.11/106.15 | 39.11/133.44 | 14.95/51.01 | 23.94/81.68 | 32.63/111.33 | 41.43/141.36 |
| 3.0/591 | 16.85/57.49 | 26.04/88.85 | 34.95/119.25 | 43.93/149.89 | 17.26/58.89 | 27.14/92.6 | 36.98/126.18 | 46.97/160.26 |

Air-side Pressure Drop Data

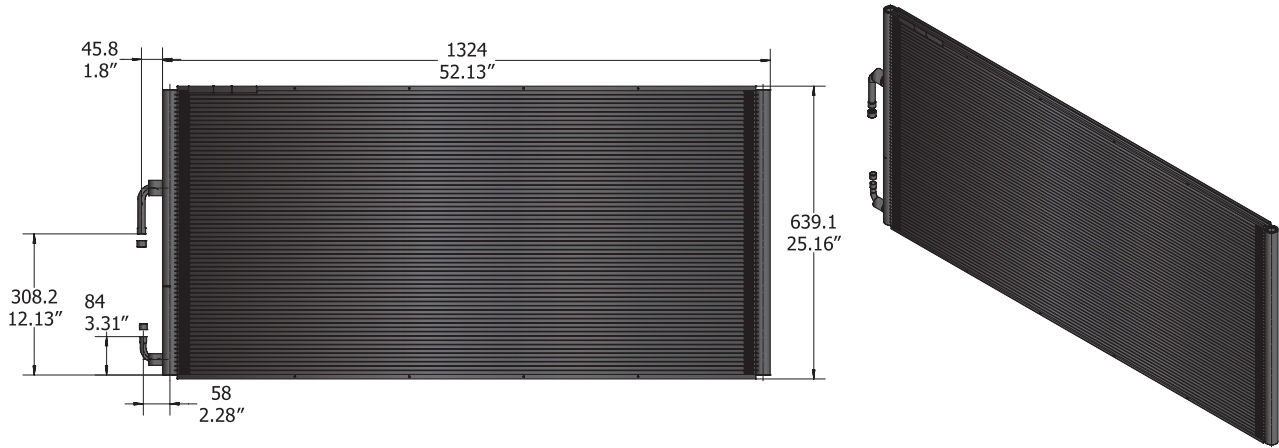
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 2785.95/1638.79 |
| 1.5/295 | 22.5/0.09 | 4178.93/2458.19 |
| 2.0/394 | 33.10/0.13 | 5571.9/3277.59 |
| 2.5/492 | 45.2/0.18 | 6964.88/4096.99 |
| 3.0/591 | 58.8/0.24 | 8357.85/4916.38 |



D1700-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0091 / DF0092 | Platform | 2G25-23FPI |
| Coil length | 1324 mm / 52.13 in | Coil height | 639.1 mm / 25.16 in |
| Inlet connection (ID) | 16.1 mm / 0.63 in | Outlet connection (ID) | 12.9 mm / 0.51 in |
| Tube width | 25.4 mm / 1 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 25.4 mm / 1 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 32 mm / 1.26 in |
| Num. of tubes | 65 | Pass distribution | 45 / 20 |
| Internal volume | 1.63 L / 99.47 in ³ | Coil weight | 9.7 Kg / 21.38 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4045 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|---------------------------------------|----|--------|
| PED | PED Cat I (Group 2)/ Cat II (Group 1) | UL | UL 207 |
|-----|---------------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| | Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |

Package

| | | | |
|--------------------------|--------------------------------|---------------------------|----------------------------------|
| DF0091 / Cat I (Group 2) | 021U0092(I/12) / 021U0085(M/8) | DF0092 / Cat II (Group 1) | 021U00626(I/12) / 021U00625(M/8) |
|--------------------------|--------------------------------|---------------------------|----------------------------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHes to move in two dimensions;

Performance Data (Typical Refrigerant Application)

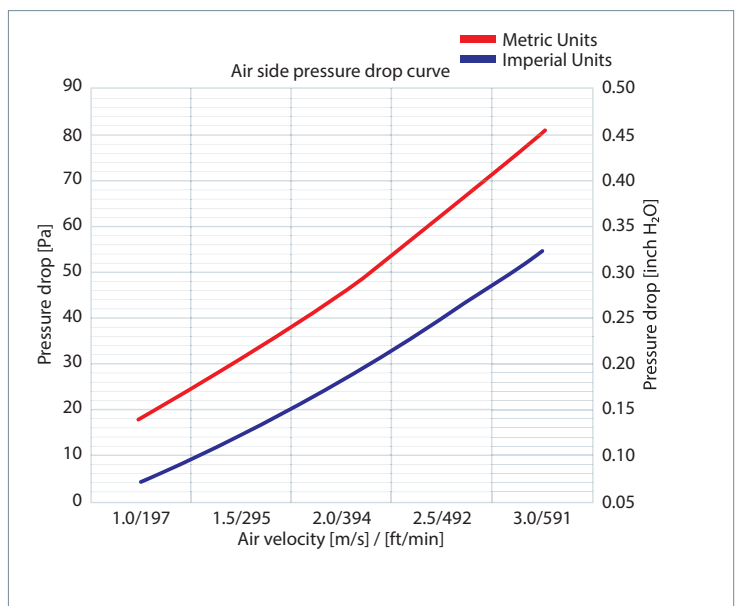
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 8.66/29.55 | 13.17/44.94 | 17.88/61.01 | 22.5/76.77 | 8.31/28.35 | 12.64/43.13 | 16.94/57.8 | 21.37/72.91 |
| 1.5/295 | 12.36/42.17 | 19.13/65.27 | 25.77/87.93 | 32.45/110.72 | 11.72/39.99 | 17.91/61.11 | 24.27/82.81 | 30.53/104.17 |
| 2.0/394 | 16.01/54.63 | 24.53/83.7 | 32.98/112.53 | 41.6/141.94 | 14.74/50.29 | 22.6/77.11 | 30.76/104.95 | 38.75/132.22 |
| 2.5/492 | 19.25/65.68 | 29.5/100.65 | 39.7/135.46 | 50.06/170.8 | 17.44/59.51 | 27.16/92.67 | 36.62/124.95 | 45.81/156.3 |
| 3.0/591 | 22.26/75.95 | 34.03/116.11 | 45.89/156.58 | 57.95/197.73 | 19.88/67.83 | 31.08/106.04 | 41.98/143.24 | 52.35/178.62 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 8.64/29.48 | 13.36/45.58 | 17.95/61.25 | 22.55/76.94 | 5.81/19.82 | 10.71/36.54 | 15.33/52.31 | 20.04/68.38 |
| 1.5/295 | 12.2/41.63 | 19.13/65.27 | 25.7/87.69 | 32.36/110.41 | 8.16/27.84 | 15.24/52 | 22.14/75.54 | 28.81/98.3 |
| 2.0/394 | 15.9/54.25 | 24.41/83.29 | 32.75/111.74 | 41.27/140.81 | 10.21/34.84 | 19.27/65.75 | 28.26/96.42 | 36.68/125.15 |
| 2.5/492 | 19.04/64.96 | 29.09/99.26 | 39.18/133.68 | 49.39/168.52 | 12.04/41.08 | 23.48/80.11 | 33.87/115.56 | 43.92/149.86 |
| 3.0/591 | 21.91/74.76 | 33.41/113.99 | 44.95/153.37 | 56.83/193.9 | 13.68/46.68 | 27.05/92.29 | 39.05/133.24 | 50.58/172.58 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R454B | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 7.98/27.23 | 12.5/42.65 | 17.08/58.28 | 21.67/73.94 | 8.06/27.5 | 12.58/42.92 | 17.19/58.65 | 21.78/74.31 |
| 1.5/295 | 11.39/38.86 | 18.07/61.65 | 24.64/84.07 | 31.22/106.52 | 11.53/39.34 | 18.21/62.13 | 24.79/84.58 | 31.39/107.1 |
| 2.0/394 | 14.5/49.47 | 23.15/78.99 | 31.59/107.79 | 40.05/136.65 | 14.67/50.05 | 23.34/79.64 | 31.77/108.4 | 40.25/137.33 |
| 2.5/492 | 17.35/59.2 | 27.85/95.02 | 37.94/129.45 | 48.2/164.46 | 17.53/59.81 | 28.08/95.81 | 38.19/130.3 | 48.46/165.35 |
| 3.0/591 | 20.39/69.57 | 32.24/110 | 43.89/149.75 | 55.8/190.39 | 20.65/70.46 | 32.5/110.89 | 44.19/150.78 | 56.07/191.31 |

