

Watercooled liquid chillers ENW series, rotary / scroll compressors, R410A / R32 / R454B refrigerant, coaxial / shell and tube evaporator (brazed plate evaporator as option), brazed plate / shell and tube condenser/s, closed cabinet. IP54 protection rating, chillers suitable for outdoor installation. 60Hz version as option. Condenser/s 2 ways valve/s, inbuilt water storage tank and single pump P3 as standard.

Types of available condensing temperature control system:

No one condensing temperature control system

PCC2 = 2 ways valve/s on water side, regulated by condensing pressure (standard)

PCC3 = 3 ways valve/s on water side, regulated by condensing pressure

Type of available expansion elements:

CP = Capillary tube

VTS = Thermostatic expansion valve

ETS = Electronic expansion valve (available as option)

TECHNICAL DATA

PERFORMANCES

	Model	003	004	005	006	008	010	012	016																
NOMINAL COOLING CAPACITY	kW	4,2	5,1	6,0	6,9	9,1	10,3	13,7	15,0																
		NOMINAL HEATING CAPACITY (4)	kW	5,1	6,2	7,4	8,6	11,6	12,9	17,0	18,4														
				TOTAL NOMINAL ABSORBED POWER	kW	1,5	1,7	2,0	2,3	3,4	3,6	4,3	4,4												
						EER	kW/kW	4,63	4,48	4,31	3,98	3,55	3,95	4,11	4,44										
								NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)	m3/h	0,7	0,9	1,0	1,2	1,6	1,8	2,3	2,6								
										NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m3/h	0,9	1,1	1,3	1,5	2,0	2,2	2,9	3,2						
												MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa	23,3	26,8	26,8	43,2	32,0	30,6	33,8	35,1				
														MECHANICAL MODE PRESSURE DROPS, CONDENSER SIDE (3)(5)	kPa	25,5	33,9	44,0	54,7	50,1	62,0	64,8	75,2		
																NOMINAL COOLING CAPACITY	kW	3,7	4,5	5,3	6,1	8,0	9,1	12,1	13,3
																		NOMINAL HEATING CAPACITY (4)	kW	4,8	5,9	7,0	8,2	11,1	12,3
TOTAL NOMINAL ABSORBED POWER	kW																			1,7	2,0	2,3	2,7	4,0	4,2
		EER	kW/kW																	3,35	3,24	3,12	2,88	2,57	2,85
				NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)	m3/h															0,6	0,8	0,9	1,0	1,4	1,6
						NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m3/h													0,8	1,0	1,2	1,4	1,9	2,1
								MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa											18,3	21,1	21,1	33,9	25,2	24,1
										MECHANICAL MODE PRESSURE DROPS, CONDENSER SIDE (3)(5)	kPa									22,7	30,3	39,5	49,6	46,0	56,2

FRIGORIFIC SECTION

COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP	nr.	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1
KIND OF COMPRESSOR	-	ROTARY	ROTARY	ROTARY	ROTARY	SCROLL	SCROLL	SCROLL	SCROLL
KIND OF EVAPORATOR	-	B-ES	B-ES	B-ES	B-ES	CX	CX	CX	CX
KIND OF CONDENSER	-	B-ES	B-ES	B-ES	B-ES	B-ES	B-ES	B-ES	B-ES
KIND OF EXPANSION ELEMENT	-	CP	CP	CP	CP	VTS	VTS	VTS	VTS

