

### SWEP dedicated products for heat pumps

Heat exchangers are key components in heat pump systems, where they influence the system's performance, stability, refrigerant charge, and overall size. SWEP Brazen Plate Heat Exchangers (BPHEs) can fulfill several functions including:

- Evaporator
- Condenser
- Subcooler/economizer
- Solar heating
- Tap water heating
- Recuperator/desuperheater
- Gas cooler

### SWEP distribution devices

SWEP offers a large range of distribution devices adapted for each type of refrigerant that:

- Improves refrigerant distribution over plate pack
- Raises efficiency and evaporation temperature
- Reduces risk of freezing

### SWEP freezing and fouling concept

Based on extensive testing, SWEP can offer optimized and unique set points for each dedicated BPHE to address freezing.

Together with our antifouling and engineering guidelines, SWEP can offer a complete recommendation package for an optimized system set up.

### Asymmetric plate concept

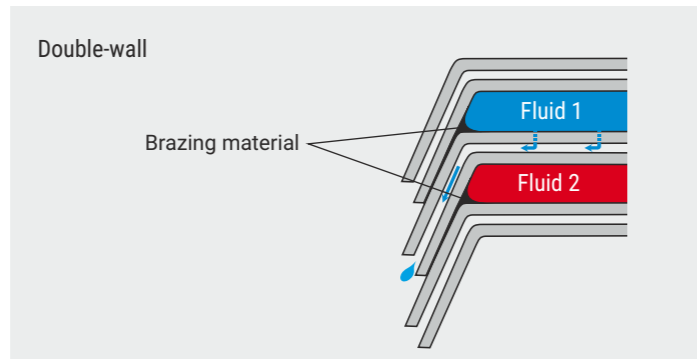
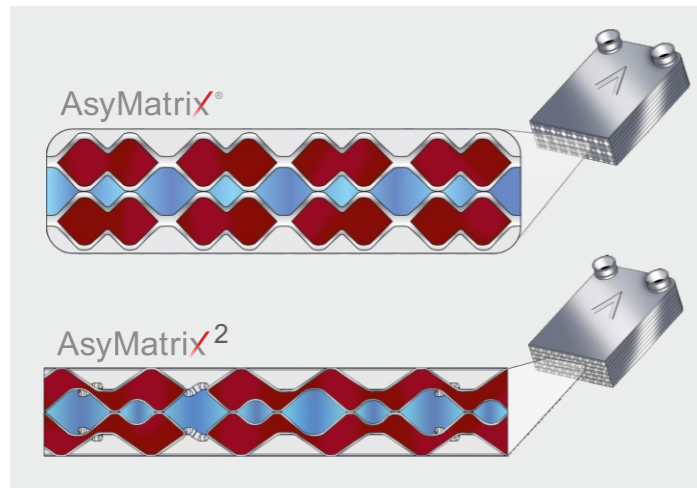
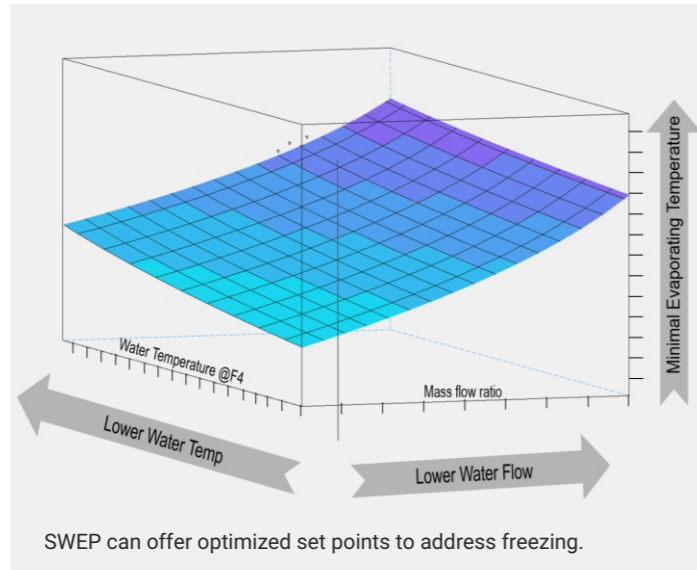
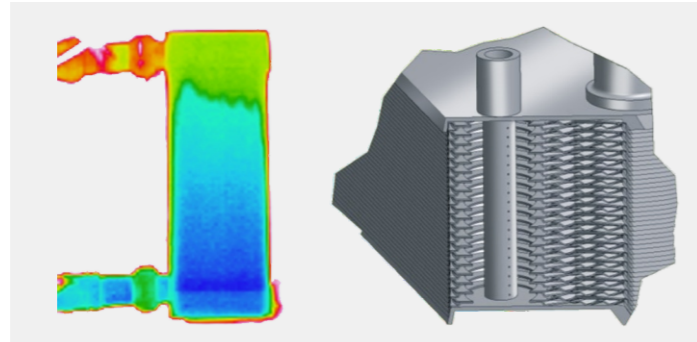
SWEP AsyMatrix® products combine high performance, low internal volume, and a smaller than expected footprint.

