



MicroChannel Heat Exchangers

Save time and money with MCHE standard products

60%

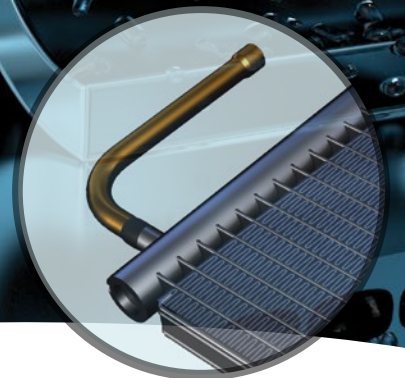
Lower weight

Compared with a copper fin-and-tube coil for reduced shipping costs and easier handling.

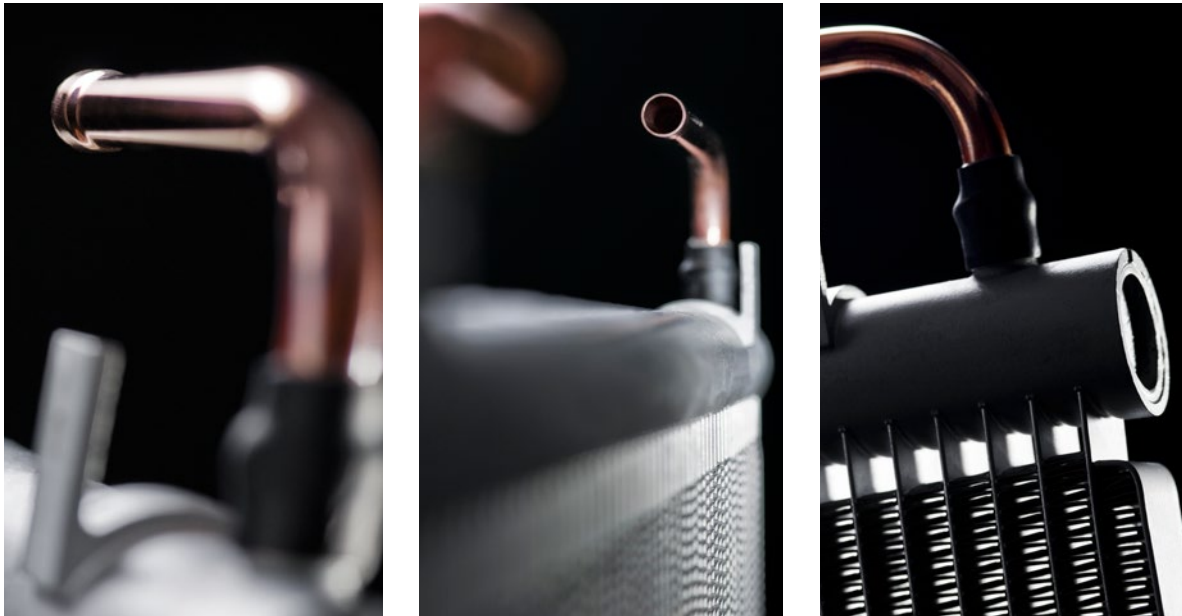
70%

Lower refrigerant charge

With less refrigerant in the condenser, both initial and lifetime costs are significantly reduced



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.

Chillers – Condensing Units – Indoor displays – Residential A/C – Air-dryers – Cabinet cooling – Commercial split/Roof tops

GET IT ALL

You can rely on us for a complete solution; not just the condenser itself but also every other component in the refrigerant circle (see illustration overleaf). The addition of MCHes to our product offering means we are now able to complete the circle and supply all your refrigeration needs.

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!

CIRCLE OF SALES



We have a long history (almost 100 years) of improving the efficiency of every component in the refrigerant circle. With the addition of MCHES, we are now able to complete this circle. Yet another good reason to source your components from us!

