



**TEAM**  
AIR POWER

## HBS SERIES



# DISCOVER HITEMA® CUSTOMIZED APPLICATIONS

choose your customized configuration



**ENR/ENRF SERIES**  
1,6kW ÷ 440kW

**CSE SERIES**  
30kW ÷ 377kW

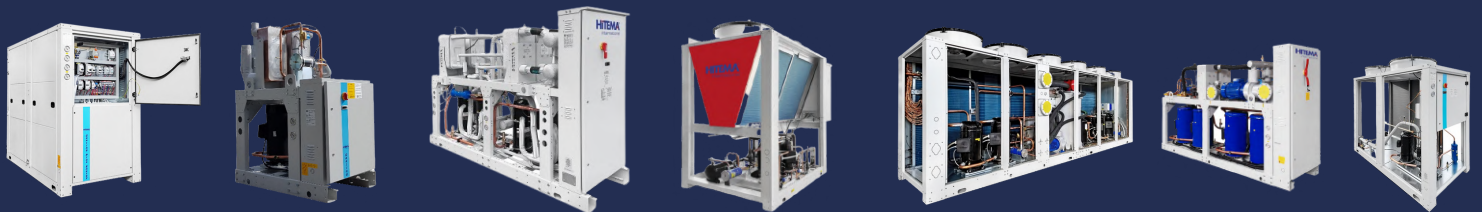
**CFT SERIES**  
7,9kW ÷ 410kW

**ENR-IR SERIES**  
8kW ÷ 200kW

**ENRC SERIES**  
7,4kW ÷ 375kW

**HNR SERIES**  
14kW ÷ 95kW  
15kW ÷ 104kW

## UNTIL 400KW



**ENW SERIES**  
3,8kW ÷ 424kW

**CFTW SERIES**  
50kW ÷ 371kW

**HFTW SERIES**  
100kW ÷ 400kW  
80kW ÷ 370kW

**SBS-HP SERIES**  
61,2kW - 81,4kW -  
105,8kW

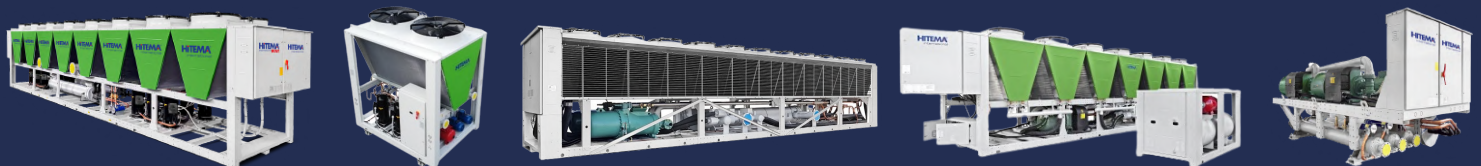
**HFT SERIES**  
16kW ÷ 345kW

**CFTC SERIES**  
50kW ÷ 370kW

**MTC SERIES**  
8kW ÷ 430kW

## CUSTOMIZED FOR YOU

with more than 100 OPTIONS available it is easy to customized your Chillers



**SBS/SBSF SERIES**  
**SBSF-OPT SERIES**  
94kW ÷ 1288kW

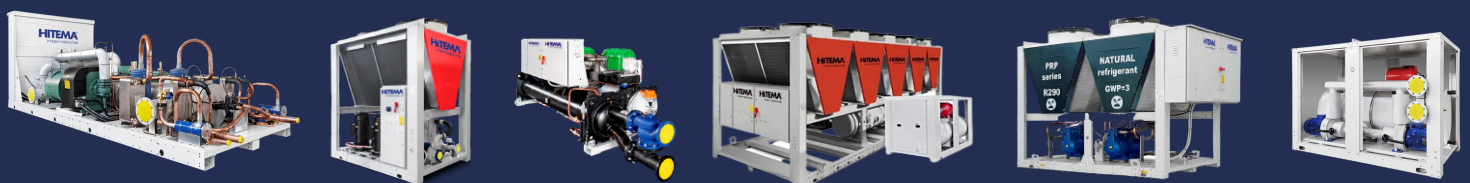
**SBS-MC SERIES**  
95kW ÷ 180kW

**NOVA/NOVAF SERIES**  
266kW ÷ 2136kW

**DTS/DTSF SERIES** **NEW!**  
**ISV-ISVF SERIES**  
266kW ÷ 2136kW

**EWB SERIES**  
291kW ÷ 2240kW

## UNTIL 3000KW



**CWB SERIES**  
291kW ÷ 2240kW

**HBS SERIES**  
211kW - 750kW

**TFW SERIES**  
250kW ÷ 3000kW

**TFV/TFVF SERIES**  
250kW ÷ 1215kW

**PRP/HPRP SERIES**  
130kW ÷ 520kW  
55kW ÷ 330kW

**HYD SERIES**  
400L ÷ 5000L

# HBS SERIES

*Reversible Heat-Pumps*

*EC axial fans*

*IP54 protection rating*

*Suitable for OUTDOOR installation*



SERIES: HBS	DATE: 29/09/2021
CODE: TTD-HBS-00	UPDATE: -
CHECKED BY:	M. Burba



