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Water cooled chillers ENW series and condenserless ENRC version, scroll compressors R410A, coaxial evaporator, plate condenser

Process cooling Application		**Model**	**003**	**004**	**005**	**008**	**010**	**012**	**016**	**018**	**022**	**030**	**038**	**045**	**055**
NOMINAL COOLING CAPACITY (1)		kW	3,8	4,5	5,7	8,6	9,8	13,0	14,3	19,7	22,0	29,9	37,6	44,2	57,4
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	1,0	1,1	1,4	2,6	2,7	3,4	3,5	4,8	5,4	6,5	8,5	10,0	12,9
EER (1)			3,98	4,02	4,04	3,32	3,66	3,80	4,14	4,08	4,10	4,60	4,45	4,42	4,45
HYDRAULIC SECTION															
NOMINAL WATER FLOW (1)l		m3/h	0,7	0,8	1,0	1,5	1,7	2,2	2,5	3,4	3,8	5,1	6,5	7,6	9,9
EVAPORATOR PRESSURE DROP (1)		kPa	27	28	28	29	22	31	23	34	29	31	35	37	56
AVAILABLE PRESSURE P3		kPa	165	161	159	161	244	234	243	223	219	189	209	200	160
AVAILABLE PRESSURE P5		kPa	418	427	419	396	593	557	542	451	540	393	581	541	457
CONDENSING SECTION															
NUMBER AND TYPE OF CONDENSERS			nr.1 stainless steel brazed plate condenser												
CONDENSER NOMINAL WATER FLOW RATE (1)		m3/h	0,81	0,96	1,23	1,93	2,15	2,82	3,05	4,22	4,71	6,3	7,9	9,3	12,1
CONDENSER PRESSURE DROP EACH CONDENSER (1) (4) (5)		kPa	45	48	53	80	100	100	119	106	123	75	80	74	79
HYDRAULIC CONNECTIONS		BSP	3/4"	3/4"	3/4"	1"	1"	1"	1"	1" 1/4	1" 1/4	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Condenserless - ENRC version (6)															
NOMINAL COOLING CAPACITY (2)		kW	3,3	3,9	5,0	7,4	8,4	11,1	12,1	16,6	19,3	26,2	33,2	39,1	50,6
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (2)		kW	1,1	1,4	1,7	3,2	3,3	4,3	4,3	6,1	6,7	8,2	10,5	12,2	15,8
EER (2)			2,90	2,89	2,97	2,27	2,51	2,61	2,81	2,72	2,88	3,18	3,18	3,20	3,20
NOMINAL WATER FLOW (2)			0,6	0,7	0,9	1,3	1,4	1,9	2,1	2,9	3,3	4,50	5,71	6,73	8,69
EVAPORATOR PRESSURE DROP (1)		kPa	21	21	21	21	16	22	17	24	22	24	27	29	43
AVAILABLE PRESSURE P3		kPa	176	172	170	174	255	247	255	238	230	202	222	213	178
AVAILABLE PRESSURE P5		kPa	430	439	430	409	604	570	554	466	552	406	594	554	475
General Informations															
Refrigenant circuits / Compressors /Partition steps			1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1
NUMBER AND TYPE OF EVAPORATOR			no.1 coaxial evaporator												
WATER FLOW RANGE		m3/h	0,6 ÷ 2,2	0,6 ÷ 2,2	0,8 ÷ 2,2	1,2 ÷ 2,4	1,4 ÷ 3	1,2 ÷ 2, 9	1,2 ÷ 2,9	2,5 ÷ 5	3 ÷ 6	4 ÷ 6	6 ÷ 12	6 ÷ 12	6 ÷ 12
MAXIMUM PUMP ABSORBED POWER	P3		0,37	0,37	0,37	0,88	0,98	0,98	0,98	0,98	1,28	1,28	2,20	2,20	2,20
MAXIMUM PUMP ABSORBED CURRENT	P3		3,20	3,20	3,20	1,65	1,78	1,78	1,78	1,78	2,37	2,37	4,24	4,24	4,24
MAXIMUM PUMP ABSORBED POWER	P5		0,74	0,74	0,74	1,10	1,10	1,10	1,10	1,47	1,47	1,47	2,94	2,94	2,94
MAXIMUM PUMP ABSORBED CURRENT	P5		3,22	3,22	3,22	2,17	2,17	2,17	2,17	2,86	2,86	2,32	5,83	5,83	5,83
HYDRULIC CONNECTIONS		BSP	3/4"	3/4"	3/4"	1"	1"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
TANK VOLUME		dm3	40	40	40	50	50	50	50	110	110	270	270	270	270
TOTAL ELECTRIC DATA			IP54 protection rating, chillers suitable for outdoor installation												
NOMINAL ABSORBED POWER (3)		kW	1,6	1,8	2,2	3,5	4,4	4,9	6,2	6,8	8,0	9,7	13,7	14,6	19,5
MAXIMUM ABSORBED CURRENT(F.L.A.) (3)		A	9,2	10,1	12,0	9,0	9,4	10,6	11,5	15,8	18,3	21,6	28,7	34,2	40,7
MAXIMUM PEAK CURRENT (L.R.A.) (3)		A	26,6	39,6	45,5	48,9	48,9	68,6	68,6	72,0	102,5	117,6	141,2	175,4	226,2
ELECTRIC FEED		V/Ph/Hz	230/1/50			400/3/50/N				400/3/50					
NOISE DATA															
SOUND PRESSURE FOR STANDARD CONFIGURATION(3) (7)		dB(A)	50,0	50,0	50,0	51,4	51,4	51,0	51,0	51,0	52,0	51,5	52,1	52,5	55,5
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (3) (7)		dB(A)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	50,5	50,8	51,0	52,5
DIMENSIONS AND WEIGHT															
LENGTH		mm	600	600	600	820	820	820	820	1010	1010	1610	1610	1610	1610
WIDTH		mm	655	655	655	615	615	615	615	720	720	860	860	860	860
HEIGHT		mm	1035	1035	1035	1240	1240	1240	1240	1420	1420	1380	1380	1380	1380
WEIGHT EMPTY	**ENW**	kg	85	90	102	175	180	185	190	230	260	390	400	430	450
WEIGHT EMPTY	**ENRC**	kg	80	85	97	170	175	177	182	220	247	374	384	397	417