The small size facilitates the design of compact systems, and the asymmetric channels allow the refrigerant hold-up volume to be reduced by up to 50% compared with similar products.

### SWEP double-wall technology

SWEP's double-wall technology ensures that liquids do not mix and makes any internal leaks visible – important factors in applications where safety is a priority.

- Internal leakage can be detected
- Exceptional double-wall thermal efficiency



#### Challenge efficiency

At SWEP, we believe our future rests on giving more energy than we take – from our planet and our people. That's why we pour our energy into leading the conversion to sustainable energy usage in heat transfer. Over three decades, the SWEP brand has become synonymous with challenging efficiency.

SWEP is a world-leading supplier of brazed plate heat exchangers for HVAC and industrial applications. With over 1,000 dedicated employees, carefully selected business partners, global presence with production, sales and heartfelt service, we bring a level of expertise and customer intimacy that's redefining competitive edge for a more sustainable future. SWEP is part of Dover Corporation, a multi-billion-dollar, diversified manufacturer of a wide range of proprietary products and components for industrial and commercial use.

Printed on 100% recycled paper. SWEP is an ISO 14001 Certified company.

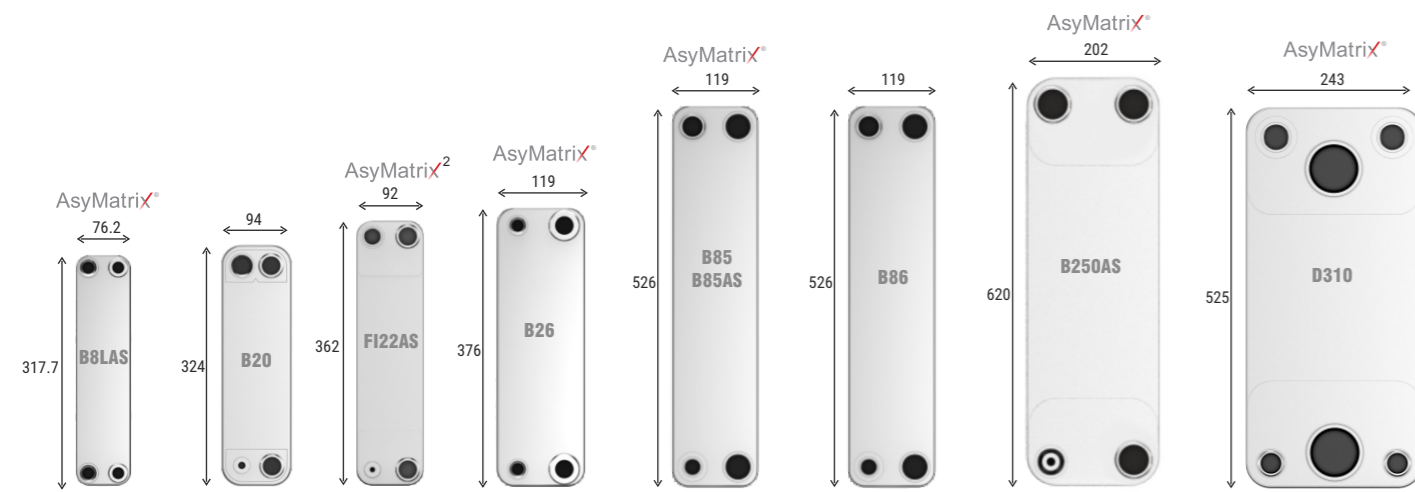


SWEP dedicated products and solutions for heat pumps

# SWEP dedicated products and solutions for heat pumps

## Condensers

- Complete condenser range with excellent performance and flexibility for highest efficiency
- Decreased refrigerant charge, footprint, and pressure drop thanks to asymmetry and unique pressing depth
- Excellent evaporator performance during reversible mode with distribution device