Air-side Pressure Drop Data

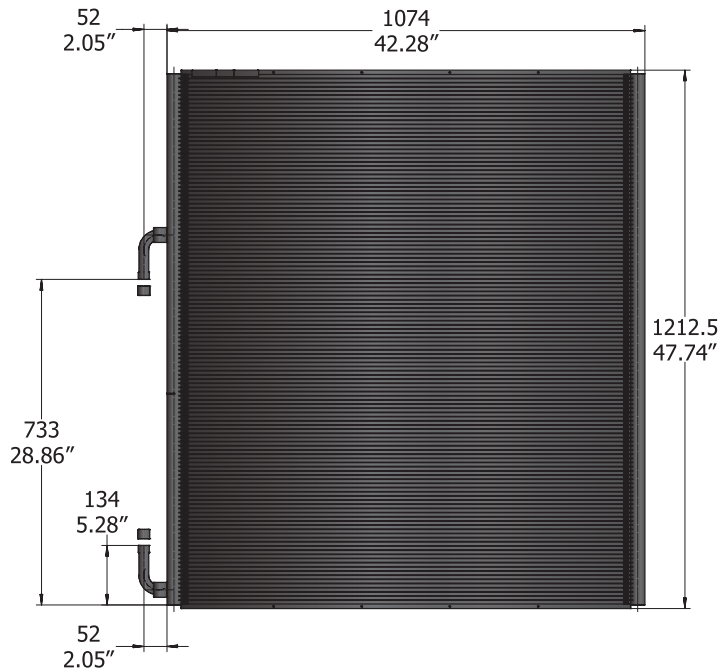
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 18.3/0.07 | 2785.9/1638.76 |
| 1.5/295 | 30.6/0.12 | 4178.93/2458.19 |
| 2.0/394 | 45.1/0.18 | 5571.9/3277.59 |
| 2.5/492 | 61.8/0.25 | 6964.88/4096.99 |
| 3.0/591 | 80.6/0.32 | 8357.85/4916.38 |



D1800-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0071 / DF0072 | Platform | 2G25-23FPI |
| Coil length | 1074 mm / 42.28 in | Coil height | 1212.5 mm / 47.74 in |
| Inlet connection (ID) | 22.4 mm / 0.88 in | Outlet connection (ID) | 22.4 mm / 0.88 in |
| Tube width | 25.4 mm / 1 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 25.4 mm / 1 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 32 mm / 1.26 in |
| Num. of tubes | 126 | Pass distribution | 76 / 50 |
| Internal volume | 2.79 L / 170.26 in ³ | Coil weight | 15.1Kg / 33.29 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4045 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|--|----|--------|
| PED | PED Cat I (Group 2) / Cat II (Group 1) | UL | UL 207 |
|-----|--|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |
|-------------|--|

Package

| | | | |
|--------------------------|--------------------------------|---------------------------|---------------------------------|
| DF0071 / Cat I (Group 2) | 021U0097(I/12) / 021U0094(M/8) | DF0072 / Cat II (Group 1) | 021U00622(I/12) / 021U0621(M/8) |
|--------------------------|--------------------------------|---------------------------|---------------------------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCH to move in two dimensions;

Performance Data (Typical Refrigerant Application)

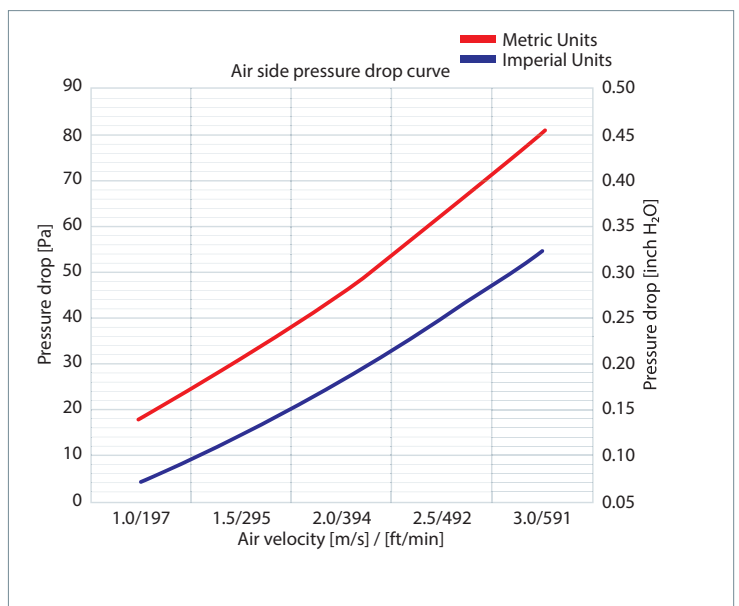
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 13.27/45.28 | 20.25/69.09 | 27.19/92.77 | 34.64/118.19 | 12.81/43.71 | 19.5/66.53 | 26.16/89.26 | 32.8/111.91 |
| 1.5/295 | 18.92/64.56 | 28.92/98.68 | 39.64/135.25 | 49.98/170.53 | 18.09/61.72 | 27.66/94.38 | 37.2/126.93 | 46.72/159.41 |
| 2.0/394 | 24.03/81.99 | 37.61/128.33 | 50.8/173.33 | 64.18/218.98 | 22.79/77.76 | 34.97/119.32 | 47.12/160.77 | 60.21/205.44 |
| 2.5/492 | 28.69/97.89 | 45.3/154.56 | 61.18/208.75 | 77.34/263.88 | 27.02/92.19 | 41.56/141.8 | 57.01/194.52 | 71.99/245.63 |
| 3.0/591 | 32.99/112.56 | 52.36/178.65 | 70.86/241.77 | 89.68/305.99 | 30.84/105.23 | 47.55/162.24 | 65.58/223.76 | 82.09/280.09 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 13.26/45.24 | 20.25/69.09 | 27.59/94.14 | 34.79/118.7 | 8.5/29 | 16.47/56.2 | 23.57/80.42 | 30.6/104.41 |
| 1.5/295 | 18.74/63.94 | 29.08/99.22 | 39.65/135.29 | 50.02/170.67 | 12.51/42.68 | 23.42/79.91 | 33.65/114.81 | 44.36/151.36 |
| 2.0/394 | 23.6/80.52 | 37.59/128.26 | 50.68/172.92 | 63.97/218.27 | 15.69/53.53 | 29.62/101.06 | 42.75/145.86 | 56.8/193.8 |
| 2.5/492 | 27.99/95.5 | 44.95/153.37 | 60.77/207.35 | 76.77/261.94 | 18.5/63.12 | 35.39/120.75 | 52.21/178.14 | 68.03/232.12 |
| 3.0/591 | 33.02/112.66 | 51.83/176.84 | 70.12/239.25 | 88.59/302.27 | 21.07/71.89 | 40.65/138.7 | 60.34/205.88 | 78.55/268.01 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R454B | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 12.19/41.59 | 19.19/65.48 | 26.12/89.12 | 33.33/113.72 | 12.34/42.1 | 19.31/65.89 | 26.27/89.63 | 33.49/114.27 |
| 1.5/295 | 17.44/59.51 | 27.48/93.76 | 37.72/128.7 | 48.15/164.29 | 17.65/60.22 | 27.65/94.34 | 38.07/129.89 | 48.34/164.94 |
| 2.0/394 | 22.18/75.68 | 35.02/119.49 | 48.61/165.86 | 61.75/210.69 | 22.46/76.63 | 35.25/120.27 | 48.88/166.78 | 62.05/211.71 |
| 2.5/492 | 26.53/90.52 | 42.65/145.52 | 58.49/199.57 | 74.42/253.92 | 26.86/91.65 | 43.04/146.85 | 58.84/200.76 | 74.8/255.22 |
| 3.0/591 | 30.55/104.24 | 49.44/168.69 | 67.75/231.16 | 86.26/294.32 | 30.91/105.46 | 49.87/170.16 | 68.13/232.46 | 86.68/295.75 |