The manufacturer reserves the right to modify specifications without notice

Updated on 21/12/2016

Data refered to:

(1) Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condenser Inlet/Outlet water temperature = +30/+35 °C; fouling factor = 0.000043 m²K/W.

(2) Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condensensing temperature = +50°C; fouling factor = 0.000043 m²K/W.

(3) Data referred to standard configuration WP (with pump P3)

(4) Pressure drops calculation includes condenser,pressostatic control valve and piping pressure drops

(5) Condenser included: 2 ways mechanical pressostatic condenser control valve for models 003÷016; 2 ways electronic pressostatic condenser control valve for models 018÷055

(6) Closed cabinet, chiller provided without refrigerant carge.

(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

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Water cooled chillers ENW series and condenserless ENRC version, scroll compressors R410A, coaxial/shell&tube evaporator, shell&tube condenser

Process cooling Application		**Model**	**061**	**070**	**075**	**090**	**100**	**130**	**160**	**185**	**200**	**230**	**280**	**340**	**370**	**430**	**480**
NOMINAL COOLING CAPACITY (1)		kW	59,8	67,5	75,2	88,3	101,6	119,6	150,4	176,7	203,2	229,6	288,1	330,2	372,3	424,3	476,3
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	13,0	15,0	16,9	20,0	22,9	26,0	33,9	39,9	45,8	51,7	65,3	74,7	84,0	95,4	106,8
EER			4,60	4,50	4,45	4,42	4,44	4,60	4,44	4,43	4,43	4,44	4,41	4,42	4,43	4,45	4,46
HYDRAULIC SECTION																	
NOMINAL WATER FLOW		m3/h	10,3	11,6	12,9	15,2	17,5	20,6	25,9	30,4	34,9	39,5	49,6	56,8	64,0	73,0	81,9
EVAPORATOR PRESSURE DROP		kPa	22	20	22	28	40	58	54	60	48	57	61	51	57	65	69
AVAILABLE PRESSURE P3		kPa	199	202	182	184	156	149	153	137	217	201	184	191	175	151	138
AVAILABLE PRESSURE P5		kPa	448	451	448	432	404	387	389	374	433	417	404	415	391	345	332
CONDENSING SECTION																	
NUMBER AND TYPE OF CONDENSERS			nr.1 shell and tube condenser					nr.2 shell and tube condensers (one per circuit)									
CONDENSER NOMINAL WATER FLOW RATE (1)		m3/h	12,52	14,19	15,84	18,63	21,41	25,04	31,70	37,26	42,82	48,4	60,8	69,6	78,5	89,4	100,3
CONDENSER PRESSURE DROP EACH CONDENSER (1) (4) (5)		kPa	90	93	96	101	110	90	96	101	108	87	91	95	104	110	116
HYDRAULIC CONNECTIONS		BSP/DN	2"	2"	2"	2"	2"	2 x 2"	2 x 2"	2 x 2"	2 x 2"	2xDN65	2xDN65	2xDN65	2xDN80	2xDN80	2xDN80
Condenserless - ENRC version (6)																	
NOMINAL COOLING CAPACITY (1)		kW	52,3	59,3	66,4	78,2	89,7	104,6	132,7	156,4	179,3	202,2	254,1	292,0	329,8	375,6	421,3
TOTAL COMPRESSORS NOMINAL ABSORBED POWER (1)		kW	16,5	18,7	20,9	24,4	28,0	32,9	41,8	48,8	56,0	63,2	79,9	91,4	102,9	116,1	129,3
EER			3,18	3,18	3,17	3,20	3,20	3,18	3,17	3,20	3,20	3,20	3,18	3,19	3,21	3,24	3,26
NOMINAL WATER FLOW		m3/h	9,0	10,2	11,4	13,5	15,4	18,0	22,8	26,9	30,8	34,8	43,7	50,2	56,7	64,6	72,5
EVAPORATOR PRESSURE DROP		kPa	17	16	17	22	31	45	42	47	37	45	47	40	45	51	54
AVAILABLE PRESSURE P3		kPa	209	211	191	195	169	167	170	155	232	218	202	207	192	170	158
AVAILABLE PRESSURE P5		kPa	448	449	448	438	422	423	421	412	26	452	443	444	426	388	378
General Informations																	
Refrigenant circuits/compressors/partition steps			2 / 1 / 2	2 / 1 / 2	2 / 1 / 2	2 / 1 / 2	2 / 1 / 2	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4	4 / 2 / 4
NUMBER AND TYPE OF EVAPORATOR			no.1 coaxial evaporator					no.1 shell and tube evaporator with double circuit									
WATER FLOW RANGE		m3/h	8 ÷ 18	10 ÷ 20	10 ÷ 20	10 ÷ 20	10 ÷ 20	14 ÷ 27	15,4 ÷ 31	17,5 ÷ 35	28 ÷ 40	25 ÷ 46	31 ÷ 58	38 ÷ 70	45 ÷ 80	52 ÷ 100	54 ÷ 100
MAXIMUM PUMP ABSORBED POWER	P3	kW	2,53	2,53	2,53	2,53	2,53	4,56	4,56	4,56	8,30	8,30	8,30	8,30	10,20	10,20	10,20
MAXIMUM PUMP ABSORBED CURRENT	P3	A	4,56	4,56	4,56	4,56	4,56	7,75	7,75	7,75	14,10	14,10	14,10	14,10	17,40	17,40	17,40
MAXIMUM PUMP ABSORBED POWER	P5	kW	6,12	6,12	6,12	6,12	6,12	10,20	10,20	10,20	16,22	16,22	16,22	16,22	16,22	19,94	19,94
MAXIMUM PUMP ABSORBED CURRENT	P5	A	10,40	10,40	10,40	10,40	10,40	17,40	17,40	17,40	26,60	26,60	26,60	26,60	26,60	32,70	32,70
HYDRULIC CONNECTIONS		BSP	2"	2"	2"	2"	2"	DN65	DN65	DN65	DN125	DN125	DN125	DN125	DN150	DN150	DN150
TANK VOLUME		dm3	410	410	410	410	410	390	390	390	390	390	390	390	500	500	500
TOTAL ELECTRIC DATA			IP54 protection rating, chillers suitable for outdoor installation														
NOMINAL ABSORBED POWER (3)		kW	18,9	21,9	24,9	27,7	31,6	40,1	50,2	57,0	63,5	75,1	93,5	106,1	118,2	135,2	153,8
MAXIMUM ABSORBED CURRENT(F.L.A.) (3)		A	43,0	48,3	53,6	64,6	71,0	84,6	105,8	127,8	147,0	159,9	192,5	221,9	254,6	283,6	312,6
MAXIMUM PEAK CURRENT (L.R.A.) (3)		A	141,8	163,8	169,1	208,6	259,6	183,4	221,3	271,8	335,5	348,4	419,9	472,6	505,3	617,8	646,8
ELECTRIC FEED		V/Ph/Hz	400/3/50														
NOISE DATA																	
SOUND PRESSURE FOR STANDARD CONFIGURATION(3) (7)		dB(A)	52,5	53,1	53,5	54,1	56,3	54,1	55,5	56,2	59,0	60,5	63,3	63,3	63,3	65,7	67,2
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (3) (7)		dB(A)	51,0	51,2	51,5	51,8	53,1	51,8	52,5	53,0	55,3	56,5	58,8	58,8	58,8	61,2	62,5
DIMENSIONS AND WEIGHT																	
LENGTH		mm	2220	2220	2220	2220	2220	3355	3355	3355	4355	4355	4355	4355	5350	5350	5350
WIDTH		mm	1100	1100	1100	1100	1100	1105	1105	1105	1305	1305	1305	1305	1305	1305	1305
HEIGHT		mm	1900	1900	1900	1900	1900	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985
WEIGHT EMPTY	**ENW**	kg	810	820	830	855	930	1550	1590	1650	1930	2210	2270	2730	3065	3215	3365
WEIGHT EMPTY	**ENRC**	kg	780	787	797	806	864	1473	1513	1535	1730	2040	2080	2480	2765	2835	2985

