



HEAT EXCHANGERS

Danfoss BPHE / Micro Plate Series

BRAND

Danfoss

SKU

RC_PROD_010

CATEGORY

Heat Exchangers



OVERVIEW

Danfoss brazed plate heat exchangers (BPHE) deliver gasket-free, compact heat transfer for evaporator, condenser, desuperheater, and heat recovery duties. Two plate technologies are offered: the patented Micro Plate™ (MPHE) dimple design, and the legacy Fishbone (chevron) design suited to higher temperatures/pressures and more viscous fluids. The Micro Plate™ dimple pattern creates a nozzle-diffuser channel with stronger turbulence, thinner boundary layers, and less scaling than traditional fishbone channels. The result is significantly improved heat transfer, lower pressure drop on the water side, reduced raw material use, and minimal hold-up volume — meaning smaller refrigerant charge. MPHE units cover chillers, heat pumps, and close-control systems for cooling capacities up to 800 kW / 225 TR.

KEY FEATURES

Patented Micro Plate™ dimple pattern
superior heat transfer with lower pressure drop

Gasket-free brazed construction
copper, CoResist™, or stainless steel brazing options

Reduced refrigerant charge
via minimal hold-up volume

High-pressure variants
up to 140 bar primary side for transcritical CO₂ heat recovery (H48T type)

SPECIFICATIONS

PARAMETER	VALUE
TECHNOLOGIES	Micro Plate™ (MPHE) and Fishbone (legacy)
CAPACITY COVERAGE	Up to 800 kW / 225 TR (MPHE chiller range)
MAX. WORKING PRESSURE (TYPICAL MPHE)	30 bar (e.g., MPHE C118/D118/H118 family)