

Modular reversible heat-pumps SBS-HP series suitable to work down to -20°C ambient temperature, scroll compressors with liquid injection, 1 refrigerant circuit, brazed plate condenser, evaporator coils with copper tubes and aluminium fins (fins space 3,2-5 mm to reduce ice formation source), brazed plate economizer, refrigerant R410A and electronic expansion valve, AC axial fans controlled by cut-phase speed regulator. Electrical feed 400V/3ph/50Hz (460V/60Hz version as option), IP54 protection rating, chillers suitable for outdoor installation. You can connect up to 8 modules in parallel with a single power supply point into a master control panel installed onboard of the first module.

Special features of SBS-HP series:
scroll compressors with liquid injection
brazed plate economizer
evaporator fin space 3,2-5 mm

 **HEATING**

TECHNICAL DATA

PERFORMANCES		Model	050	075	100	
NOMINAL HEATING CAPACITY	W 40°C/45°C @ 7°C (1)	kW	61,7	79,5	98,8	
		TOTAL NOMINAL ABSORBED POWER	kW	19,9	25,9	32,1
		COP	kW/kW	3,09	3,07	3,08
		SCOP (2)	-	2,60	2,56	2,61
		NOMINAL WATER FLOW	m³/h	10,6	13,7	17,0
SINGLE MODULE PRESSURE DROPS (4)		kPa	41,3	54,0	54,2	
MULTIPLE MODULES PRESSURE DROPS (5)		kPa	58,2	78,7	89,4	
NOMINAL HEATING CAPACITY	W 30°C/35°C @ -15°C (11)	kW	38,5	49,9	62,1	
		TOTAL NOMINAL ABSORBED POWER	kW	15,4	19,9	24,7
		COP	kW/kW	2,50	2,50	2,51
		NOMINAL WATER FLOW	m³/h	7,34	8,56	10,64
		SINGLE MODULE PRESSURE DROPS (4)	kPa	19,9	21,0	21,3
MULTIPLE MODULES PRESSURE DROPS (5)	kPa	27,9	30,9	35,1		
FRIGORIFIC SECTION						
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP	nr.	2/1/2	2/1/2	2/1/2		
HYDRAULIC SECTION (3)						
WATER FLOW RANGE	m³/h	7÷16	7÷16	8,5÷21		
HYDRAULIC CONNECTIONS FOR SINGLE MODULE (FLANGED)	DN	50	50	50		
HEADERS CONNECTIONS SIZE (VICTAULIC) (9)	DN	150	150	150		
FAN SECTION (AXIAL)						
FANS	nr.	2	2	2		
MAXIMUM FANS ABSORBED POWER	AC	kW	3,68	3,68	3,68	
		MAXIMUM FANS ABSORBED CURRENT	A	7,66	7,66	7,66
		TOTAL AIR FLOW	m³/h	38150	38150	38150
MAXIMUM FANS ABSORBED POWER	EC	kW	5,12	5,12	5,12	
		MAXIMUM FANS ABSORBED CURRENT	A	7,80	7,80	7,80
		TOTAL AIR FLOW	m³/h	40280	40280	40280
TOTAL ELECTRIC DATA (6)						
MAXIMUM ABSORBED CURRENT (F.L.A)	A	45,1	67,2	77,8		
MAXIMUM PEAK CURRENT (L.R.A)	A	142,5	209,5	208,8		
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A)	A	118,9	174,7	175,2		
NOISE DATA (6) (7)						
SOUND PRESSURE FOR STANDARD CONFIGURATION	dB(A)	58,1	58,3	58,3		
SOUND PRESSURE FOR LOW NOISE OPTION (LNJ)	dB(A)	57,2	57,3	57,3		
SOUND PRESSURE FOR SUPER LOW NOISE OPTION (SLN)	dB(A)	54,6	54,8	54,8		
DIMENSIONS AND WEIGHT						
SINGLE MODULE LENGTH (12)	mm	1610	1610	1610		
SINGLE MODULE WIDTH	mm	2590	2590	2590		
MULTIPLE MODULES WIDTH	mm	2870	2870	2870		
HEIGHT	mm	2500	2500	2500		
WEIGHT EMPTY FOR STANDARD CONFIGURATION (6) (8)	kg	1270	1280	1300		
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (6) (8)	kg	1310	1325	1350		

The manufacturer reserves the right to modify specifications without notice.

Last update: 15/02/2021
Revision: 01-2021

Data referred to:

- Data referred to inlet/outlet water temperature = +40/+45 °C, ambient temperature = +7°C, fluid = Water
- SCOP data comply with the EN14825:2013, referring to medium temperature climate zone
- Pump and tank can be supplied in a separate hydro-module (HITEMA HYD series)
- Pressure drops taken in account: evaporator, valves, piping
- Pressure drops taken in account: evaporator, automatic isolation valves, circuit setter balancing valve, one way valve, piping
- Data referred to standard heat-pump configuration NP (no pump) and AC fans
- Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface
- Weight referred to SINGLE MODULE version. For multiple module configuration, weight to be confirmed in case of order
- Headers connection size is valid for a maximum flow rate of 191 m³/h in multi-module configuration. Dimensions will increase for greater flow rate.
- Water flow is different from heating mode, assuming that an inverter pump will be used
- Data referred to inlet/outlet water temperature = +30/+35°C, ambient temperature = -15°C, fluid = Water
- Multiple modules length must be increase of 52mm each module, this length increasing correspond to minimum distance between two consecutive modules