The manufacturer reserves the right to modify specifications without notice

Updated on 21/12/2016

Data refered to:

(1) Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condenser Inlet/Outlet water temperature = +30/+35 °C; fouling factor = 0.000043 m²K/W.

(2) Evaporator Inlet/Outlet water temperature = +12/+7 °C; Condensensing temperature = +50°C; fouling factor = 0.000043 m²K/W.

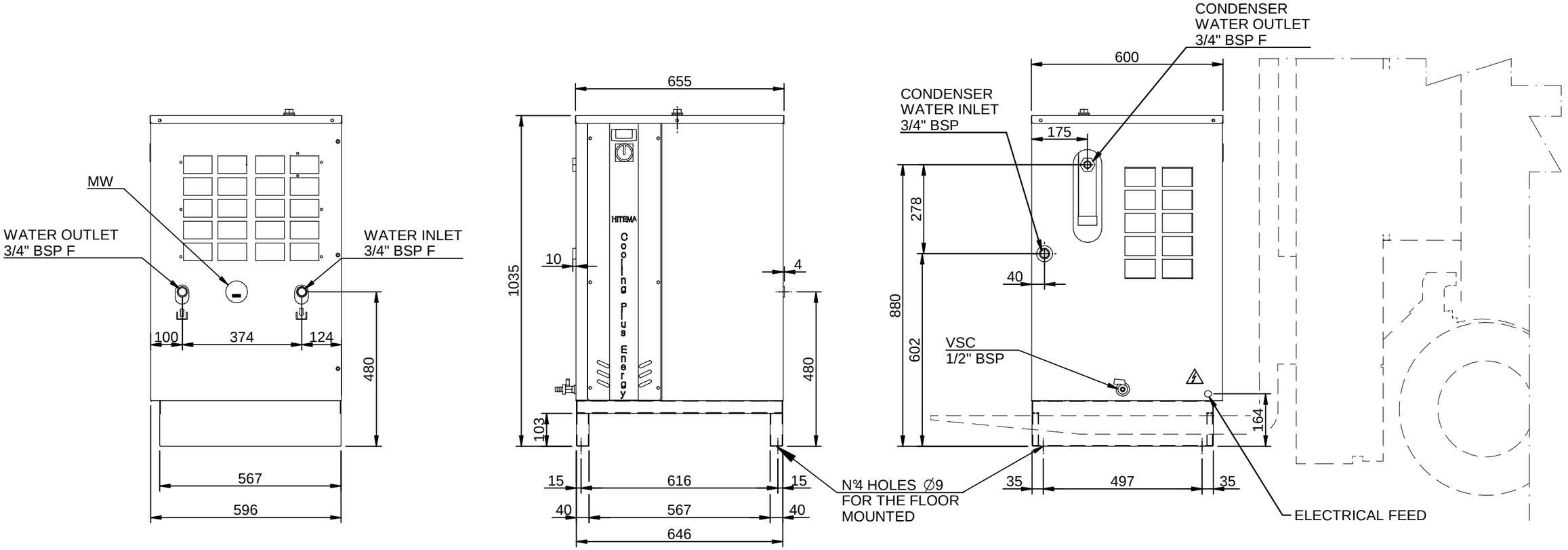
(3) Data referred to standard configuration WP (with pump P3)