HYDRAULIC SECTION

EVAPORATORS / CONDENSERS	nr.	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
WATER FLOW RANGE, EVAPORATOR SIDE (TOTAL) (6)	m3/h	01±02	01±02	01±02	01±02	01±03	01±03	01±03	01±03	
WATER FLOW RANGE, CONDENSER SIDE (EACH)	m3/h	01±04	01±04	01±04	01±04	02±06	02±06	02±06	02±06	
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (3)	kW	0,56	0,56	0,56	0,56	0,88	0,98	0,98	0,98
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)		A	3,46	3,46	3,46	3,46	1,65	1,78	1,78	1,78
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (3)	kW	0,74	0,74	0,74	0,74	1,10	1,10	1,10	1,10
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	3,22	3,22	3,22	3,22	2,17	2,17	2,17	2,17
HYDRAULIC CONNECTIONS, EVAPORATOR SIDE (THREADED / FLANGED)	BSP / DN	1/2"	1/2"	1/2"	1/2"	1"	1"	1"	1"	
HYDRAULIC CONNECTIONS, CONDENSER SIDE (THREADED / FLANGED)	BSP / DN	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"	
TANK VOLUME (6) (8)	dm³	25	25	25	25	50	50	50	50	
EXPANSION VESSEL VOLUME (OPTION XV) (9)	liters	NA	NA	NA	NA	5	5	5	5	

TOTAL ELECTRIC DATA (6)

ELECTRICAL FEED	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	400/3/50/N	400/3/50/N	400/3/50/N	400/3/50/N
MAXIMUM ABSORBED CURRENT (F.L.A)	A	10,3	11,9	13,9	16,2	9,4	9,6	11,3	11,6
MAXIMUM PEAK CURRENT (L.R.A)	A	27,5	39,5	46,5	57,5	49,7	49,8	64,8	64,8
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A)	A	NA	NA	NA	NA	NA	NA	NA	NA

NOISE DATA (6) (7)

SOUND PRESSURE FOR STANDARD CONFIGURATION	dB(A)	48,2	50,1	52,1	54,1	42,0	42,0	42,0	43,0
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (OPTION LNJ)	dB(A)	NA	NA	NA	NA	NA	NA	NA	NA

DIMENSIONS AND WEIGHT

LENGTH	mm	600	600	600	600	820	820	820	820
WIDTH	mm	725	725	725	725	615	615	615	615
HEIGHT	mm	950	950	950	950	1240	1240	1240	1240
WEIGHT EMPTY FOR STANDARD CONFIGURATION (5) (6)	kg	85	90	90	95	150	150	165	165
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (5) (6)	kg	110	115	115	120	200	200	210	210

The manufacturer reserves the right to modify specifications without notice.

Last update: 02/03/2021
Revision: 00-2021

Data referred to:

- (1) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +30/35°C (fluid = Water)
- (2) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +40/45°C (fluid = Water)
- (3) Pressure drops taken in account: heat exchanger, valves, piping. Pump at the evaporator side, head pressure can be calculated from Hitema Online Selection Software
- (4) Water cooled chillers can be used as not reversible heat pumps, this kind of application must be indicated in the order
- (5) Data referred to standard chiller configuration (PCC2), with different condensing temperature control system this data will change
- (6) Data referred to standard chiller configuration, evaporator as indicated in frigorific section and single pump P3 (WP), with different evaporator this data can change
- (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) To avoid excessive start/stop of the compressors a minimum water volume for the entire plant must be guarantee, the tank supplied by Hitema can be not enough
- (9) The expansion vessel volume is calculated considering 40°C of deltaT between water temperature with chiller stopped and chiller active, 1/2bar of hydraulic circuit pre-charge and considering only the water volume of the unit

* 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

Watercooled liquid chillers ENW series, rotary / scroll compressors, R410A / R32 / R454B refrigerant, coaxial / shell and tube evaporator (brazed plate evaporator as option), brazed plate / shell and tube condenser/s, closed cabinet. IP54 protection rating, chillers suitable for outdoor installation. 60Hz version as option. Condenser/s 2 ways valve/s, inbuilt water storage tank and single pump P3 as standard.