Modular reversible heat-pumps **SBS-HP series** suitable to work down to **-20°C ambient temperature**, scroll compressors with liquid injection, 1 refrigerant circuit, brazed plate evaporator, condenser coils with copper tubes and aluminium fins (fins space 3,2-5 mm to reduce ice formation source), brazed plate economizer, refrigerant R410A and electronic expansion valve, AC axial fans controlled by cut-phase speed regulator.
Electrical feed 400V/3ph/50Hz (460V/60Hz version as option), IP54 protection rating, chillers suitable for outdoor installation.
You can connect up to 8 modules in parallel with a single power supply point into a master control panel installed onboard of the first module.

Special features of SBS-HP series:
scroll compressors with liquid injection
brazed plate economizer
condenser fin space 3,2-5 mm

 **COOLING**

TECHNICAL DATA

PERFORMANCES

		Model	050	075	100
NOMINAL COOLING CAPACITY	W 12°C/7°C @ 35°C (1)	kW	55,5	72,1	92,0
TOTAL NOMINAL ABSORBED POWER		kW	16,5	22,9	29,8
EER		kW/kW	3,36	3,15	3,09
SEPR (2)		-	6,15	5,77	5,67
NOMINAL WATER FLOW (10)		m ³ /h	9,5	12,4	15,8
SINGLE MODULE PRESSURE DROPS (4)		kPa	34,3	45,3	47,5
MULTIPLE MODULES PRESSURE DROPS (5)		kPa	43,8	61,3	73,6
FRIGORIFIC SECTION					
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP	nr.	2/1/2	2/1/2	2/1/2	
HYDRAULIC SECTION (3)					
WATER FLOW RANGE	m ³ /h	7-16	7-16	8,5-21	
HYDRAULIC CONNECTIONS FOR SINGLE MODULE (FLANGED)	DN	50	50	50	
HEADERS CONNECTIONS SIZE (VICTAULIC) (9)	DN	150	150	150	
FAN SECTION (AXIAL)					
FANS	nr.	2	2	2	
MAXIMUM FANS ABSORBED POWER	AC	kW	3,68	3,68	3,68
MAXIMUM FANS ABSORBED CURRENT		A	7,66	7,66	7,66
TOTAL AIR FLOW		m ³ /h	42000	42000	42000
MAXIMUM FANS ABSORBED POWER	EC	kW	5,12	5,12	5,12
MAXIMUM FANS ABSORBED CURRENT		A	7,80	7,80	7,80
TOTAL AIR FLOW		m ³ /h	44360	44360	44360
TOTAL ELECTRIC DATA (6)					
MAXIMUM ABSORBED CURRENT (F.L.A)	A	45,1	67,2	77,8	
MAXIMUM PEAK CURRENT (L.R.A)	A	142,5	209,5	208,8	
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A)	A	118,9	174,7	175,2	
NOISE DATA (6) (7)					
SOUND PRESSURE FOR STANDARD CONFIGURATION	dB(A)	57,4	57,7	57,7	
SOUND PRESSURE FOR LOW NOISE OPTION (LNJ)	dB(A)	56,4	56,6	56,6	
SOUND PRESSURE FOR SUPER LOW NOISE OPTION (SLN)	dB(A)	53,9	54,1	54,1	
DIMENSIONS AND WEIGHT					
SINGLE MODULE LENGTH (12)	mm	1610	1610	1610	
SINGLE MODULE WIDTH	mm	2590	2590	2590	
MULTIPLE MODULES WIDTH	mm	2870	2870	2870	
HEIGHT	mm	2500	2500	2500	
WEIGHT EMPTY FOR STANDARD CONFIGURATION (6) (8)	kg	1270	1280	1300	
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (6) (8)	kg	1310	1325	1350	

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Last update: 15/02/2021
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Data referred to:

- (1) Data referred to inlet/outlet water temperature = +12/+7 °C, ambient temperature = +35°C, fluid = Water
- (2) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers
- (3) Pump and tank can be supplied in a separate hydro-module (HITEMA HYD series)
- (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Pressure drops taken in account: evaporator, automatic isolation valves, circuit setter balancing valve, one way valve, piping
- (6) Data referred to standard chiller configuration NP (no pump) and AC fans
- (7) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface
- (8) Weight referred to SINGLE MODULE version. For multiple module configuration, weight to be confirmed in case of order
- (9) Headers connection size is valid for a maximum flow rate of 191 m³/h in multi-module configuration. Dimensions will increase for greater flow rate.
- (10) Water flow is different from heating mode, assuming that an inverter pump will be used
- (11) Data referred to inlet/outlet water temperature = +30/+35°C, ambient temperature = -15°C, fluid = Water
- (12) Multiple modules length must be increase of 52mm each module, this length increasing correspond to minimum distance between two consecutive modules