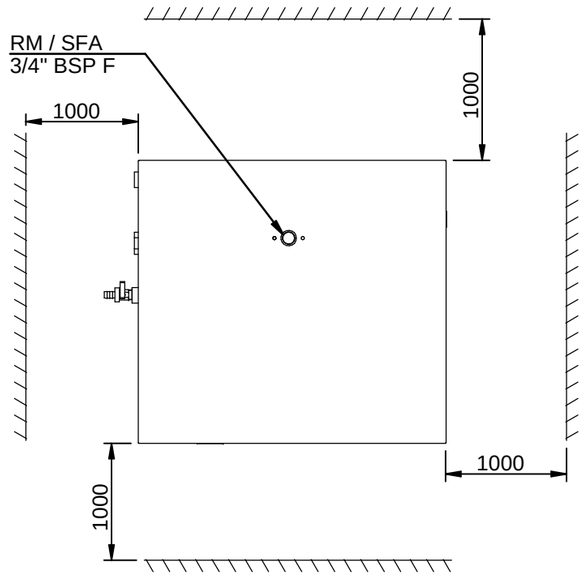
(4) Pressure drops calculation includes condenser,pressostatic control valve and piping pressure drops

(5) Condenser included 2 ways electronic pressostatic condenser control valve. The optional 3 ways electronic pressostatic condenser control valve is available from model ENW.130 on request.

(6) Closed cabinet, chiller provided without refrigerant carge.

(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





LEGEND

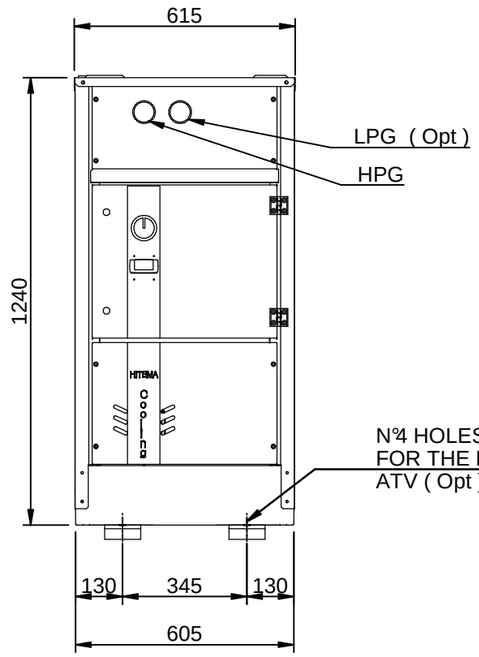
MW	Water pressure gauge
RM	Manual water filling cap
SFA	Manual air vent
VSC	Water drain valve

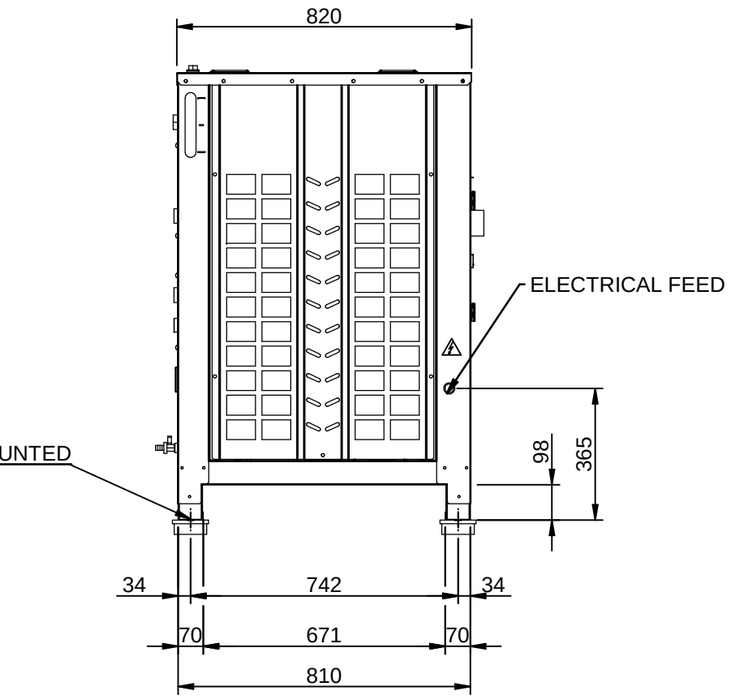
MOD.	EMPTY WEIGHT	OPERATING WEIGHT
ENW.003	85 kg	125 kg
ENW.004	90 kg	130 kg
ENW.005	102 kg	145 kg

