

Standard range Braze Plate Heat Exchanger

The Sanhua standard range of Braze Plate Heat Exchangers (BPHE's) can be used as Evaporator, Condenser and Single-phase. The design of the BPHE's is robust and offers great flexibility in the choice of fluids with PS of 42-50 bar depending on model and size. The range offered has a wide range of powers from 1 to 70 kW, compatible with A1 and A2L refrigerants.

Materials:

- ✓ Cover plates: Stainless Steel 304
- ✓ Channel plates: Stainless Steel 316L
- ✓ Connections: Stainless Steel 304
- ✓ Brazing material: pure Copper
- ✓ Combi-connections: outer thread / inner soldering (mm and inch)
- ✓ Third-party Approvals:
Pressure Equipment Directive (PED) III
UK: UK Conformity Assessed Marking (UKCA)
US: Underwriter Laboratories Inc. (UL)

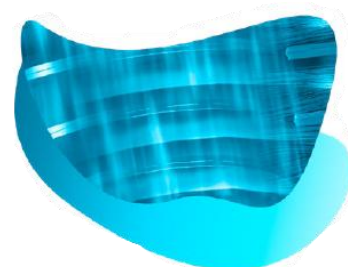


Designation

S 40 A H - 30 H Z



- **Distribution system**
- Z = distribution system included / no letter = no distribution system
- **Type of plate pattern**
- H = High theta pattern/angle
- M = Medium theta pattern/angle
- L = Low theta pattern/angle
- **Number of Plates**
- **Design pressure**
- H = up to 50 bar / L = up to 30 bar
- **Internal plate design, letter A, B, C...**
- **Size of heat exchanger**
- **Application**
- S = Standard HVAC and Refrigeration



Characteristics

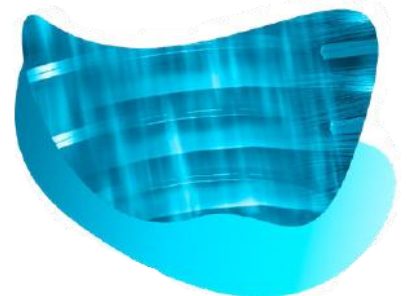
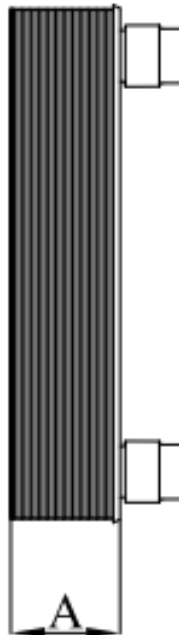
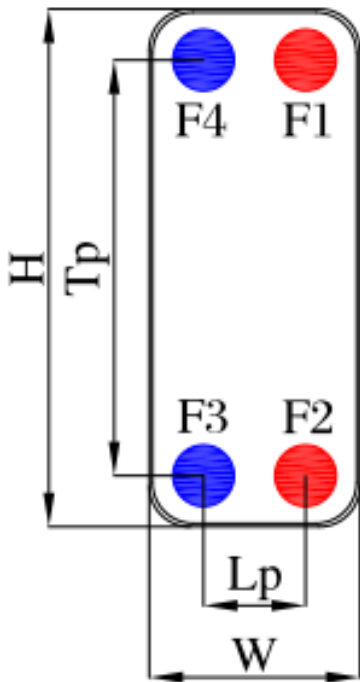