Reversible heat-pumps **HBS series**, scroll compressors, R410A / R32 / R454B refrigerant, brazed-plate evaporator/condenser, condenser/evaporator coil with copper tubes and aluminium fins with hydrophilic coating, EC axial fans, electronic expansion valve.  
IP54 protection rating, heat-pump suitable for outdoor installation. Minimum working ambient temperature admitted = -10°C

Type of available condensers:

B-ES = stainless steel brazed plate condenser

 **HEATING**

**TECHNICAL DATA**

<b>PERFORMANCES</b>		<b>Model</b>	<b>190</b>	<b>240</b>	<b>290</b>	<b>330</b>	<b>380</b>	<b>430</b>	<b>470</b>	<b>530</b>
NOMINAL HEATING CAPACITY	W 40°C/45°C @ 7°C (1)	kW	199,7	242,0	319,8	355,6	389,2	465,9	487,7	565,9
TOTAL NOMINAL ABSORBED POWER		kW	56,2	70,4	90,8	101,8	112,8	134,3	145,3	164,6
COP		kW/kW	3,56	3,44	3,52	3,49	3,45	3,47	3,36	3,44
NOMINAL WATER FLOW		m <sup>3</sup> /h	34,3	41,6	54,9	61,1	66,8	80,0	83,8	97,2
MECHANICAL MODE PRESSURE DROPS (4)		kPa	60	73	60	58	57	62	59	56
<b>FRIGORIFIC SECTION</b>										
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP		nr.	4/2/4	4/2/4	4/2/4	4/2/4	4/2/4	6/2/4	6/2/4	9/3/4
<b>HYDRAULIC SECTION</b>										
WATER FLOW RANGE (6)		m <sup>3</sup> /h	15÷35	22÷47	40÷75	45÷80	45÷85	60÷90	65÷90	70÷130
MAXIMUM PUMP ABSORBED POWER (OPTION WP OR DP)	P3 (2)	kW	8,30	8,30	8,30	8,30	10,20	10,20	10,20	16,22
MAXIMUM PUMP ABSORBED CURRENT (OPTION WP OR DP)		A	14,10	14,10	14,10	14,10	17,40	17,40	17,40	26,60
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	16,22	16,22	16,22	16,22	24,85	24,85	24,85	24,85
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	26,60	26,60	26,60	26,60	42,40	42,40	42,40	42,40