Air-side Pressure Drop Data

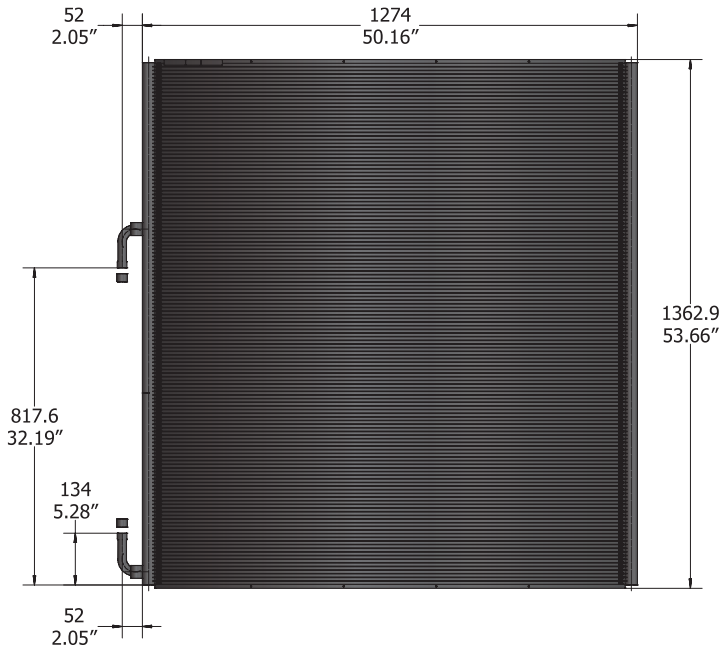
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 18.3/0.07 | 4293/2525.29 |
| 1.5/295 | 30.6/0.12 | 6439.5/3787.94 |
| 2.0/394 | 45.1/0.18 | 8586/5050.59 |
| 2.5/492 | 61.8/0.25 | 10732.5/6313.24 |
| 3.0/591 | 80.6/0.32 | 12879/7575.88 |



D1900-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0101 / DF0102 | Platform | 2G25-23FPI |
| Coil length | 1274 mm / 50.16 in | Coil height | 1362.9 mm / 53.66 in |
| Inlet connection (ID) | 22.4 mm / 0.88 in | Outlet connection (ID) | 22.4 mm / 0.88 in |
| Tube width | 25.4 mm / 1 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 25.4 mm / 1 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 32 mm / 1.26 in |
| Num. of tubes | 142 | Pass distribution | 90 / 52 |
| Internal volume | 3.49 L / 212.97 in ³ | Coil weight | 19.8 Kg / 43.8 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4045 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|--|----|--------|
| PED | PED Cat I (Group 2) / Cat II (Group 1) | UL | UL 207 |
|-----|--|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| | Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |

Package

| | | | |
|--------------------------|--------------------------------|---------------------------|---------------------------------|
| DF0101 / Cat I (Group 2) | 021U0093(I/12) / 021U0086(M/8) | DF0102 / Cat II (Group 1) | 021U00628(I/12) / 021U0627(M/8) |
|--------------------------|--------------------------------|---------------------------|---------------------------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data (Typical Refrigerant Application)

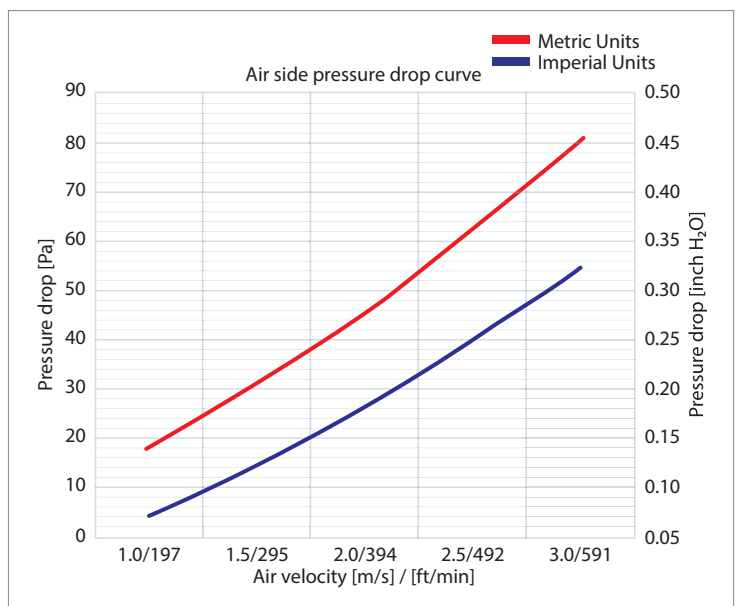
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 18.1/61.76 | 27.5/93.83 | 37.27/127.17 | 46.91/160.06 | 17.33/59.13 | 26.34/89.87 | 35.31/120.48 | 44.27/151.05 |
| 1.5/295 | 25.81/88.06 | 39.93/136.24 | 53.68/183.16 | 67.65/230.82 | 24.42/83.32 | 37.28/127.2 | 50.11/170.98 | 63.59/216.97 |
| 2.0/394 | 32.78/111.85 | 51.12/174.42 | 68.76/234.61 | 86.71/295.85 | 30.68/104.68 | 47/160.36 | 64.08/218.64 | 80.63/275.11 |
| 2.5/492 | 40.18/137.09 | 61.34/209.29 | 82.7/282.17 | 104.36/356.08 | 36.25/123.69 | 55.72/190.12 | 76.24/260.13 | 95.23/324.92 |
| 3.0/591 | 46.35/158.15 | 70.93/242.01 | 95.65/326.36 | 120.72/411.9 | 41.28/140.85 | 64.53/220.18 | 87.27/297.77 | 108.75/371.06 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 18.03/61.52 | 27.42/93.56 | 37.41/127.64 | 46.99/160.33 | 12.12/41.35 | 22.36/76.29 | 31.94/108.98 | 41.54/141.73 |
| 1.5/295 | 25.47/86.9 | 39.86/136 | 53.59/182.85 | 67.45/230.14 | 17.05/58.17 | 31.77/108.4 | 45.55/155.42 | 60.06/204.92 |
| 2.0/394 | 32.06/109.39 | 50.67/172.89 | 68.24/232.83 | 85.97/293.33 | 21.35/72.85 | 40.24/137.3 | 58.83/200.73 | 76.46/260.88 |
| 2.5/492 | 39.61/135.15 | 60.59/206.73 | 81.61/278.45 | 102.88/351.03 | 25.11/85.68 | 47.92/163.5 | 70.51/240.58 | 91.53/312.3 |
| 3.0/591 | 45.6/155.59 | 69.65/237.65 | 93.84/320.18 | 118.42/404.05 | 28.57/97.48 | 56.28/192.03 | 80.89/276 | 105.35/359.45 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R454B | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 16.63/56.74 | 26.05/88.88 | 35.41/120.82 | 45.17/154.12 | 16.84/57.46 | 26.25/89.57 | 35.61/121.5 | 45.39/154.87 |
| 1.5/295 | 23.82/81.27 | 37.31/127.3 | 51.38/175.31 | 65.1/222.12 | 24.07/82.13 | 37.58/128.22 | 51.69/176.37 | 65.45/223.32 |
| 2.0/394 | 30.24/103.18 | 48.23/164.56 | 65.76/224.37 | 83.48/284.83 | 30.61/104.44 | 48.63/165.93 | 66.16/225.74 | 83.9/286.27 |
| 2.5/492 | 36.19/123.48 | 58.05/198.07 | 79.12/269.96 | 100.47/342.8 | 36.61/124.91 | 58.52/199.67 | 79.59/271.56 | 100.97/344.51 |
| 3.0/591 | 41.64/142.08 | 67.18/229.22 | 91.51/312.23 | 116.26/396.68 | 42.11/143.68 | 67.74/231.13 | 92.05/314.07 | 116.88/398.79 |