Types of available condensing temperature control system:

No one condensing temperature control system

PCC2 = 2 ways valve/s on water side, regulated by condensing pressure (standard)

PCC3 = 3 ways valve/s on water side, regulated by condensing pressure

Type of available expansion elements:

CP = Capillary tube

VTS = Thermostatic expansion valve

ETS = Electronic expansion valve (available as option)

TECHNICAL DATA

PERFORMANCES

	Model	018	022	025	030	038	045	055	061	
NOMINAL COOLING CAPACITY	kW	20,5	23,9	27,0	31,0	40,1	46,8	60,2	62,5	
	NOMINAL HEATING CAPACITY (4)	kW	25,3	29,2	32,6	37,7	48,4	56,7	72,9	75,8
	TOTAL NOMINAL ABSORBED POWER	kW	5,7	6,5	6,9	8,0	10,5	12,1	14,9	15,8
	EER	kW/kW	4,31	4,54	4,80	4,60	4,80	4,75	4,75	4,70
	NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)	m ³ /h	3,5	4,1	4,6	5,3	6,9	8,0	10,3	10,7
	NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m ³ /h	4,3	5,0	5,6	6,5	8,3	9,7	12,5	13,0
MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa	36,1	39,6	50,5	41,5	41,7	40,5	60,3	45,3	
	kPa	56,5	74,4	48,2	64,0	58,8	68,7	75,9	52,1	
NOMINAL COOLING CAPACITY	kW	18,2	21,1	23,9	27,4	35,4	41,4	53,2	55,2	
	NOMINAL HEATING CAPACITY (4)	kW	24,0	27,6	30,8	35,6	45,6	53,4	68,7	71,5
TOTAL NOMINAL ABSORBED POWER	kW	6,8	7,7	8,2	9,5	12,4	14,3	17,7	18,8	
EER	kW/kW	3,11	3,28	3,47	3,33	3,47	3,43	3,43	3,40	
NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)	m ³ /h	3,1	3,6	4,1	4,7	6,1	7,1	9,2	9,5	
NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m ³ /h	4,1	4,7	5,3	6,1	7,8	9,2	11,8	12,3	
MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa	28,4	31,1	39,7	32,6	32,8	31,8	47,4	35,6	
MECHANICAL MODE PRESSURE DROPS, CONDENSER SIDE (3)(5)	kPa	50,7	66,4	42,8	57,1	52,2	61,1	67,5	46,4	

FRIGORIFIC SECTION

COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP	nr.	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1	1/1/1	2/1/2
KIND OF COMPRESSOR	-	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
KIND OF EVAPORATOR	-	CX	CX	CX	CX	CX	CX	CX	CX
KIND OF CONDENSER	-	B-ES	B-ES	B-ES	B-ES	B-ES	B-ES	B-ES	ST
KIND OF EXPANSION ELEMENT	-	VTS	VTS	VTS	VTS	VTS	VTS	VTS	VTS

HYDRAULIC SECTION

EVAPORATORS / CONDENSERS	nr.	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
WATER FLOW RANGE, EVAPORATOR SIDE (TOTAL) (6)	m ³ /h	03÷05	03÷06	03÷06	04÷06	05÷12	06÷12	06÷12	08÷18
WATER FLOW RANGE, CONDENSER SIDE (EACH)	m ³ /h	02÷06	02÷06	04÷14	04÷14	04÷14	04÷14	08÷22	08÷17
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (3) kW	0,98	1,28	1,28	1,28	2,20	2,20	2,20	2,53
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)	P3 (3) A	1,78	2,37	2,37	2,37	4,24	4,24	4,24	4,56
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (3) kW	1,47	1,47	1,47	1,47	2,94	2,94	2,94	6,12
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)	P5 (3) A	2,86	2,86	2,86	2,32	5,83	5,83	5,83	10,40
HYDRAULIC CONNECTIONS, EVAPORATOR SIDE (THREADED / FLANGED)	BSP / DN	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"
HYDRAULIC CONNECTIONS, CONDENSER SIDE (THREADED / FLANGED)	BSP / DN	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"
TANK VOLUME (6) (8)	dm ³	110	110	110	270	270	270	270	410
EXPANSION VESSEL VOLUME (OPTION XV) (9)	liters	8	8	8	8	8	8	8	12

TOTAL ELECTRIC DATA (6)