Condensing temperature: 40°C Discharge temperature: 65°C Subcooling: 2 K				Condensing temperature: 45°C Discharge temperature: 65°C Subcooling: 3 K			
Capacity kW	Water temp.	Model	Ordering No. (U11)	Capacity kW	Water temp.	Model	Ordering No. (U11)
~1-5	25/30°C	S20BH-10H	BPHE0002701	~1-5	30/35°C	S20BH-20H	10568611701
~10	25/30°C	S20BH-20H	10568611701	~10	30/35°C	S20BH-30H	BPHE0002801
~15	25/30°C	S20BH-30H	BPHE0002801	~15	30/35°C	S20BH-30H	BPHE0002801
~20	25/30°C	S20BH-40H	BPHE0002901	~20	30/35°C	S20BH-40H	BPHE0002901
~10	30/37°C	S40AH-20HZ	BPHE0065001	~10	35/40°C	S40AH-20HZ	BPHE0065001
~15	30/37°C	S40AH-30HZ	BPHE0065101	~15	35/40°C	S40AH-30HZ	BPHE0065101
~20	30/37°C	S40AH-40HZ	BPHE0003401	~20	35/40°C	S40AH-40HZ	BPHE0003401
~25	30/37°C	S40AH-50HZ	BPHE0003501	~25	35/40°C	S40AH-50HZ	BPHE0003501
~30	30/37°C	S40AH-60HZ	BPHE0003601	~30	35/40°C	S40AH-60HZ	BPHE0003601
~35	30/37°C	S40AH-70HZ	BPHE0003701	~35	35/40°C	S40AH-70HZ	BPHE0003701
~40	30/37°C	S40AH-80HZ	BPHE0003801	~40	35/40°C	S40AH-80HZ	BPHE0003801
~45	30/35°C	S60BH-50HZ	BPHE0004601	~50	35/40°C	S60BH-50HZ	BPHE0004601
~55	30/35°C	S60BH-60HZ	BPHE0004701	~60	35/40°C	S60BH-60HZ	BPHE0004701
~60	30/35°C	S60BH-70HZ	BPHE0004801	~70	35/40°C	S60BH-70HZ	BPHE0004801
~70	30/35°C	S60BH-80HZ	BPHE0004901	~80	35/40°C	S60BH-80HZ	BPHE0004901

Note
For more detailed calculation we refer to Sanhua selection software for Sanhua BPHE. We are also happy to assist you in calculations and selections.

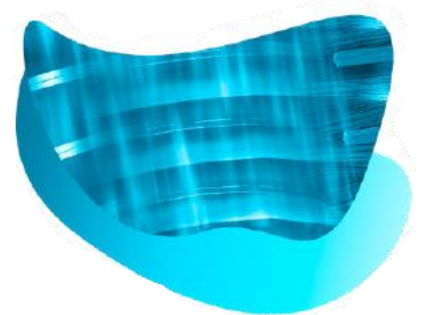
Configuration and Dimensions

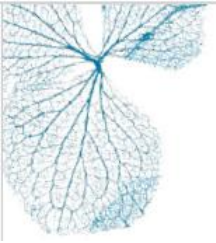
Ordering No. (U11)	Model	Allowable working Pressure (bar)	BPHE type	Stud-bolts	Connections				Height (mm)	Width (mm)	Depth (A) (mm)	Tp (mm)	Lp (mm)	Weight (kg)
					F1 (Liq.)	F2 (Liq.)	F3 (Ref.)	F4 (Ref.)						
BPHE0002701	S20BH-10H	49	Symmetric	x	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	24.0	278.0	42.0	1.66
10568611701	S20BH-20H	49	Symmetric	x	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	39.0	278.0	42.0	2.35
BPHE0002801	S20BH-30H	49	Symmetric	x	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	54.0	278.0	42.0	3.04
BPHE0002901	S20BH-40H	49	Symmetric	x	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	69.0	278.0	42.0	3.73
BPHE0006001	S20BH-50H	49	Symmetric	x	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	84.0	278.0	42.0	4.42
BPHE0003001	S20BH-60H	49	Symmetric	x	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	99.0	278.0	42.0	5.11
BPHE0006301	S20CH-10H	49	Symmetric	-	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	32.5	278.0	40.0	1.40
BPHE0006401	S20CH-20H	49	Symmetric	-	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	55.0	278.0	40.0	2.08
BPHE0006501	S20CH-30H	49	Symmetric	-	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	77.5	278.0	40.0	2.76
BPHE0006601	S20CH-40H	49	Symmetric	-	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	100.0	278.0	40.0	3.44
BPHE0006701	S20CH-50H	49	Symmetric	-	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	122.5	278.0	40.0	4.12
BPHE0006801	S20CH-60H	49	Symmetric	-	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	G $\frac{3}{4}$ " - $\frac{5}{8}$ "	318.0	76.0	145.0	278.0	40.0	4.80
BPHE0003201	S27CH-20H	49	Symmetric	x	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	314.0	116.0	57.0	250.0	50.0	3.40
BPHE0003101	S27CH-30H	49	Symmetric	x	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	314.0	116.0	79.5	250.0	50.0	4.40
BPHE0005501	S27CH-40H	49	Symmetric	x	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	314.0	116.0	102.0	250.0	50.0	5.40
BPHE0003301	S27CH-50H	49	Symmetric	x	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	314.0	116.0	124.5	250.0	50.0	6.40
BPHE0005201	S27CH-60H	49	Symmetric	x	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	G1" - $\frac{7}{8}$ "	314.0	116.0	147.0	250.0	50.0	7.40