Air-side Pressure Drop Data

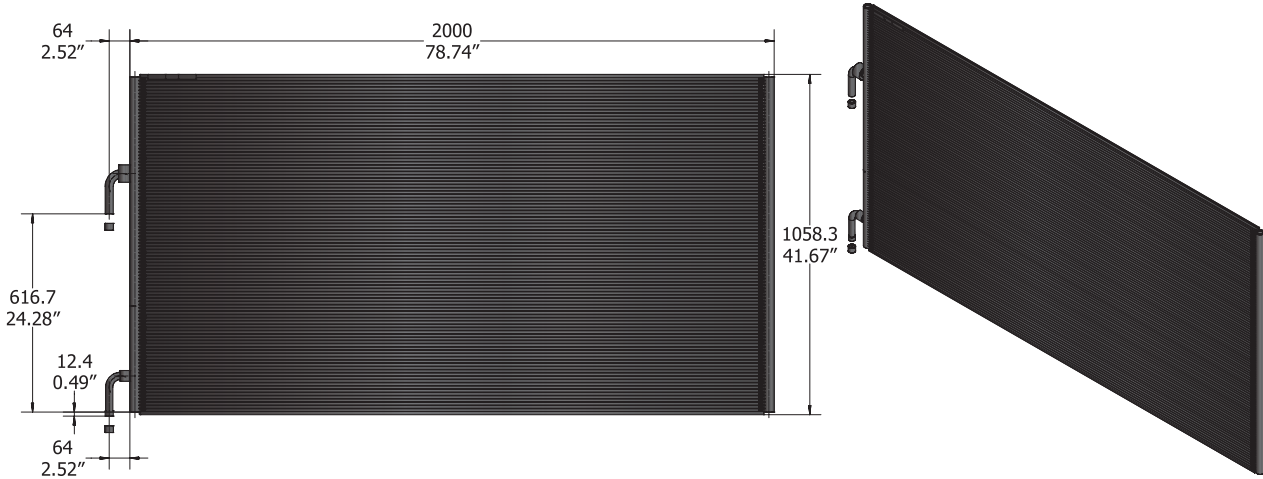
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 18.3/0.07 | 5801.33/3412.55 |
| 1.5/295 | 30.6/0.12 | 8701.99/5118.82 |
| 2.0/394 | 45.1/0.18 | 11602.66/6825.09 |
| 2.5/492 | 61.8/0.25 | 14503.32/8531.36 |
| 3.0/591 | 80.6/0.32 | 17403.98/10237.64 |



D2000-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DF0321 / DF0322 | Platform | 4G25-23FPI |
| Coil length | 2000 mm / 78.74 in | Coil height | 1058.3 mm / 41.67 in |
| Inlet connection (ID) | 25.4 mm / 1 in | Outlet connection (ID) | 22.4 mm / 0.88 in |
| Tube width | 25.4 mm / 1 in | Tube height | 2 mm / 0.08 in |
| Fin width | 25.4 mm / 1 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23FPI | Manifold diameter | 32 mm / 1.26 in |
| Num. of tubes | 102 | Pass distribution | 70 / 32 |
| Internal volume | 5.44 / 332 in ³ | Coil weight | 26.4 Kg / 58.2 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | LLA9153 | Manifold | AA3003 clad with AA4045 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|--|----|--------|
| PED | PED Cat II (Group 2) / Cat III (Group 1) | UL | UL 207 |
|-----|--|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |
|-------------|--|

Package

| | | | |
|---------------------------|--------------------------------|----------------------------|--------------------------------|
| DF0321 / Cat II (Group 2) | 021U0265(I/12) / 021U0264(M/8) | DF0322 / Cat III (Group 1) | 021U1201(I/12) / 021U1200(M/8) |
|---------------------------|--------------------------------|----------------------------|--------------------------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data (Typical Refrigerant Application)