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 MCHEs have a 70% lower refrigerant charge than F&T coils. When an MCHC 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 MCHEs' 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 MCHEs lets you maximise the space available for product display while minimising the mechanical space requirement. Similarly, MCHEs enable a slimmer design for ice machines used in hotels or restaurants, where space is also at a premium.

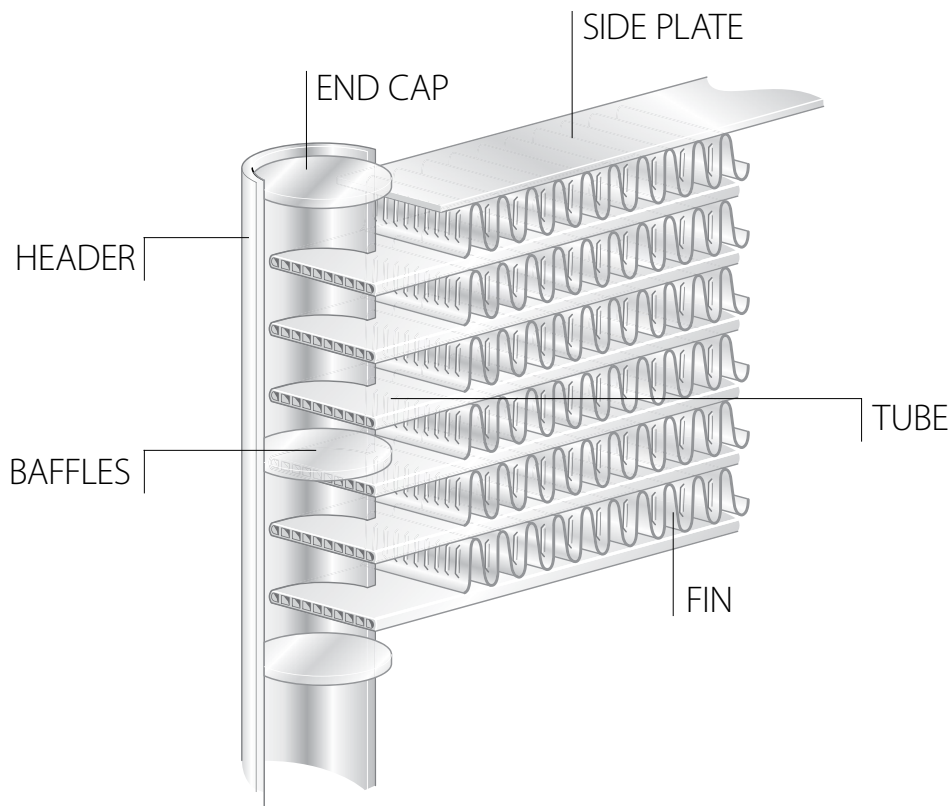
RESIDENTIAL AC MCHEs have a lower air side pressure loss than F&T coils, which means they function more quietly - as well as consuming less fan power. This is obviously a major advantage in residential applications, and ensures that as a manufacturer you are able to meet local market regulations with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

AIR DRYERS When MCHEs are used in air dryers, their high efficiency and compact nature let you reach out to new customers. MCHEs 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 MCHEs. 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 MCHEs 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 MCHEs weigh a lot less, which can make a big difference when positioning the unit on a roof top.

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 formed in a way that facilitates installation using U-bars.

ORDERING IS EASY



The whole idea of developing standard product ranges is to help your business move swiftly and smoothly into the MCHÉ 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 MCHÉs, we have adopted the high quality standards of the automotive industry. Every step in the production chain is quality-certified with ISO 9001 and TS16949. All the external parts used in our products are approved by third parties such as KHK, PED and UL.