HYDRAULIC CONNECTIONS (THREADED / FLANGED)		BSP / DN	DN65	DN65	DN100	DN100	DN100	DN125	DN125	DN125
TANK VOLUME		dm <sup>3</sup>	300	300	300	300	380	380	380	500
EXPANSION VESSEL NUMBER x VOLUME (OPTION XV)		liters	19	19	19	19	19	19	19	19
<b>FAN SECTION (AXIAL)</b>										
FANS		nr.	4	4	6	6	6	8	8	12
MAXIMUM FANS ABSORBED POWER	EC	kW	7,76	7,76	11,64	11,64	11,64	15,52	15,52	23,28
MAXIMUM FANS ABSORBED CURRENT		A	15,60	15,60	23,40	23,40	23,40	31,20	31,20	46,80
TOTAL AIR FLOW		m <sup>3</sup> /h	76300	76300	114450	114450	114450	152600	152600	228900
<b>TOTAL ELECTRIC DATA</b>										
ELECTRICAL FEED		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
MAXIMUM ABSORBED CURRENT (F.L.A) (6)		A	135,6	152,5	198,9	231,2	260,6	294,4	328,2	354,9
MAXIMUM PEAK CURRENT (L.R.A) (6)		A	279,6	359,1	442,5	481,9	511,3	538,1	578,9	561,4
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A) (6)		A	244,8	310,9	385,0	419,9	449,3	480,6	516,9	513,3
<b>NOISE DATA</b>										
SOUND PRESSURE FOR STANDARD CONFIGURATION (6) (7)		dB(A)	59,8	62,8	63,5	64,7	64,7	65,0	66,3	66,8
SOUND PRESSURE FOR LOW NOISE OPTION (LNJ) (6) (7)		dB(A)	58,7	60,1	61,3	62,0	62,0	62,7	63,5	64,5
<b>DIMENSIONS AND WEIGHT</b>										
LENGTH		mm	2910	2910	4210	4210	4210	5900	5900	8890
WIDTH		mm	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT		mm	2500	2500	2500	2500	2500	2500	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (6)		kg	2000	2350	2800	2850	3000	3900	4050	5900
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (6)		kg	2050	2420	2900	2950	3100	4000	4180	6220