Configuration and Dimensions

Ordering No. (U11)	Model	Allowable working Pressure (bar)	BPHE type	Stud-bolts	Connections				Height (mm)	Width (mm)	Depth (A) (mm)	Tp (mm)	Lp (mm)	Weight (kg)
					F1 (Liq.)	F2 (Liq.)	F3 (Ref.)	F4 (Ref.)						
BPHE0005001	S40AH-20HZ	49	Asymmetric	x	G1" - 7/8"	G1" - 7/8"	3/8"	5/8"	332.0	118.0	41.1	279/286	68/75	3.38
BPHE0005101	S40AH-30HZ	49	Asymmetric	x	G1" - 7/8"	G1" - 7/8"	3/8"	5/8"	332.0	118.0	56.4	279/286	68/75	4.44
BPHE0003401	S40AH-40HZ	49	Asymmetric	x	G1" - 7/8"	G1" - 7/8"	3/8"	5/8"	332.0	118.0	71.7	279/286	68/75	5.50
BPHE0003501	S40AH-50HZ	49	Asymmetric	x	G1" - 7/8"	G1" - 7/8"	1/2"	7/8"	332.0	118.0	87.0	279/286	68/75	6.56
BPHE0003601	S40AH-60HZ	49	Asymmetric	x	G1" - 7/8"	G1" - 7/8"	1/2"	7/8"	332.0	118.0	102.3	279/286	68/75	7.62
BPHE0003701	S40AH-70HZ	49	Asymmetric	x	G1" - 7/8"	G1" - 7/8"	1/2"	7/8"	332.0	118.0	117.6	279/286	68/75	8.68
BPHE0003801	S40AH-80HZ	49	Asymmetric	x	G1" - 7/8"	G1" - 7/8"	1/2"	7/8"	332.0	118.0	132.9	279/286	68/75	9.74
BPHE0003901	S60H-20H	50	Symmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	526.0	119.0	55.0	470.0	63.0	6.20
BPHE0004001	S60H-30H	50	Symmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	526.0	119.0	78.0	470.0	63.0	8.00
BPHE0004101	S60H-40H	50	Symmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	526.0	119.0	101.0	470.0	63.0	9.80
BPHE0004201	S60H-50H	50	Symmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	526.0	119.0	124.0	470.0	63.0	11.60
BPHE0004301	S60H-60H	50	Symmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	526.0	119.0	147.0	470.0	63.0	13.40
BPHE0004401	S60H-70H	50	Symmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	526.0	119.0	170.0	470.0	63.0	15.20
BPHE0004501	S60H-80H	50	Symmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	526.0	119.0	193.0	470.0	63.0	17.00
BPHE0004601	S60BH-50HZ	49	Asymmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	1/2"	1 1/8"	526.0	119.0	106.0	470.0	63.0	10.60
BPHE0004701	S60BH-60HZ	49	Asymmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	5/8"	1 1/8"	526.0	119.0	124.6	470.0	63.0	12.28
BPHE0004801	S60BH-70HZ	49	Asymmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	5/8"	1 1/8"	526.0	119.0	143.2	470.0	63.0	13.96
BPHE0004901	S60BH-80HZ	49	Asymmetric	x	G1 1/4" - 1 1/8"	G1 1/4" - 1 1/8"	5/8"	1 1/8"	526.0	119.0	161.8	470.0	63.0	15.64





Drawings Sanhua Standard BPHE range

- S20B Drawings: [S20B-Series.pdf](#)
- S20C Drawings: [S20C-Series.pdf](#)
- S27C Drawings: [S27C-Series.pdf](#)
- S40A Drawings: [S40A-Series.pdf](#)
- S60 Drawings: [S60-Series.pdf](#)
- S60B Drawings: [S60B-Series.pdf](#)