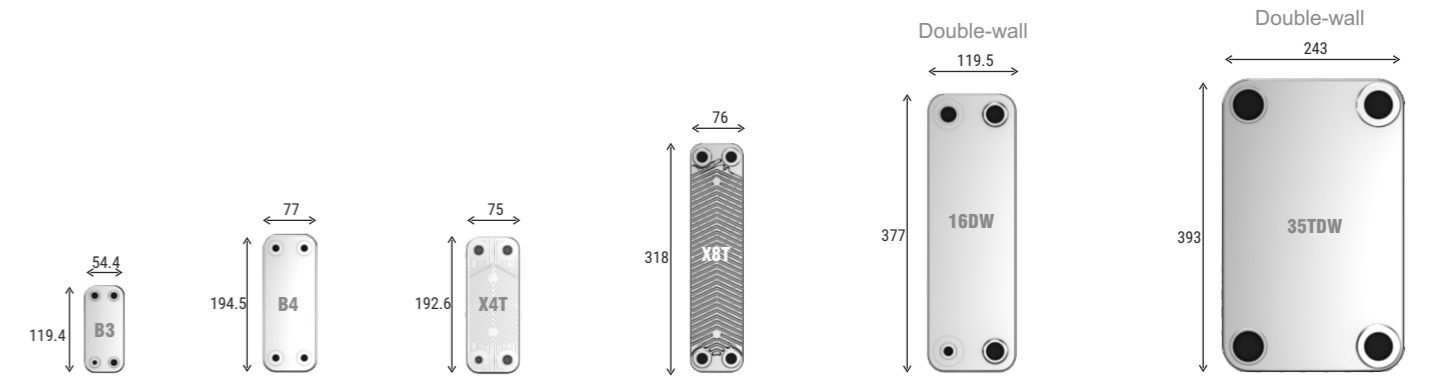
## Evaporators

- Complete evaporator range for variable- and fixed-speed compressors meeting highest demands
- Optimized distribution device
- Less use of refrigerants and smaller footprint thanks to asymmetry and unique pressing depth



## Economizers and Double-wall

- Efficient double-wall range with safety and reliability in mind
- Efficient and compact economizers



## Technical specifications

### Condensers

BPHE Model	BBLAS	B20	FI22ASM/H	B26	B80	B85	B85AS	B86	B250AS	D310
A (mm)	317.7	324	362	376	526	526	526	526	620	525
A (inch)	12.51	12.76	14.25	14.80	20.71	20.71	20.71	20.71	24.41	20.67
B (mm)	76.2	94	92	119	119	119	119	119	202	243
B (inch)	3	3.7	3.62	4.69	4.69	4.69	4.69	4.69	7.95	9.57
C (mm)	278	268.2	318	329	470	470	470	470	538	221
C (inch)	10.94	10.56	12.52	12.95	18.5	18.5	18.5	18.5	21.18	8.7
D (mm)	40	39	48	72	63	63	63	63	112	160
D (inch)	1.57	1.54	1.89	2.83	2.48	2.48	2.48	2.48	4.41	6.3
E1/E2/E3 (mm)	20,1/45,1	20,1	20	20,1/45,1	27,1/45,1	27,1/45,1/20,1	27,1/45,1/20,1	20,1/45,1/27	27,1/54,2	27,1/54,2
E1/E2/E3 (inch)	0.79/1.78	0.79	0.70	0.79/1.78	1.07/1.78	1.07/1.78/0.79	1.07/1.78/0.79	0.79/1.78/1.06	1.07/2.13	1.07/2.13
F (mm)	4+1,32×NoP	6+1,46×NoP	6+1,32×NoP	4+1,63×NoP	4+2,24×NoP	4+1,84×NoP	4+1,84×NoP	4+1,68×NoP	14+1,91×NoP	10+1,91×NoP
F (inch)	0.157+0.052×NoP	0.236+0.057×NoP	0.236+0.052×NoP	0.157+0.064×NoP	0.157+0.072×NoP	0.157+0.072×NoP	0.157+0.072×NoP	0.157+0.066×NoP	0.551+0.075×NoP	0.394+0.075×NoP
G (mm)	6.3	5	5	6	6	6	6	6	0	4
G (inch)	0.25	0.2	0.2	0.24	0.24	0.24	0.24	0.24	0	0.16
Evaporator distributor types	-	-	FI	V	F, Q	F, Q	F, Q	F, Q	F, P	F, P
Max number of plates	70	140	140	160	140	160	160	160	300	350
Max flow capacity (m³/h) water gal/m	4 17.6	9.7 42.7	11.3 49.7	11.3 49.7	16.9 74.4	17 74.8	17 74.8	9.0 39.6	62 272.8	60 264.0
Standard connection size	3/4"	1"	1"	1"	1 1/4"	1 1/4"	1 1/4"	1"	3"	2 1/2"