The manufacturer reserves the right to modify specifications without notice.

Last update: 05/01/2021  
Revision: 00-2020

Data referred to:

- (1) Data referred to inlet/outlet water temperature = +40/+45 °C, ambient temperature = +7°C, fluid = Water
- (2) Available pressure can be calculated from Hitema Online Selection Software
- (3) SCOP data comply with the EN14825:2013, referring to medium temperature climate zone
- (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Water flow is different from heating mode, assuming that an inverter pump will be used
- (6) Data referred to standard chiller configuration NP (no pump) and EC 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

\* For the configuration DPH (double pump P5) the chiller width will be 1305mm

\*\* For the configurations DP or DPH (double pump P3 or double pump P5) the chiller width will be 1305mm

Reversible heat-pumps **HBS series**, scroll compressors, R410A / R32 / R454B refrigerant, brazed-plate evaporator/condenser, condenser/evaporator coil with copper tubes and aluminium fins with hydrophilic coating, EC axial fans, electronic expansion valve.  
IP54 protection rating, heat-pump suitable for outdoor installation. Minimum working ambient temperature admitted = -10°C

Type of available condensers:

B-ES = stainless steel brazed plate condenser

 **HEATING**

**TECHNICAL DATA**

<b>PERFORMANCES</b>		<b>Model</b>	<b>570</b>	<b>610</b>	<b>720</b>
NOMINAL HEATING CAPACITY	W 40°C/45°C @ 7°C (1)	kW	606,7	671,0	753,3
TOTAL NOMINAL ABSORBED POWER		kW	175,1	194,0	212,9
COP		kW/kW	3,47	3,46	3,54
NOMINAL WATER FLOW		m <sup>3</sup> /h	104,2	115,3	129,4
MECHANICAL MODE PRESSURE DROPS (4)		kPa	50	55	59
<b>FRIGORIFIC SECTION</b>					
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP		nr.	6/3/4	6/3/4	6/3/4
<b>HYDRAULIC SECTION</b>					
WATER FLOW RANGE (6)		m <sup>3</sup> /h	75÷130	85÷130	90÷140
MAXIMUM PUMP ABSORBED POWER (OPTION WP OR DP)	P3 (2)	kW	16,22	16,22	16,22
MAXIMUM PUMP ABSORBED CURRENT (OPTION WP OR DP)		A	26,60	26,60	26,60
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	31,88	31,88	39,09
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	53,50	53,50	65,60
HYDRAULIC CONNECTIONS (THREADED / FLANGED)		BSP / DN	DN150	DN150	DN150
TANK VOLUME		dm <sup>3</sup>	500	500	500
EXPANSION VESSEL NUMBER x VOLUME (OPTION XV)		liters	19	19	38
<b>FAN SECTION (AXIAL)</b>					
FANS		nr.	12	12	12
MAXIMUM FANS ABSORBED POWER	EC	kW	23,28	23,28	23,28
MAXIMUM FANS ABSORBED CURRENT		A	46,80	46,80	46,80
TOTAL AIR FLOW		m <sup>3</sup> /h	228900	228900	228900
<b>TOTAL ELECTRIC DATA</b>					
ELECTRICAL FEED		V/ph/Hz	400/3/50	400/3/50	400/3/50
MAXIMUM ABSORBED CURRENT (F.L.A) (6)		A	402,5	446,0	489,5
MAXIMUM PEAK CURRENT (L.R.A) (6)		A	653,3	780,3	823,8
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A) (6)		A	591,3	698,7	742,2
<b>NOISE DATA</b>					
SOUND PRESSURE FOR STANDARD CONFIGURATION (6) (7)		dB(A)	66,9	68,6	69,8
SOUND PRESSURE FOR LOW NOISE OPTION (LNJ) (6) (7)		dB(A)	64,6	65,5	66,3
<b>DIMENSIONS AND WEIGHT</b>					
LENGTH		mm	8890	8890	8890
WIDTH		mm	2210	2210	2210
HEIGHT		mm	2500	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (6)		kg	6000	6200	6300
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (6)		kg	6400	6670	6780

The manufacturer reserves the right to modify specifications without notice.

Last update: 27/07/2020  
Revision: 00-2020

Data referred to:

- (1) Data referred to inlet/outlet water temperature = +40/+45 °C, ambient temperature = +7°C, fluid = Water
- (2) Available pressure can be calculated from Hitema Online Selection Software
- (3) SCOP data comply with the EN14825:2013, referring to medium temperature climate zone
- (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Water flow is different from heating mode, assuming that an inverter pump will be used
- (6) Data referred to standard chiller configuration NP (no pump) and EC 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

\* For the configuration DPH (double pump P5) the chiller width will be 1305mm

\*\* For the configurations DP or DPH (double pump P3 or double pump P5) the chiller width will be 1305mm

Reversible heat-pumps **HBS series**, scroll compressors, R410A / R32 / R454B refrigerant, brazed-plate evaporator/condenser, condenser/evaporator coil with copper tubes and aluminium fins with hydrophilic coating, EC axial fans, electronic expansion valve.  
IP54 protection rating, heat-pump suitable for outdoor installation. Minimum working ambient temperature admitted = -10°C

Type of available evaporators:

B-ES = stainless steel brazed plate evaporator

 **COOLING**

**TECHNICAL DATA**

<b>PERFORMANCES</b>		<b>Model</b>	<b>190</b>	<b>240</b>	<b>290</b>	<b>330</b>	<b>380</b>	<b>430</b>	<b>470</b>	<b>530</b>
NOMINAL COOLING CAPACITY	W 12°C/7°C @ 35°C (1)	kW	183,1	230,0	298,1	332,1	366,2	436,8	473,1	545,4
TOTAL NOMINAL ABSORBED POWER		kW	54,2	71,0	88,2	102,5	116,8	134,0	147,5	155,1
EER		kW/kW	3,38	3,24	3,38	3,24	3,13	3,26	3,21	3,52
NOMINAL WATER FLOW (5)		m <sup>3</sup> /h	31,4	39,5	51,2	57,0	62,9	75,0	81,3	93,7
MECHANICAL MODE PRESSURE DROPS (4)		kPa	56	67	58	58	56	61	58	56
<b>FRIGORIFIC SECTION</b>										
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP	nr.		4/2/4	4/2/4	4/2/4	4/2/4	4/2/4	6/2/4	6/2/4	9/3/4
<b>HYDRAULIC SECTION</b>										
WATER FLOW RANGE (6)		m <sup>3</sup> /h	15÷35	22÷47	40÷75	45÷80	45÷85	60÷90	65÷90	70÷130
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (2)	kW	8,30	8,30	8,30	8,30	10,20	10,20	10,20	16,22
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)		A	14,10	14,10	14,10	14,10	17,40	17,40	17,40	26,60
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	16,22	16,22	16,22	16,22	24,85	24,85	24,85	24,85
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	26,60	26,60	26,60	26,60	42,40	42,40	42,40	42,40
HYDRAULIC CONNECTIONS (THREADED / FLANGED)	BSP / DN		DN65	DN65	DN100	DN100	DN100	DN125	DN125	DN125
TANK VOLUME		dm <sup>3</sup>	300	300	300	300	380	380	380	500
EXPANSION VESSEL NUMBER x VOLUME (OPTION XV)		liters	19	19	19	19	19	19	19	19
<b>FAN SECTION (AXIAL)</b>										
FANS		nr.	4	4	6	6	6	8	8	12
MAXIMUM FANS ABSORBED POWER	EC	kW	7,76	7,76	11,64	11,64	11,64	15,52	15,52	23,28
MAXIMUM FANS ABSORBED CURRENT		A	15,60	15,60	23,40	23,40	23,40	31,20	31,20	46,80
TOTAL AIR FLOW		m <sup>3</sup> /h	76300	76300	114450	114450	114450	152600	152600	228900
<b>TOTAL ELECTRIC DATA</b>										
ELECTRICAL FEED		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
MAXIMUM ABSORBED CURRENT (F.L.A) (6)		A	135,6	152,5	198,9	231,2	260,6	294,4	328,2	354,9
MAXIMUM PEAK CURRENT (L.R.A) (6)		A	279,6	359,1	442,5	481,9	511,3	538,1	578,9	561,4
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A) (6)		A	244,8	310,9	385,0	419,9	449,3	480,6	516,9	513,3
<b>NOISE DATA</b>										
SOUND PRESSURE FOR STANDARD CONFIGURATION (6) (7)		dB(A)	59,8	62,8	63,5	64,7	64,7	65,0	66,3	66,8
SOUND PRESSURE FOR LOW NOISE OPTION (LNJ) (6) (7)		dB(A)	58,7	60,1	61,3	62,0	62,0	62,7	63,5	64,5
<b>DIMENSIONS AND WEIGHT</b>										
LENGTH		mm	2910	2910	4210	4210	4210	5900	5900	8890
WIDTH		mm	2210	2210	2210	2210	2210	2210	2210	2210
HEIGHT		mm	2500	2500	2500	2500	2500	2500	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (6)		kg	2000	2350	2800	2850	3000	3900	4050	5900
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (6)		kg	2050	2420	2900	2950	3100	4000	4180	6220

The manufacturer reserves the right to modify specifications without notice.