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)	A	15,9	18,3	19,0	21,6	28,7	34,2	40,7	43,0
MAXIMUM PEAK CURRENT (L.R.A)	A	74,8	98,4	113,4	120,4	144,2	178,2	229,2	141,8
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A)	A	NA	NA	NA	NA	NA	NA	NA	118,2

NOISE DATA (6) (7)

SOUND PRESSURE FOR STANDARD CONFIGURATION	dB(A)	43,0	51,0	51,5	51,5	52,1	52,5	55,5	52,5
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (OPTION LNJ)	dB(A)	NA	NA	NA	50,5	50,8	51,0	52,5	51,0

DIMENSIONS AND WEIGHT

LENGTH	mm	1010	1010	1010	1610	1610	1610	1610	2220
WIDTH	mm	720	720	720	860	860	860	860	1100
HEIGHT	mm	1420	1420	1420	1380	1380	1380	1380	1855
WEIGHT EMPTY FOR STANDARD CONFIGURATION (5) (6)	kg	260	275	290	340	360	365	450	700
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (5) (6)	kg	390	405	415	610	630	635	720	1120

The manufacturer reserves the right to modify specifications without notice.

Last update: 02/03/2021
Revision: 00-2021

Data referred to:

- (1) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +30/35°C (fluid = Water)
- (2) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +40/45°C (fluid = Water)
- (3) Pressure drops taken in account: heat exchanger, valves, piping. Pump at the evaporator side, head pressure can be calculated from Hitema Online Selection Software
- (4) Water cooled chillers can be used as not reversible heat pumps, this kind of application must be indicated in the order
- (5) Data referred to standard chiller configuration (PCC2), with different condensing temperature control system this data will change
- (6) Data referred to standard chiller configuration, evaporator as indicated in frigorific section and single pump P3 (WP), with different evaporator this data can change
- (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) To avoid excessive start/stop of the compressors a minimum water volume for the entire plant must be guarantee, the tank supplied by Hitema can be not enough
- (9) The expansion vessel volume is calculated considering 40°C of deltaT between water temperature with chiller stopped and chiller active, 1/2bar of hydraulic circuit pre-charge and considering only the water volume of the unit

* 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

Watercooled liquid chillers ENW series, rotary / scroll compressors, R410A / R32 / R454B refrigerant, coaxial / shell and tube evaporator (brazed plate evaporator as option), brazed plate / shell and tube condenser/s, closed cabinet. IP54 protection rating, chillers suitable for outdoor installation. 60Hz version as option. Condenser/s 2 ways valve/s, inbuilt water storage tank and single pump P3 as standard.

Types of available condensing temperature control system:

No one condensing temperature control system

PCC2 = 2 ways valve/s on water side, regulated by condensing pressure (standard)

PCC3 = 3 ways valve/s on water side, regulated by condensing pressure

Type of available expansion elements:

CP = Capillary tube

VTS = Thermostatic expansion valve

ETS = Electronic expansion valve (available as option)

TECHNICAL DATA

PERFORMANCES

	Model	070	075	090	100	130	160	185	200																
NOMINAL COOLING CAPACITY	kW	70,4	78,9	92,8	106,7	124,0	157,8	185,7	213,3																
		NOMINAL HEATING CAPACITY (4)	kW	85,7	95,9	112,7	129,3	150,9	191,8	225,4	258,6														
				TOTAL NOMINAL ABSORBED POWER	kW	17,8	19,5	22,4	25,2	31,5	38,6	44,3	53,5												
						EER	kW/kW	4,62	4,64	4,67	4,71	4,60	4,64	4,67	4,71										
								NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)	m3/h	12,1	13,5	15,9	18,3	21,3	27,1	31,8	36,6								
										NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m3/h	14,7	16,4	19,3	22,2	12,9	16,4	19,3	22,2						
												MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa	22,1	46,9	46,1	43,2	47,4	59,4	65,4	52,1				
														MECHANICAL MODE PRESSURE DROPS, CONDENSER SIDE (3)(5)	kPa	55,1	68,9	63,8	51,6	45,8	57,4	59,9	56,8		
																NOMINAL COOLING CAPACITY	kW	62,3	69,7	82,1	94,3	109,6	139,5	164,1	188,5
																		NOMINAL HEATING CAPACITY (4)	kW	80,9	90,5	106,4	121,9	142,5	181,1
TOTAL NOMINAL ABSORBED POWER	kW																			21,2	23,3	26,8	30,2	37,5	46,2
		EER	kW/kW																	3,34	3,35	3,38	3,41	3,33	3,35
				NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)	m3/h															10,7	12,0	14,1	16,2	18,8	24,0
						NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m3/h													13,9	15,5	18,2	20,9	12,2	15,5
								MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa											17,3	36,8	36,3	34,0	37,3	46,7
										MECHANICAL MODE PRESSURE DROPS, CONDENSER SIDE (3)(5)	kPa									49,1	61,4	56,8	45,9	40,8	51,1