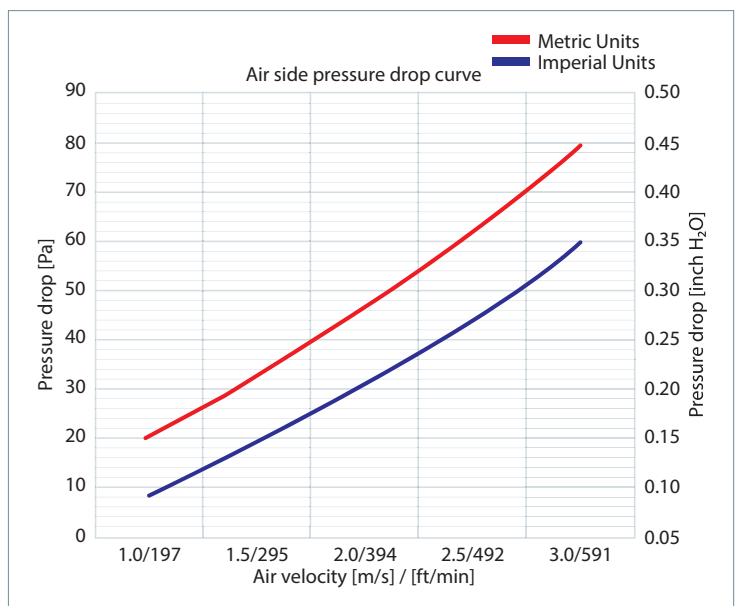
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 22.66/77.32 | 34.85/118.91 | 46.82/159.75 | 58.88/200.9 | 21.92/74.79 | 33.22/113.35 | 44.83/152.96 | 56.24/191.89 |
| 1.5/295 | 33.06/112.8 | 50.49/172.27 | 67.85/231.5 | 85.42/291.45 | 31.13/106.22 | 48.02/163.84 | 64.5/220.07 | 80.99/276.34 |
| 2.0/394 | 42.5/145.01 | 64.89/221.4 | 87.4/298.21 | 110.18/375.93 | 39.36/134.3 | 61.3/209.16 | 82.37/281.05 | 102.95/351.27 |
| 2.5/492 | 51.27/174.93 | 78.32/267.23 | 105.58/360.24 | 133.2/454.48 | 46.77/159.58 | 73.36/250.3 | 97.98/334.31 | 123.15/420.19 |
| 3.0/591 | 59.52/203.08 | 90.96/310.36 | 122.63/418.41 | 154.83/528.28 | 55.06/187.86 | 84.43/288.08 | 112.51/383.88 | 141.52/482.87 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 22.51/76.8 | 35.06/123.2 | 47.04/165.3 | 59.11/207.71 | 15.26/53.62 | 28.04/98.53 | 40.51/142.35 | 52.57/184.73 |
| 1.5/295 | 33.08/112.87 | 50.5/177.46 | 67.86/238.46 | 85.43/300.2 | 21.44/75.34 | 40.57/142.56 | 58.53/205.67 | 75.92/266.78 |
| 2.0/394 | 42.35/144.5 | 64.63/227.11 | 87.06/305.93 | 109.66/385.35 | 26.89/94.49 | 52.25/183.61 | 75.17/264.15 | 97.44/342.4 |
| 2.5/492 | 50.86/173.53 | 77.81/273.42 | 104.73/368.02 | 131.99/463.81 | 31.78/111.67 | 62.87/220.93 | 90.17/316.86 | 117.32/412.26 |
| 3.0/591 | 58.57/199.84 | 89.79/315.52 | 121.08/425.48 | 152.69/536.55 | 36.18/127.14 | 72.78/255.75 | 104.24/366.3 | 135.74/476.99 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R454B | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 20.87/71.21 | 32.74/111.71 | 44.76/152.72 | 56.67/193.36 | 21.13/72.1 | 33.16/113.14 | 45.05/153.71 | 56.97/194.38 |
| 1.5/295 | 29.92/102.09 | 47.67/162.65 | 64.87/221.34 | 82.24/280.6 | 30.26/103.25 | 48.04/163.91 | 65.28/222.74 | 82.67/282.07 |
| 2.0/394 | 38.95/132.9 | 61.37/209.39 | 83.56/285.11 | 106.03/361.77 | 39.47/134.67 | 61.85/211.03 | 84.09/286.92 | 106.61/363.75 |
| 2.5/492 | 47/160.36 | 74.02/252.56 | 101.08/344.88 | 128.22/437.49 | 47.61/162.45 | 74.6/254.54 | 101.61/346.69 | 128.9/439.81 |
| 3.0/591 | 54.56/186.16 | 85.9/293.09 | 117.29/400.19 | 148.96/508.25 | 55.24/188.48 | 86.54/295.27 | 118.04/402.75 | 149.79/511.08 |

Air-side Pressure Drop Data

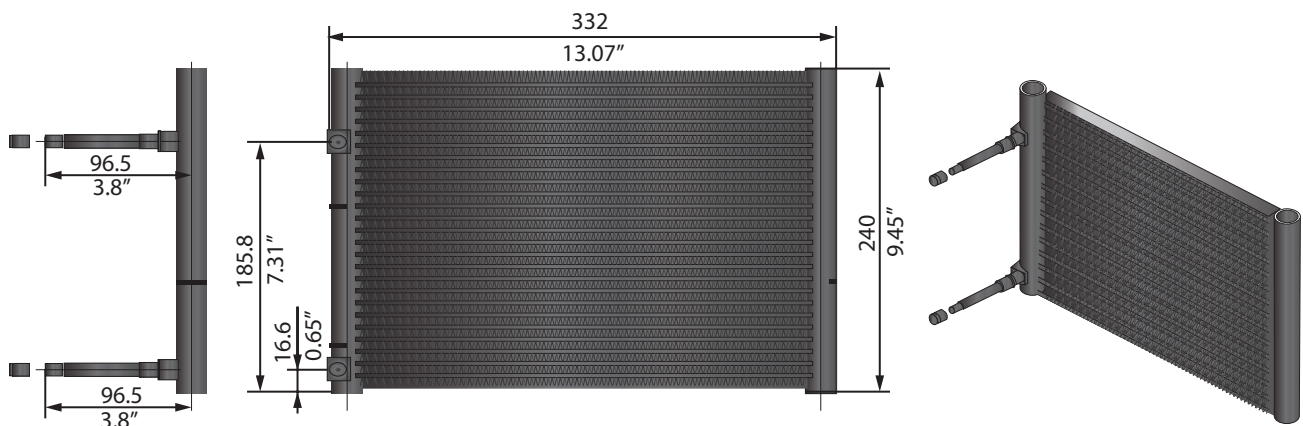
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 20.9/0.08 | 7199.16/4234.8 |
| 1.5/295 | 34.7/0.14 | 10798.74/6352.2 |
| 2.0/394 | 50.7/0.2 | 14398.31/8469.59 |
| 2.5/492 | 68.9/0.28 | 17997.89/10586.99 |
| 3.0/591 | 89.4/0.36 | 21597.47/12704.39 |



D2100-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DM0010 | Platform | 2G16-23FPI |
| Coil length | 332 mm / 13.07 in | Coil height | 240 mm / 9.45 in |
| Inlet connection (ID) | 6.15 mm / 0.24 in | Outlet connection (ID) | 6.15 mm / 0.24 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. of tubes | 24 | Pass distribution | 10 / 6 / 5 / 3 |
| Internal volume | 0.15 L / 9.15 in ³ | Coil weight | 0.643 Kg / 1.41 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| | Note: R32 is available for MCHes, but if customers request special PS & TS, please confirm with engineering team |

Package

| | | | |
|-----------------|----------------|------------|----------------|
| Industrial pack | 021U0341(I/48) | Multi pack | 021U0510(M/24) |
|-----------------|----------------|------------|----------------|

Mounting Bars

Aluminum MCHes expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCH to move in two dimensions;

Performance Data (Typical Refrigerant Application)