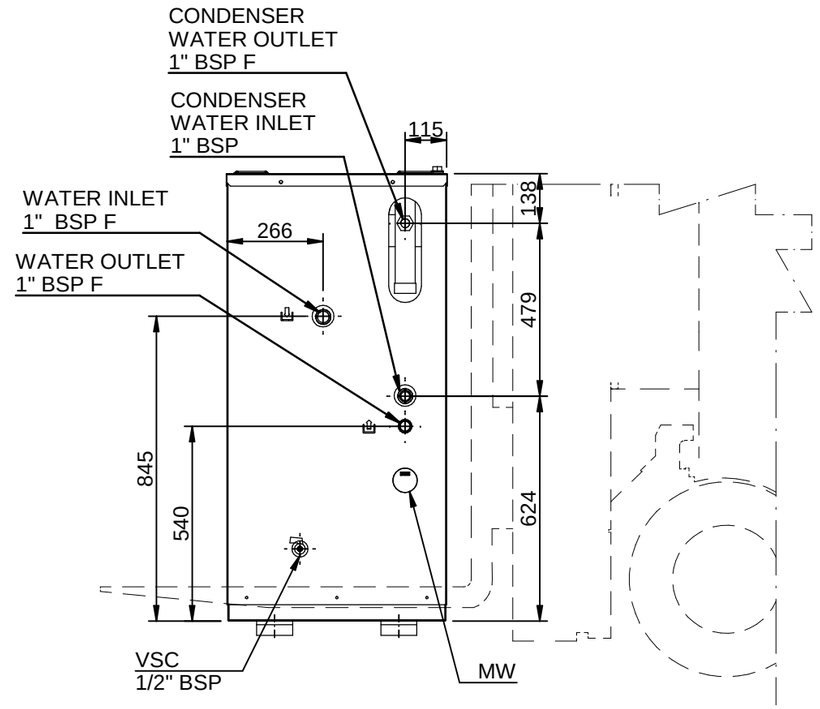
LIFTING AND CARRIAGE PRECAUTIONS

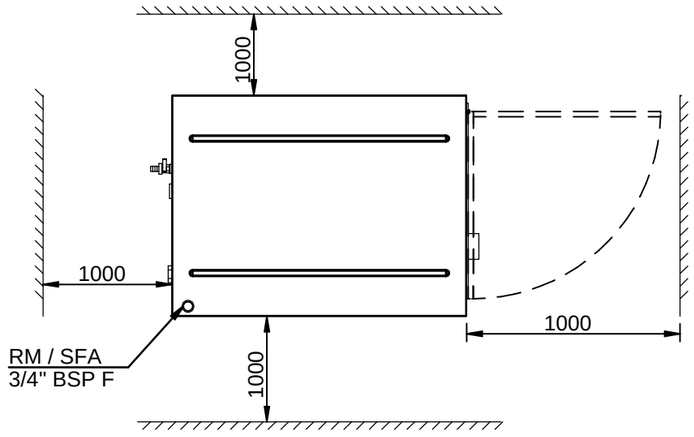
- Check the weight on the CE label to select appropriate lift equipment .
- Before lifting the unit make sure that the external panel is firmly fixed in place.
- The movement must be performed with caution and avoid abrupt movements.
- Never move the unit on rollers.

Scala-Scale	Data-Date 08/04/16	Dis.to-Drawn M. M.	Nº Pezzi
Peso-Weight Kg.	Materiali-Materials		
Denominazione-Denomination: WATER CHILLERS mod. ENW.003÷005		DIS.-DRAW N.	DIM-ENW-005ST01
Particolare-Detail: Overall dimension - Lift Instruction		Rev.	00
REFRIGERNAT R410a		PROGRAM.N.	









LEGEND

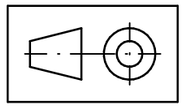
HPG	High pressure gauge
LPG	Low pressure gauge (Opt)
MW	Water pressure gauge
RM	Manual water filling cap
SFA	Manual air vent
VSC	Water drain valve
ATV	Rubber type antivibrant mounting (Opt)

LIFTING AND CARRIAGE PRECAUTIONS

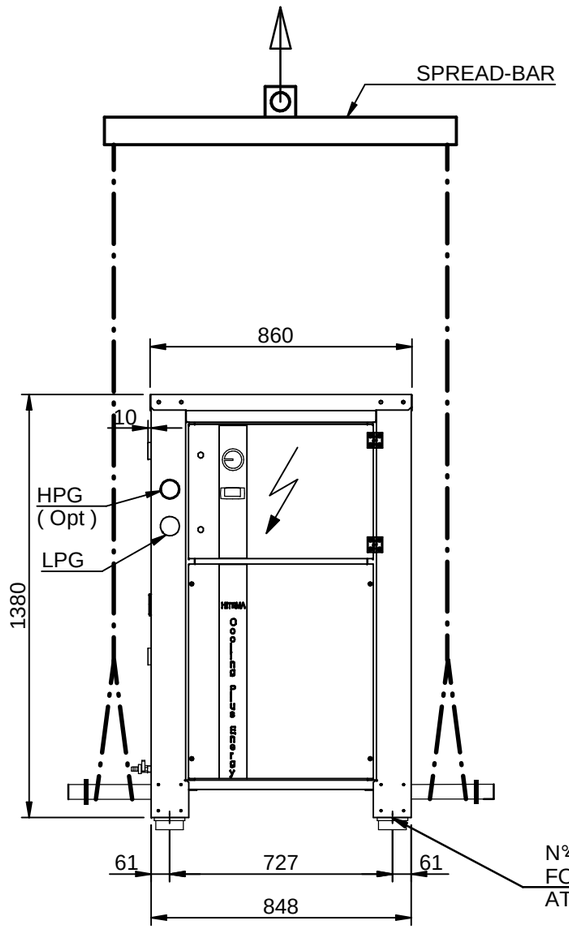
- Check the weight on the CE label to select appropriate lift equipment .
- Before lifting the unit make sure that the external panel is firmly fixed in place.
- The movement must be performed with caution and avoid abrupt movements.
- Never move the unit on rollers.