FRIGORIFIC SECTION

COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP	nr.	2/1/2	2/1/2	2/1/2	2/1/2	4/2/4	4/2/4	4/2/4	4/2/4
KIND OF COMPRESSOR	-	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
KIND OF EVAPORATOR	-	CX	CX	CX	CX	ST	ST	ST	ST
KIND OF CONDENSER	-	ST	ST	ST	ST	ST	ST	ST	ST
KIND OF EXPANSION ELEMENT	-	VTS	VTS	VTS	VTS	VTS	VTS	VTS	VTS

HYDRAULIC SECTION

EVAPORATORS / CONDENSERS	nr.	1/1	1/1	1/1	1/1	1/2	1/2	1/2	1/2
WATER FLOW RANGE, EVAPORATOR SIDE (TOTAL) (6)	m3/h	10÷20	10÷20	10÷20	10÷20	14÷27	15÷31	18÷35	25÷46
WATER FLOW RANGE, CONDENSER SIDE (EACH)	m3/h	08÷17	08÷17	10÷22	10÷22	08÷17	08÷20	10÷22	14÷24
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (3)	kW	2,53	2,53	2,53	2,53	4,56	4,56	8,30
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)		A	4,56	4,56	4,56	4,56	7,75	7,75	14,10
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (3)	kW	6,12	6,12	6,12	6,12	10,20	10,20	16,22
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	10,40	10,40	10,40	10,40	17,40	17,40	26,60
HYDRAULIC CONNECTIONS, EVAPORATOR SIDE (THREADED / FLANGED)	BSP / DN	2"	2"	2"	2"	65	65	65	80
HYDRAULIC CONNECTIONS, CONDENSER SIDE (THREADED / FLANGED)	BSP / DN	2"	2"	2"	2"	2 x 2"	2 x 2"	2 x 2"	2 x DN65
TANK VOLUME (6) (8)	dm³	410	410	410	410	390	390	390	390
EXPANSION VESSEL VOLUME (OPTION XV) (9)	liters	12	12	12	12	19	19	19	19

TOTAL ELECTRIC DATA (6)

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)	A	48,3	53,6	64,6	71,0	84,6	105,8	127,8	147,0
MAXIMUM PEAK CURRENT (L.R.A)	A	163,8	169,1	208,6	259,6	183,4	221,3	271,8	335,5
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A)	A	135,8	141,1	173,8	214,6	159,8	193,3	237,0	290,5

NOISE DATA (6) (7)

SOUND PRESSURE FOR STANDARD CONFIGURATION	dB(A)	53,1	53,5	54,1	56,3	54,1	55,5	56,2	59,0
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (OPTION LNJ)	dB(A)	51,2	51,5	51,8	53,1	51,8	52,5	53,0	55,3

DIMENSIONS AND WEIGHT

LENGTH	mm	2220	2220	2220	2220	3355	3355	3355	4355
WIDTH	mm	1100	1100	1100	1100	1105*	1105*	1105*	1105**
HEIGHT	mm	1855	1855	1855	1855	1985	1985	1985	1985
WEIGHT EMPTY FOR STANDARD CONFIGURATION (5) (6)	kg	725	740	750	860	1180	1375	1420	1825
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (5) (6)	kg	1145	1160	1170	1270	1620	1830	1885	2310

The manufacturer reserves the right to modify specifications without notice.