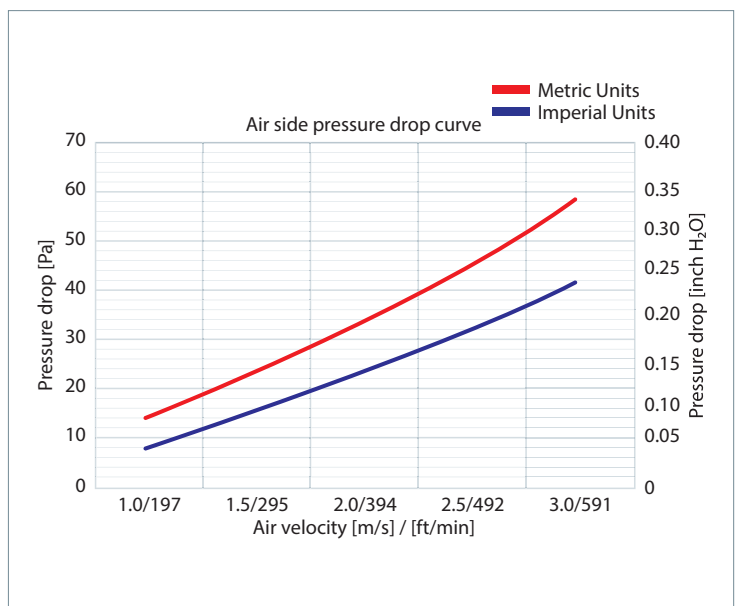
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 0.55/1.88 | 0.95/3.24 | 1.34/4.57 | 1.71/5.83 | 0.54/1.84 | 0.93/3.17 | 0.93/3.17 | 1.61/5.49 |
| 1.5/295 | 0.71/2.42 | 1.36/4.64 | 1.88/6.41 | 2.41/8.22 | 0.81/2.76 | 1.29/4.4 | 1.75/5.97 | 2.29/7.81 |
| 2.0/394 | 1.02/3.48 | 1.71/5.83 | 2.36/8.05 | 3.02/10.3 | 1.01/3.45 | 1.59/5.43 | 2.25/7.68 | 2.88/9.83 |
| 2.5/492 | 1.2/4.09 | 2.03/6.93 | 2.81/9.59 | 3.59/12.25 | 1.18/4.03 | 1.87/6.38 | 2.66/9.08 | 3.42/11.67 |
| 3.0/591 | 1.54/5.25 | 2.32/7.92 | 3.21/10.95 | 4.11/14.02 | 1.33/4.54 | 2.16/7.37 | 3.04/10.37 | 3.91/13.34 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 0.54/1.84 | 0.94/3.21 | 1.33/4.54 | 1.7/5.8 | 0.37/1.26 | 0.75/2.56 | 1.11/3.79 | 1.49/5.08 |
| 1.5/295 | 0.82/2.8 | 1.36/4.64 | 1.87/6.38 | 2.38/8.12 | 0.48/1.64 | 1.04/3.55 | 1.54/5.25 | 2.1/7.17 |
| 2.0/394 | 0.99/3.38 | 1.7/5.8 | 2.34/7.98 | 2.99/10.2 | 0.57/1.94 | 1.28/4.37 | 1.98/6.76 | 2.64/9.01 |
| 2.5/492 | 1.24/4.23 | 2/6.82 | 2.77/9.45 | 3.54/12.08 | 0.62/2.12 | 1.5/5.12 | 2.35/8.02 | 3.11/10.61 |
| 3.0/591 | 1.42/4.85 | 2.29/7.81 | 3.18/10.85 | 4.05/13.82 | 0.81/2.76 | 1.7/5.8 | 2.68/9.14 | 3.56/12.15 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 0.56/1.91 | 0.93/3.17 | 1.27/4.33 | 1.61/5.49 | 0.53/1.81 | 0.79/2.7 | 1.26/4.3 | 1.65/5.63 |
| 1.5/295 | 0.74/2.52 | 1.29/4.4 | 1.76/6.01 | 2.29/7.81 | 0.68/2.32 | 1.26/4.3 | 1.8/6.14 | 2.32/7.92 |
| 2.0/394 | 1.01/3.45 | 1.61/5.49 | 2.27/7.75 | 2.88/9.83 | 0.95/3.24 | 1.62/5.53 | 2.27/7.75 | 2.92/9.96 |
| 2.5/492 | 1.19/4.06 | 1.89/6.45 | 2.68/9.14 | 3.42/11.67 | 1.12/3.82 | 1.92/6.55 | 2.69/9.18 | 3.47/11.84 |
| 3.0/591 | 1.34/4.57 | 2.23/7.61 | 3.06/10.44 | 3.91/13.34 | 1.28/4.37 | 2.2/7.51 | 3.08/10.51 | 3.97/13.55 |

Air-side Pressure Drop Data

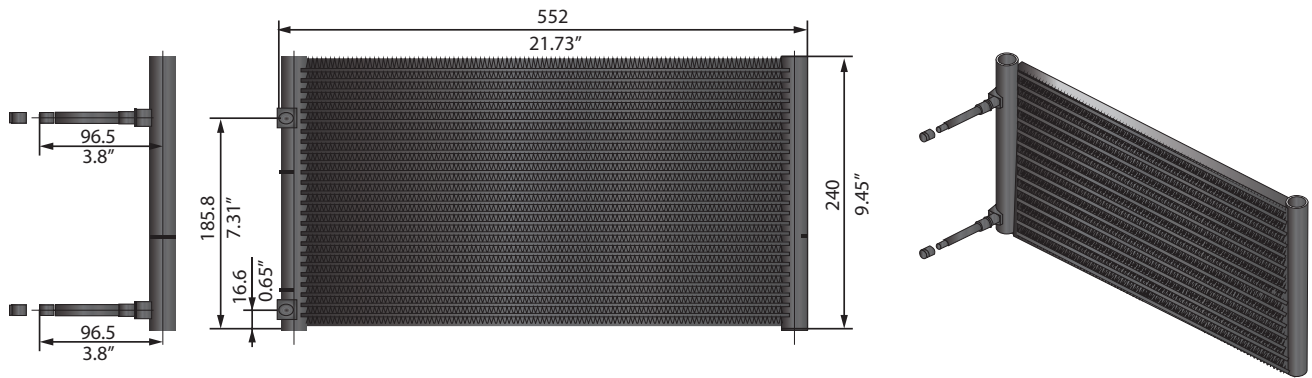
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 235.57/138.57 |
| 1.5/295 | 22.5/0.09 | 353.35/207.85 |
| 2.0/394 | 33.10/0.13 | 471.14/277.14 |
| 2.5/492 | 45.2/0.18 | 588.92/346.42 |
| 3.0/591 | 58.8/0.24 | 706.71/415.71 |



D2200-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DM0020 | Platform | 2G16-23FPI |
| Coil length | 552 mm / 21.73 in | Coil height | 240 mm / 9.45 in |
| Inlet connection (ID) | 6.15 mm / 0.24 in | Outlet connection (ID) | 6.15 mm / 0.24 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. Of tubes | 24 | Pass distribution | 10 / 6 / 5 / 3 |
| Internal volume | 0.19 L / 11.59 in ³ | Coil weight | 1.011 Kg / 2.22 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|-------------|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| | Note: R32 is available for MCHEs, but if customers request special PS & TS, please confirm with engineering team |

Package

| | | | |
|-----------------|----------------|------------|----------------|
| Industrial pack | 021U0342(I/32) | Multi pack | 021U0509(M/16) |
|-----------------|----------------|------------|----------------|