Last update: 05/01/2021  
Revision: 00-2020

Data referred to:

- (1) Data referred to inlet/outlet water temperature = +12/+7 °C, ambient temperature = +35°C, fluid = Water
- (2) Available pressure can be calculated from Hitema Online Selection Software
- (3) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers
- (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Water flow is different from heating mode, assuming that an inverter pump will be used
- (6) Data referred to standard chiller configuration NP (no pump) and EC 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

\* For the configuration DPH (double pump P5) the chiller width will be 1305mm

\*\* For the configurations DP or DPH (double pump P3 or double pump P5) the chiller width will be 1305mm

Reversible heat-pumps **HBS series**, scroll compressors, R410A / R32 / R454B refrigerant, brazed-plate evaporator/condenser, condenser/evaporator coil with copper tubes and aluminium fins with hydrophilic coating, EC axial fans, electronic expansion valve.  
IP54 protection rating, heat-pump suitable for outdoor installation. Minimum working ambient temperature admitted = -10°C

Type of available evaporators:

B-ES = stainless steel brazed plate evaporator

 **COOLING**

**TECHNICAL DATA**

<b>PERFORMANCES</b>		<b>Model</b>	<b>570</b>	<b>610</b>	<b>720</b>
NOMINAL COOLING CAPACITY	W 12°C/7°C @ 35°C (1)	kW	583,7	651,0	714,2
TOTAL NOMINAL ABSORBED POWER		kW	168,5	192,8	218,9
EER		kW/kW	3,46	3,38	3,26
NOMINAL WATER FLOW (5)		m <sup>3</sup> /h	100,3	111,8	122,7
MECHANICAL MODE PRESSURE DROPS (4)		kPa	50	56	60
<b>FRIGORIFIC SECTION</b>					
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP		nr.	6/3/4	6/3/4	6/3/4
<b>HYDRAULIC SECTION</b>					
WATER FLOW RANGE (6)		m <sup>3</sup> /h	75÷130	85÷130	90÷140
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (2)	kW	16,22	16,22	16,22
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)		A	26,60	26,60	26,60
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	31,88	31,88	39,09
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	53,50	53,50	65,60
HYDRAULIC CONNECTIONS (THREADED / FLANGED)		BSP / DN	DN150	DN150	DN150
TANK VOLUME		dm <sup>3</sup>	500	500	500
EXPANSION VESSEL NUMBER x VOLUME (OPTION XV)		liters	19	19	38
<b>FAN SECTION (AXIAL)</b>					
FANS		nr.	12	12	12
MAXIMUM FANS ABSORBED POWER	EC	kW	23,28	23,28	23,28
MAXIMUM FANS ABSORBED CURRENT		A	46,80	46,80	46,80
TOTAL AIR FLOW		m <sup>3</sup> /h	228900	228900	228900
<b>TOTAL ELECTRIC DATA</b>					
ELECTRICAL FEED		V/ph/Hz	400/3/50	400/3/50	400/3/50
MAXIMUM ABSORBED CURRENT (F.L.A) (6)		A	402,5	446,0	489,5
MAXIMUM PEAK CURRENT (L.R.A) (6)		A	653,3	780,3	823,8
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A) (6)		A	591,3	698,7	742,2
<b>NOISE DATA</b>					
SOUND PRESSURE FOR STANDARD CONFIGURATION (6) (7)		dB(A)	66,9	68,6	69,8
SOUND PRESSURE FOR LOW NOISE OPTION (LNJ) (6) (7)		dB(A)	64,6	65,5	66,3
<b>DIMENSIONS AND WEIGHT</b>					
LENGTH		mm	8890	8890	8890
WIDTH		mm	2210	2210	2210
HEIGHT		mm	2500	2500	2500
WEIGHT EMPTY FOR STANDARD CONFIGURATION (6)		kg	6000	6200	6300
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (6)		kg	6400	6670	6780

The manufacturer reserves the right to modify specifications without notice.

Last update: 05/01/2021  
Revision: 00-2020

Data referred to:

- (1) Data referred to inlet/outlet water temperature = +12/+7 °C, ambient temperature = +35°C, fluid = Water
- (2) Available pressure can be calculated from Hitema Online Selection Software
- (3) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers
- (4) Pressure drops taken in account: evaporator, valves, piping
- (5) Water flow is different from heating mode, assuming that an inverter pump will be used
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\*\* For the configurations DP or DPH (double pump P3 or double pump P5) the chiller width will be 1305mm

NORTHERN IRELAND  
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