Last update: 02/03/2021
Revision: 00-2021

Data referred to:

- (1) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +30/35°C (fluid = Water)
- (2) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +40/45°C (fluid = Water)
- (3) Pressure drops taken in account: heat exchanger, valves, piping. Pump at the evaporator side, head pressure can be calculated from Hitema Online Selection Software
- (4) Water cooled chillers can be used as not reversible heat pumps, this kind of application must be indicated in the order
- (5) Data referred to standard chiller configuration (PCC2), with different condensing temperature control system this data will change
- (6) Data referred to standard chiller configuration, evaporator as indicated in frigorific section and single pump P3 (WP), with different evaporator this data can change
- (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) To avoid excessive start/stop of the compressors a minimum water volume for the entire plant must be guarantee, the tank supplied by Hitema can be not enough
- (9) The expansion vessel volume is calculated considering 40°C of deltaT between water temperature with chiller stopped and chiller active, 1/2bar of hydraulic circuit pre-charge and considering only the water volume of the unit

* 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

Watercooled liquid chillers ENW series, rotary / scroll compressors, R410A / R32 / R454B refrigerant, coaxial / shell and tube evaporator (brazed plate evaporator as option), brazed plate / shell and tube condenser/s, closed cabinet. IP54 protection rating, chillers suitable for outdoor installation. 60Hz version as option. Condenser/s 2 ways valve/s, inbuilt water storage tank and single pump P3 as standard.

Types of available condensing temperature control system:

No one condensing temperature control system

PCC2 = 2 ways valve/s on water side, regulated by condensing pressure (standard)

PCC3 = 3 ways valve/s on water side, regulated by condensing pressure

Type of available expansion elements:

CP = Capillary tube

VTS = Thermostatic expansion valve

ETS = Electronic expansion valve (available as option)

TECHNICAL DATA

PERFORMANCES

	Model	230	280	340	370	430			
NOMINAL COOLING CAPACITY	kW	240,9	302,2	346,7	391,3	445,8			
	NOMINAL HEATING CAPACITY (4)	kW	291,7	365,5	420,0	474,4	539,9		
	TOTAL NOMINAL ABSORBED POWER	kW	59,0	71,6	81,5	93,3	104,3		
	EER	kW/kW	4,75	4,77	4,74	4,71	4,74		
	NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)	m ³ /h	41,3	51,8	59,5	67,1	76,4		
	NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m ³ /h	25,0	31,3	36,0	40,7	46,3		
MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa	62,9	66,4	56,3	62,8	81,5			
	MECHANICAL MODE PRESSURE DROPS, CONDENSER SIDE (3)(5)	kPa	52,1	55,2	61,7	52,9	57,9		
		NOMINAL COOLING CAPACITY	kW	213,0	267,1	306,5	345,8	394,0	
			NOMINAL HEATING CAPACITY (4)	kW	275,0	344,5	396,0	447,4	509,0
			TOTAL NOMINAL ABSORBED POWER	kW	70,3	85,7	97,8	111,8	125,2
			EER	kW/kW	3,43	3,45	3,42	3,40	3,43
NOMINAL WATER FLOW, EVAPORATOR SIDE (TOTAL)			m ³ /h	36,6	45,9	52,7	59,5	67,8	
NOMINAL WATER FLOW, CONDENSER SIDE (EACH)	m ³ /h		23,6	29,5	33,9	38,4	43,6		
MECHANICAL MODE PRESSURE DROPS, EVAPORATOR SIDE (3)(6)	kPa	49,4	52,2	44,2	49,3	64,1			
	MECHANICAL MODE PRESSURE DROPS, CONDENSER SIDE (3)(5)	kPa	46,3	49,1	54,8	47,1	51,5		