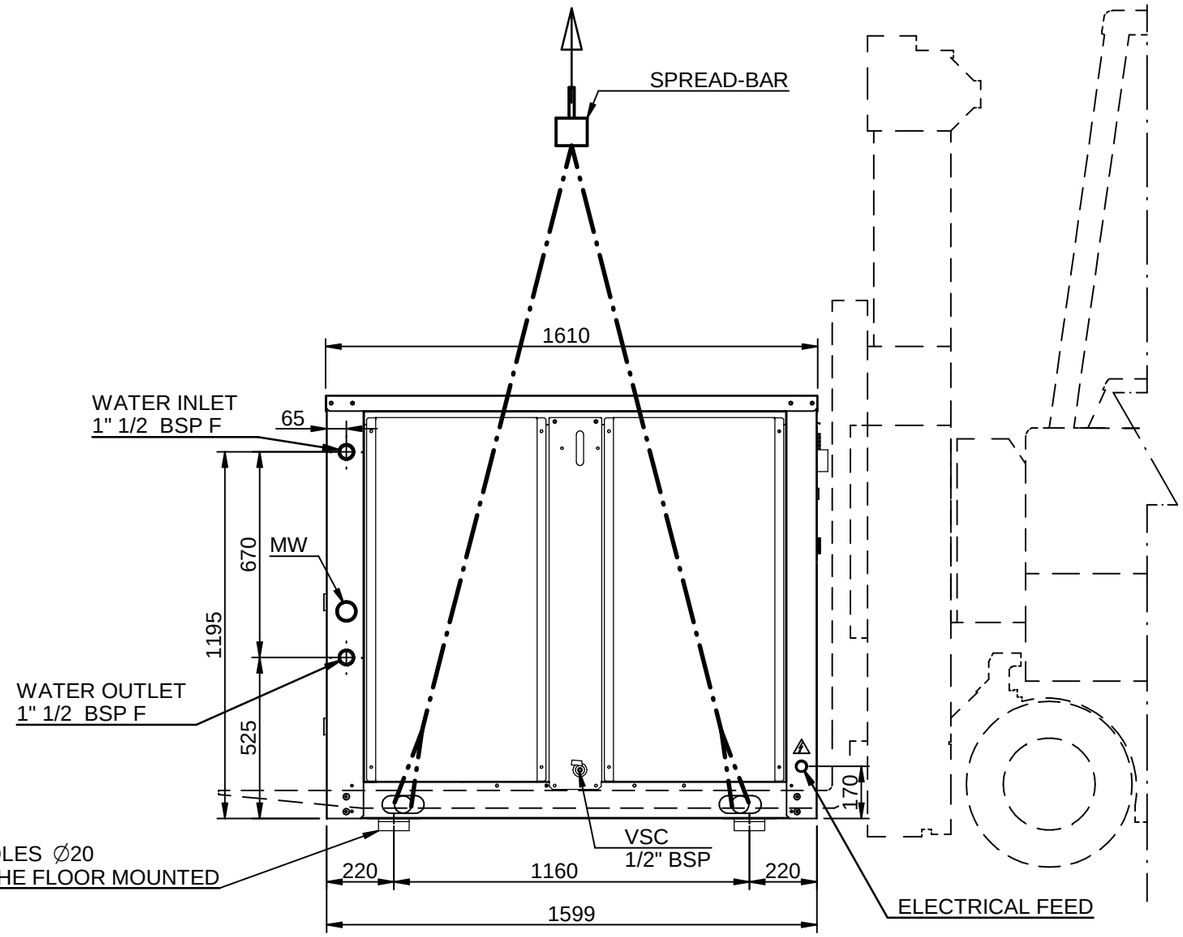
MOD.	EMPTY WEIGHT	OPERATING WEIGHT
ENW.008	150 kg	200 kg
ENW.010	150 kg	200 kg
ENW.012	160 kg	210 kg
ENW.016	160 kg	210 kg