MCHE STANDARD RANGE

		Size H/L (mm) (inch)	kW	Model name	Prod. code	Quantity per box	Weight (kg/lbs)
CHILLERS R410A/R134a Delta T 12K Air velocity 2,5 m/s		771/800 30.3/31.5	14.8/12.9	D1400-C	021U0091	15	4.4/9.7
		517/1074 20.4/42.3	15.4/13.3	D1500-C	021U0098	24	6.4/14.1
		639/1300 25.2/51.2	20.3/15.9	D1600-C	021U0099	15	5.9/12.9
		639/1324 25.2/52.1	24.3/20.8	D1700-C	021U0092	12	9.6/12.1
		1213/1074 47.7/40.3	37.2/32.5	D1800-C	021U0097	12	14.7/32.5
		1363/1274 53.7/50.2	50.7/43.2	D1900-C	021U0093	12	19.5/42.9
CONDENSING UNITS R404A Delta T 12K Air velocity 3 m/s		301/330 11.8/13.0	2.3	D1000-C	021U0087	48	0.8/1.7
		348/385 13.7/15.2	3.1	D1100-C	021U0088	48	1.0/2.2
		432/460 17.0/18.1	4.9	D1200-C	021U0089	32	1.5/3.3
		517/550 20.4/21.7	6.8	D1300-C	021U0090	32	2.1/4.6
INDOOR DISPLAY R404A Delta T 12K Air velocity 3 m/s		301/330 11.8/13.0	2.3	D1000-C	021U0087	48	0.8/1.7
		348/385 13.7/15.2	3.1	D1100-C	021U0088	48	1.0/2.2
		432/460 17.0/18.1	4.9	D1200-C	021U0089	32	1.5/3.3
RESIDENTIAL A/C R134a Delta T 12K Air velocity 3 m/s		301/330 11.8/13.0	2.0	D1000-C	021U0087	48	0.8/1.7
		348/385 13.7/15.2	2.8	D1100-C	021U0088	48	1.0/2.2
		432/460 17.0/18.1	4.4	D1200-C	021U0089	32	1.5/3.3
		517/550 20.4/21.7	6.4	D1300-C	021U0090	32	2.1/4.6
		771/800 30.3/31.5	14.6	D1400-C	021U0091	15	4.4/9.7
AIR DRYERS R134a Delta T 15K Air velocity 3 m/s		301/330 11.8/13.0	2.6	D1000-C	021U0087	48	0.8/1.7
		348/385 13.7/15.2	3.6	D1100-C	021U0088	48	1.0/2.2
		432/460 17.0/18.1	5.5	D1200-C	021U0089	32	1.5/3.3
		517/550 20.4/21.7	8.2	D1300-C	021U0090	32	2.1/4.6
CABINET COOLING R404A Delta T 12K Air velocity 2,7 m/s		301/330 11.8/13.0	2.1	D1000-C	021U0087	48	0.8/1.7
		348/385 13.7/15.2	2.9	D1100-C	021U0088	48	1.0/2.2
		432/460 17.0/18.1	4.6	D1200-C	021U0089	32	1.5/3.3
		517/550 20.4/21.7	6.3	D1300-C	021U0090	32	2.1/4.6
COMMERCIAL SPLIT/ ROOF TOPS R410A/ R134a Delta T 12K Air velocity 2,5 m/s		771/800 30.3/31.5	14.8	D1400-C	021U0091	15	4.4/9.7
		517/1074 20.4/42.3	15.4/13.3	D1500-C	021U0098	24	6.4/14.1
		639/1324 25.2/52.1	24.3/20.8	D1700-C	021U0092	12	9.6/12.1
		1213/1074 47.7/40.3	37.2/32.5	D1800-C	021U0097	12	14.7/32.5
		1363/1274 53.7/50.2	50.7/43.2	D1900-C	021U0093	12	19.5/42.9

ARI. Ambient 35 °C/MBP (-10 °C evap)/HBP (+5 °C evap) / 10 °C super heat / 5 °C sub cooling



A NATURAL CHOICE – MICROCHANNEL HEAT EXCHANGERS

Our revolutionary MicroChannel Heat Exchanger technology enables us meet customer demands for clear, core savings and a better environmental performance. Our focus on customer solutions means we can identify the best way to help you meet current and future challenges – environmental, economic, legal or political - and help you develop your business.

Address

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