FRIGORIFIC SECTION

COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP	nr.	4/2/4	4/2/4	4/2/4	4/2/4	4/2/4
KIND OF COMPRESSOR	-	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
KIND OF EVAPORATOR	-	ST	ST	ST	ST	ST
KIND OF CONDENSER	-	ST	ST	ST	ST	ST
KIND OF EXPANSION ELEMENT	-	VTS	VTS	VTS	VTS	VTS

HYDRAULIC SECTION

EVAPORATORS / CONDENSERS	nr.	1/2	1/2	1/2	1/2	1/2
WATER FLOW RANGE, EVAPORATOR SIDE (TOTAL) (6)	m ³ /h	25÷46	31÷58	38÷70	45÷80	52÷100
WATER FLOW RANGE, CONDENSER SIDE (EACH)	m ³ /h	14÷28	20÷37	20÷40	20÷52	34÷60
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (3) kW	8,30	8,30	8,30	10,20	10,20
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)	A	14,10	14,10	14,10	17,40	17,40
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (3) kW	16,22	16,22	16,22	16,22	19,94
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)	A	26,60	26,60	26,60	26,60	32,70
HYDRAULIC CONNECTIONS, EVAPORATOR SIDE (THREADED / FLANGED)	BSP / DN	80	100	100	100	125
HYDRAULIC CONNECTIONS, CONDENSER SIDE (THREADED / FLANGED)	BSP / DN	2 x DN65	2 x DN80	2 x DN80	2 x DN80	2 x DN100
TANK VOLUME (6) (8)	dm ³	500	500	500	500	500
EXPANSION VESSEL VOLUME (OPTION XV) (9)	liters	19	19	19	19	19

TOTAL ELECTRIC DATA (6)

ELECTRICAL FEED	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
MAXIMUM ABSORBED CURRENT (F.L.A)	A	159,9	192,5	221,9	254,6	283,6
MAXIMUM PEAK CURRENT (L.R.A)	A	348,4	419,9	472,6	505,3	617,8
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A)	A	303,4	365,5	410,6	443,3	536,2

NOISE DATA (6) (7)

SOUND PRESSURE FOR STANDARD CONFIGURATION	dB(A)	60,5	63,3	63,3	63,4	65,7
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (OPTION LNJ)	dB(A)	56,5	58,8	58,8	59,2	61,2

DIMENSIONS AND WEIGHT

LENGTH	mm	5350	5350	5350	6350	6350
WIDTH	mm	1305	1305	1305	1305	1305
HEIGHT	mm	1985	1985	1985	1985	1985
WEIGHT EMPTY FOR STANDARD CONFIGURATION (5) (6)	kg	2190	2400	2530	2865	2945
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (5) (6)	kg	2775	3000	3150	3510	3605

The manufacturer reserves the right to modify specifications without notice.

Last update: 02/03/2021
Revision: 00-2021

Data referred to:

- (1) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +30/35°C (fluid = Water)
- (2) Data referred to inlet/outlet water temperatures: evaporator side = +12/+7 °C (fluid = Water), condenser side = +40/45°C (fluid = Water)
- (3) Pressure drops taken in account: heat exchanger, valves, piping. Pump at the evaporator side, head pressure can be calculated from Hitema Online Selection Software
- (4) Water cooled chillers can be used as not reversible heat pumps, this kind of application must be indicated in the order
- (5) Data referred to standard chiller configuration (PCC2), with different condensing temperature control system this data will change
- (6) Data referred to standard chiller configuration, evaporator as indicated in frigorific section and single pump P3 (WP), with different evaporator this data can change
- (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) To avoid excessive start/stop of the compressors a minimum water volume for the entire plant must be guarantee, the tank supplied by Hitema can be not enough
- (9) The expansion vessel volume is calculated considering 40°C of deltaT between water temperature with chiller stopped and chiller active, 1/2bar of hydraulic circuit pre-charge and considering only the water volume of the unit

* 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