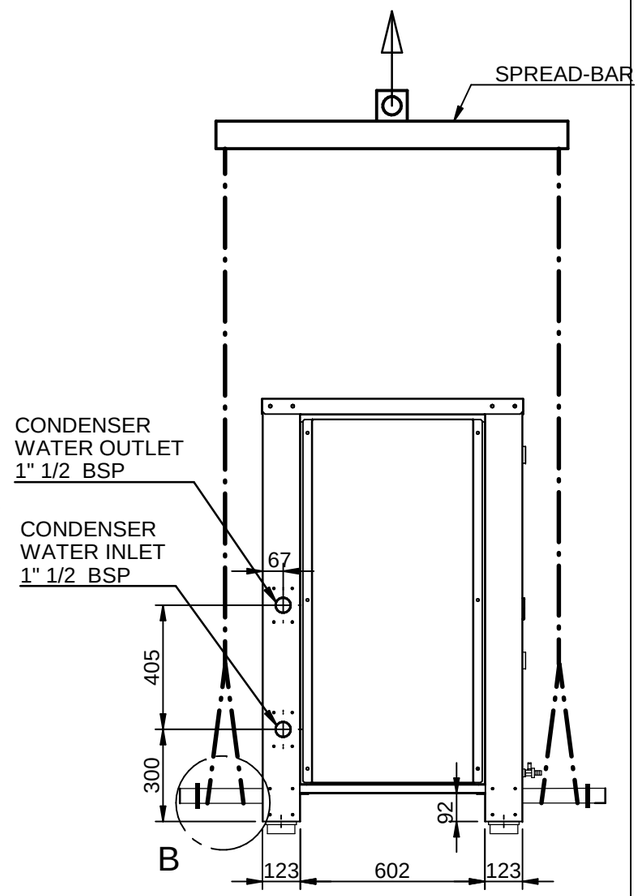
Rev.01 :Update weight

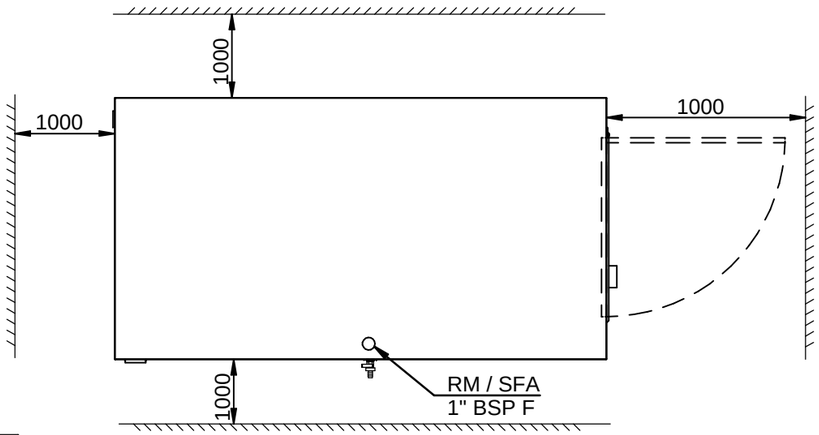


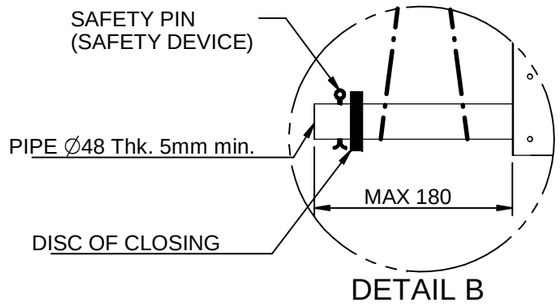
Scala-Scale	Data-Date 30/03/16	Dis.to-Drawn M. M.	N°Pezzi
Peso-Weight Kg.	Materiali-Materials		
Denominazione-Denomination WATER CHILLERS mod. ENW.008÷016		DIS.-DRAW N.	DIM-ENW-008ST01
Particolare-Detail Overall dimension		Revisione	01-M.M.-21/09/16
REFRIGERANT R410a		PROGRAM.N.	











DETAIL B

LEGEND

HPG	High pressure gauge (Opt)
LPG	Low pressure gauge
MW	Water pressure gauge
RM	Manual water filling cap
SFA	Manual air vent
VSC	Water drain valve
ATV	Rubber type antivibrant mounting (Opt)