Mounting Bars

Aluminum MCHEs expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data

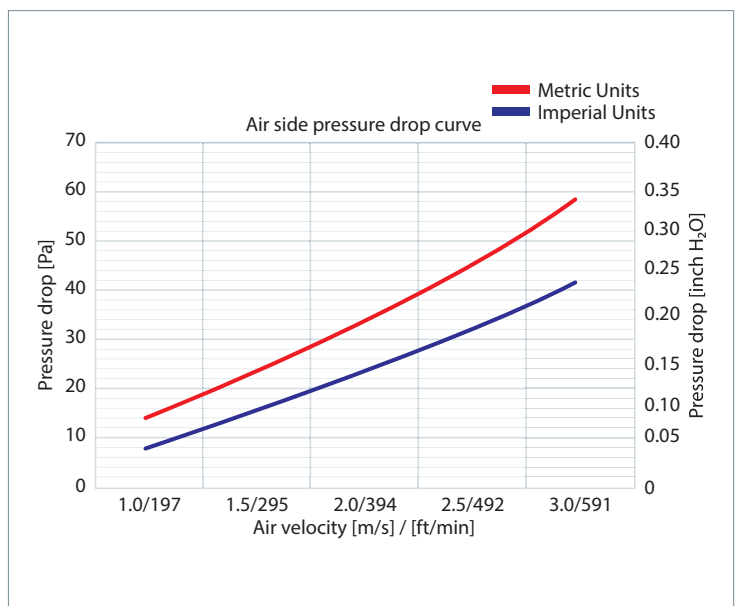
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.17/3.99 | 1.85/6.31 | 2.5/8.53 | 3.15/10.75 | 1.11/3.79 | 1.74/5.94 | 2.38/8.12 | 2.96/10.1 |
| 1.5/295 | 1.67/5.7 | 2.59/8.84 | 3.51/11.98 | 4.42/15.08 | 1.54/5.25 | 2.44/8.33 | 3.3/11.26 | 4.09/13.96 |
| 2.0/394 | 2.1/7.17 | 3.24/11.05 | 4.39/14.98 | 5.56/18.97 | 1.9/6.48 | 3.04/10.37 | 4.09/13.96 | 5.09/17.37 |
| 2.5/492 | 2.48/8.46 | 3.84/13.1 | 5.2/17.74 | 6.59/22.49 | 2.21/7.54 | 3.57/12.18 | 4.78/16.31 | 5.94/20.27 |
| 3.0/591 | 2.82/9.62 | 4.37/14.91 | 5.93/20.23 | 7.53/25.69 | 2.55/8.7 | 4.03/13.75 | 5.41/18.46 | 6.71/22.89 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.14/3.89 | 1.82/6.21 | 2.46/8.39 | 3.1/10.58 | 0.75/2.56 | 1.43/4.88 | 2.11/7.2 | 2.76/9.42 |
| 1.5/295 | 1.64/5.6 | 2.53/8.63 | 3.42/11.67 | 4.33/14.77 | 1.02/3.48 | 2.03/6.93 | 2.95/10.07 | 3.85/13.14 |
| 2.0/394 | 2.04/6.96 | 3.15/10.75 | 4.27/14.57 | 5.41/18.46 | 1.25/4.27 | 2.54/8.67 | 3.68/12.56 | 4.81/16.41 |
| 2.5/492 | 2.39/8.15 | 3.71/12.66 | 5.03/17.16 | 6.37/21.73 | 1.44/4.91 | 2.99/10.2 | 4.34/14.81 | 5.67/19.35 |
| 3.0/591 | 2.72/9.28 | 4.21/14.36 | 5.71/19.48 | 7.24/24.7 | 1.61/5.49 | 3.41/11.63 | 4.93/16.82 | 6.45/22.01 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.14/3.89 | 1.75/5.97 | 2.39/8.15 | 3.01/10.27 | 1.09/3.72 | 1.75/5.97 | 2.4/8.19 | 3.05/10.41 |
| 1.5/295 | 1.57/5.36 | 2.48/8.46 | 3.34/11.4 | 4.2/14.33 | 1.52/5.19 | 2.46/8.39 | 3.37/11.5 | 4.29/14.64 |
| 2.0/394 | 1.95/6.65 | 3.1/10.58 | 4.17/14.23 | 5.27/17.98 | 1.94/6.62 | 3.08/10.51 | 4.23/14.43 | 5.38/18.36 |
| 2.5/492 | 2.36/8.05 | 3.66/12.49 | 4.92/16.79 | 6.2/21.15 | 2.29/7.81 | 3.64/12.42 | 5.01/17.09 | 6.37/21.73 |
| 3.0/591 | 2.71/9.25 | 4.15/14.16 | 5.6/19.11 | 7.06/24.09 | 2.62/8.94 | 4.16/14.19 | 5.71/19.48 | 7.28/24.84 |

Air-side Pressure Drop Data

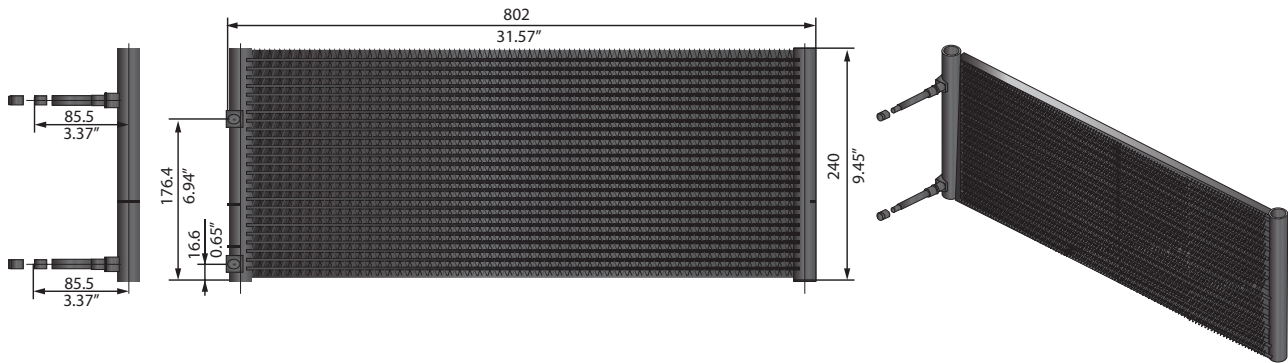
| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 422.34/248.44 |
| 1.5/295 | 22.5/0.09 | 633.51/372.65 |
| 2.0/394 | 33.10/0.13 | 844.68/496.87 |
| 2.5/492 | 45.2/0.18 | 1055.86/621.09 |
| 3.0/591 | 58.8/0.24 | 1267.03/745.31 |



D2300-C Condenser coil

Micro-Channel Heat Exchanger

Dimensional Drawing



Parameters Table

| | | | |
|-----------------------|------------------------------------|------------------------|-----------------------------------|
| Danfoss code | DM0030 | Platform | 2G16-23FPI |
| Coil length | 802 mm / 31.57 in | Coil height | 240 mm / 9.45 in |
| Inlet connection (ID) | 9.7 mm / 0.38 in | Outlet connection (ID) | 8.2 mm / 0.32 in |
| Tube width | 16 mm / 0.63 in | Tube height | 1.3 mm / 0.05 in |
| Fin width | 16 mm / 0.63 in | Fin height | 8.1 mm / 0.32 in |
| Fin pitch | 1.1 mm / 23 FPI | Manifold diameter | 20 mm / 0.79 in |
| Num. of tubes | 24 | Pass distribution | 16 / 8 |
| Internal volume | 0.23 L / 14.04 in ³ | Coil weight | 1.391 Kg / 3.06 LB |
| Ps | 45 bar / 652.7 psig | Ts (min ~ max) | -40 °C – 121 °C / -40 °F – 250 °F |
| Ambient temp. Range | -40 °C – 72 °C / -40 °F – 161.6 °F | Storage temp. Range | -40 °C – 121 °C / -40 °F – 250 °F |