### Evaporators

BPHE Model	Q20	FI22ASM/H	QA80	QA80AS	QN85	QB250AS	D310
A (mm)	324	362	526	526	526	620	525
A (inch)	12.76	14.25	20.71	20.71	20.71	24.41	20.67
B (mm)	94	92	119	119	119	202	243
B (inch)	3.7	3.62	4.69	4.69	4.69	7.95	9.57
C (mm)	268.2	318	470	470	470	538	221
C (inch)	10.56	12.52	18.5	18.5	18.5	21.18	8.7
D (mm)	39	48	63/470	63/470	63/470	112/538	160
D (inch)	1.54	1.89	2.48/18.5	2.48/18.5	2.48/18.5	4.41/21.18	6.3
E1/E2/E3 (mm)	20,1	20	27,1/45,1	27,1/45,1	27,1/45,1/20,1	27,1/54,2	27,1/54,2
E1/E2/E3 (inch)	0.79	0.70	1.07/1.78	1.07/1.78	1.07/1.78/0.79	1.07/2.13	1.07/2.13
F (mm)	6+1,46×NoP	6+1,32×NoP	4+2,24×NoP	4+2,25×NoP	4+1,84×NoP	14+1,91×NoP	10+1,91×NoP
F (inch)	0.236+0.057×NoP	0.236+0.052×NoP	0.157+0.09×NoP	0.157+0.09×NoP	0.157+0.072×NoP	0.551+0.075×NoP	0.394+0.075×NoP
G (mm)	5	5	6	6	6	0	4
G (inch)	0.2	0.2	0.24	0.24	0.24	0	0.16
Evaporator distributor types	Q	FI	P, F, Q, V	F, Q	F, Q	P, F	P, F
Max number of plates	82	140	140	140	160	300	350
Max flow capacity (m³/h) water gal/m	9.7 42.7	11.3 49.7	16.9 74.4	17 74.8	17 74.8	62 272.8	60 264.0
Standard connection size	1"	1"	1 1/4"	1 1/4"	1 1/4"	3"	2 1/2"

### Economizers and Double-wall

BPHE Model	B3	B4	B8T/X8T	B16TDW	B35TDW
A (mm)	119.4	193.5	317	377	393
A (inch)	4.7	7.62	12.48	14.84	15.47
B (mm)	54.4	76	76	119.5	243
B (inch)	2.14	2.99	2.99	4.7	9.57
C (mm)	91	154	278	329	309
C (inch)	3.58	6.06	10.94	12.95	12.17
D (mm)	26	40	40	72	159
D (inch)	1.02	1.57	1.57	2.83	6.26
E1/E2/E3 (mm)	12,1/20,1	20,1/45,1	20,1	20,1	27,1/54,2
E1/E2/E3 (inch)	0.48/0.79	0.79/1.78	0.79	0.79	1.07/2.13
F (mm)	2+1,22×NoP	4+1,02×NoP	4+2,24×NoP	4+1,96×NoP	18+2,53×NoP
F (inch)	0.079+0.048×NoP	0.157+0.04×NoP	0.157+0.088×NoP	0.157+0.077×NoP	0.709+0.1×NoP
G (mm)	6	6	7	6	0
G (inch)	0.24	0.24	0.28	0.24	0
Evaporator distributor types	-	-	-	-	-
Max number of plates	60	100	60	140	260
Max flow capacity (m³/h) water gal/m	1.6 7.0	1.2 5.3	4.0 17.6	11.3 49.7	58 255.2
Standard connection size	1/2"	3/4"	3/4"	1"	2 1/2"