Material

| | | | |
|------|----------------------------|-----------------|-------------------------|
| Tube | AA3102 | Manifold | AA3003 clad with AA4343 |
| Fin | AA3003Mod clad with AA4343 | Connecting tube | Cu |

Approval

| | | | |
|-----|-----------------------------------|----|--------|
| PED | N/A (Not needed for this product) | UL | UL 207 |
|-----|-----------------------------------|----|--------|

| | |
|--|--|
| Refrigerant | Group 1: R290, R32, R600, R600a, R1234yf, R717, R444B, R454B, R452B, R447A, R454C, R454A |
| | Group 2: R22, R134a, R404A, R407A, R407B, R407C, R410A, R507A, R1234ze, R513A, R448A, R449A, R407F, R452A, R450A, R422B, R422D, R438A, R1233zd(E), R449B, R407H, R513B |
| Note: R32 is available for MCHEs, but if customers request special PS & TS, please confirm with engineering team | |

Package

| | | | |
|-----------------|----------------|------------|----------------|
| Industrial pack | 021U0609(I/32) | Multi pack | 021U0689(M/16) |
|-----------------|----------------|------------|----------------|

Mounting Bars

Aluminum MCHEs expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHE to move in two dimensions;

Performance Data

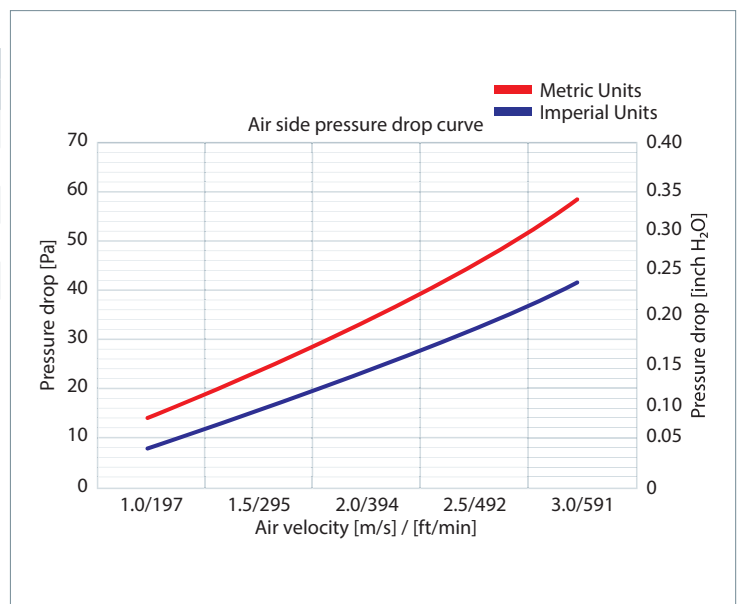
| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R410A | | | | R134a | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.71/5.83 | 2.66/9.08 | 3.68/12.56 | 4.67/15.93 | 1.64/5.6 | 2.53/8.63 | 3.55/12.11 | 4.32/14.74 |
| 1.5/295 | 2.37/8.09 | 3.78/12.9 | 5.15/17.57 | 6.55/22.35 | 2.25/7.68 | 3.49/11.91 | 4.72/16.1 | 6.11/20.85 |
| 2.0/394 | 2.93/10 | 4.74/16.17 | 6.47/22.08 | 8.23/28.08 | 2.77/9.45 | 4.32/14.74 | 6.02/20.54 | 7.65/26.1 |
| 2.5/492 | 3.43/11.7 | 5.61/19.14 | 7.66/26.14 | 9.76/33.3 | 3.23/11.02 | 5.05/17.23 | 7.09/24.19 | 9/30.71 |
| 3.0/591 | 4.08/13.92 | 6.42/21.91 | 8.76/29.89 | 11.16/38.08 | 3.65/12.45 | 5.89/20.1 | 8.06/27.5 | 10.18/34.73 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R404A | | | | R407C | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.67/5.7 | 2.58/8.8 | 3.62/12.35 | 4.6/15.7 | 1.03/3.51 | 2.11/7.2 | 3.06/10.44 | 4.06/13.85 |
| 1.5/295 | 2.28/7.78 | 3.72/12.69 | 5.06/17.26 | 6.43/21.94 | 1.5/5.12 | 2.91/9.93 | 4.26/14.54 | 5.7/19.45 |
| 2.0/394 | 2.79/9.52 | 4.66/15.9 | 6.34/21.63 | 8.06/27.5 | 1.82/6.21 | 3.6/12.28 | 5.43/18.53 | 7.16/24.43 |
| 2.5/492 | 3.48/11.87 | 5.48/18.7 | 7.49/25.56 | 9.53/32.52 | 2.12/7.23 | 4.21/14.36 | 6.45/22.01 | 8.43/28.76 |
| 3.0/591 | 3.96/13.51 | 6.24/21.29 | 8.54/29.14 | 10.87/37.09 | 2.37/8.09 | 4.78/16.31 | 7.32/24.98 | 9.62/32.82 |

| Air Velocity [m/s] / [ft/min] | Performance [KW/Btu/h×1000] | | | | | | | |
|----------------------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | R290 | | | | R452B | | | |
| | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F | Δ=10 K / 18 °F | Δ=15 K / 27 °F | Δ=20 K / 36 °F | Δ=25 K / 45 °F |
| 1.0/197 | 1.69/5.77 | 2.62/8.94 | 3.53/12.04 | 4.45/15.18 | 1.57/5.36 | 2.5/8.53 | 3.46/11.81 | 4.51/15.39 |
| 1.5/295 | 2.34/7.98 | 3.63/12.39 | 4.9/16.72 | 6.31/21.53 | 2.17/7.4 | 3.47/11.84 | 4.87/16.62 | 6.33/21.6 |
| 2.0/394 | 2.9/9.89 | 4.51/15.39 | 6.26/21.36 | 7.92/27.02 | 2.7/9.21 | 4.44/15.15 | 6.13/20.92 | 7.95/27.13 |
| 2.5/492 | 3.39/11.57 | 5.29/18.05 | 7.41/25.28 | 9.37/31.97 | 3.17/10.82 | 5.26/17.95 | 7.26/24.77 | 9.43/32.18 |
| 3.0/591 | 3.84/13.1 | 6.2/21.15 | 8.45/28.83 | 10.67/36.41 | 3.59/12.25 | 6.02/20.54 | 8.31/28.35 | 10.78/36.78 |

Air-side Pressure Drop Data

| Air Velocity [m/s] / [ft/min] | Pressure drop | Flow rate |
|----------------------------------|--------------------------------|-----------------------------|
| | [Pa] / [inch H ₂ O] | [m ³ /h] / [cfm] |
| 1.0/197 | 13.4/0.05 | 630.99/371.17 |
| 1.5/295 | 22.5/0.09 | 946.48/556.75 |
| 2.0/394 | 33.10/0.13 | 1255.67/738.63 |
| 2.5/492 | 45.2/0.18 | 1577.45/927.91 |
| 3.0/591 | 58.8/0.24 | 1892.97/1113.51 |



ENGINEERING
TOMORROW

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