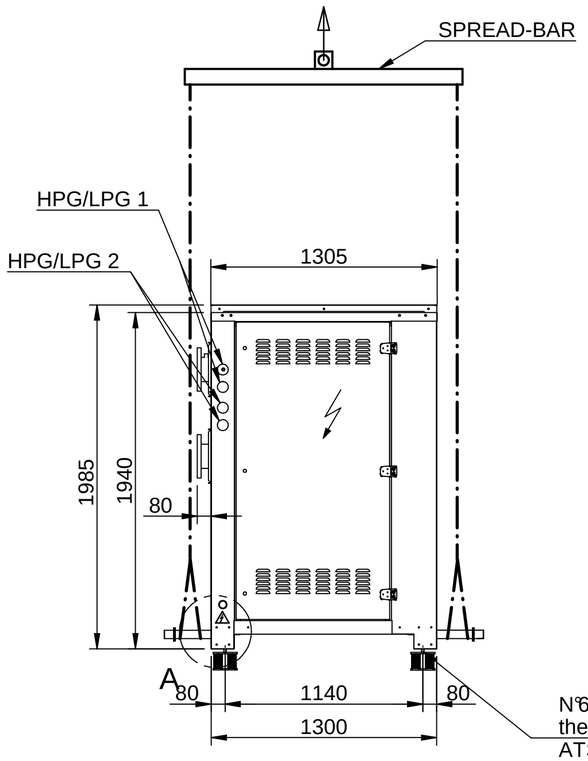
LIFTING AND CARRIAGE PRECAUTIONS

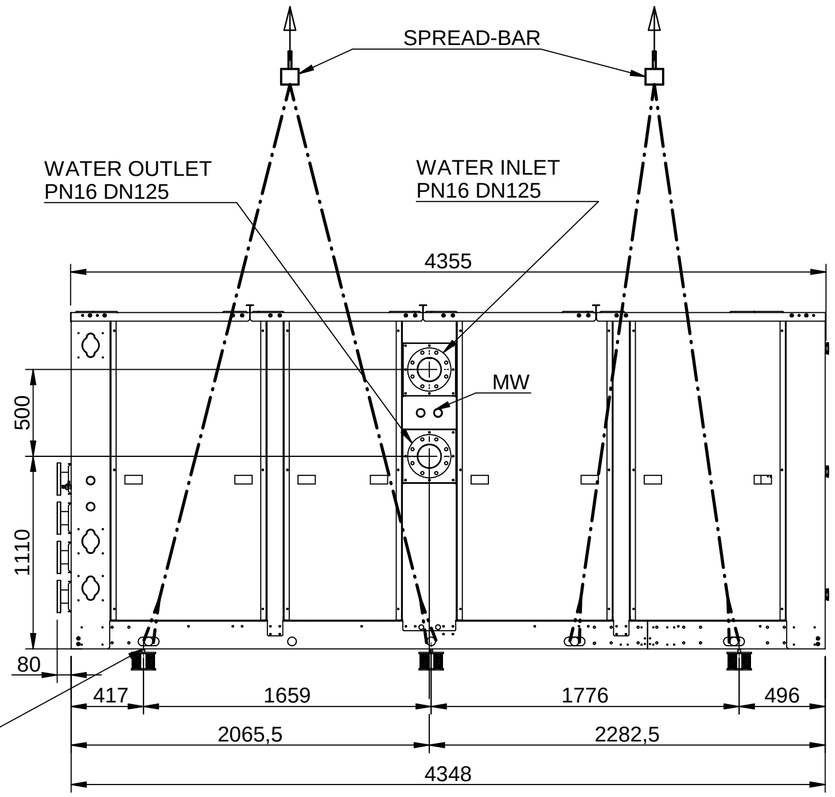
- Check the weight on the CE label to select appropriate lift equipment .
- Before lifting the unit make sure that the external panel is firmly fixed in place.
- To use only lifting points provided.
- The chains or slings must be of equal length.
- To use a spread-bar to avoid damage to the unit.
- The movement must be performed with caution and avoid abrupt movements.
- Never move the unit on rollers.

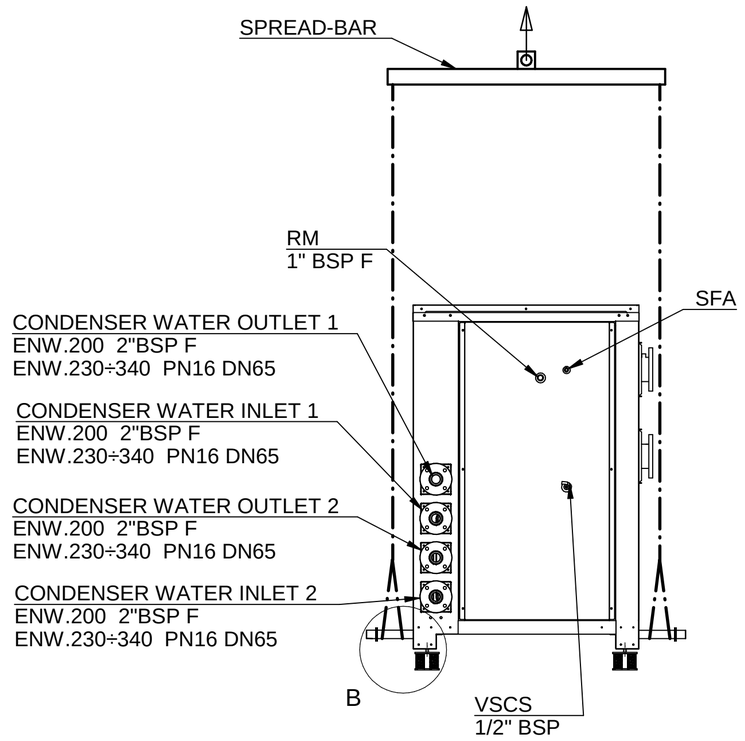
MOD.	EMPTY WEIGHT	OPERATING WEIGHT
ENW.030	340 kg	610 kg
ENW.038	360 kg	630 kg
ENW.045	465 kg	635 kg
ENW.055	450 kg	720 kg

Scala-Scale	Data-Date 10/11/17	Dis.to-Drawn M. M.	N°Pezzi
Peso-Weight Kg.	Materiali-Materials		
Denominazione-Denomination: WATER CHILLERS mod. ENW.030÷055		DIS.-DRAW N.	DIM-ENW-030ST01
Particolare-Detail: Overall dimension - Lift Instruction		Rev.	00
REFRIGERANT R410a		PROGRAM.N.	

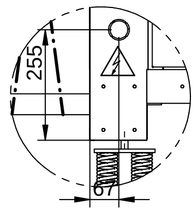
HITEMA®



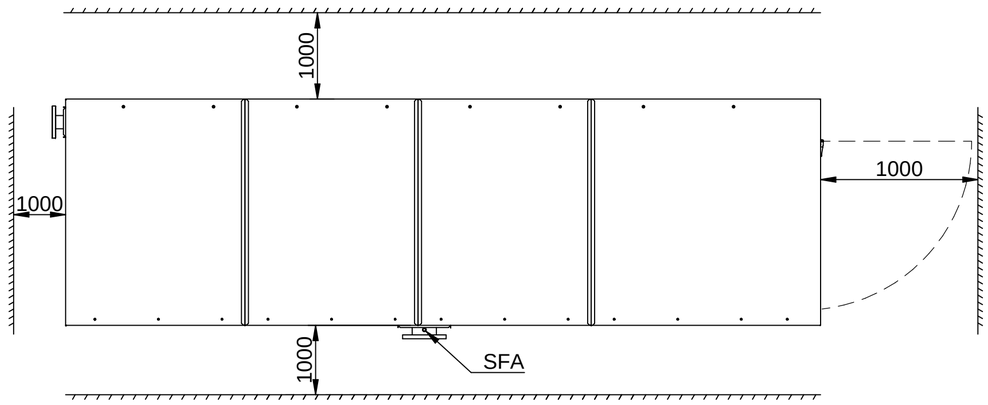




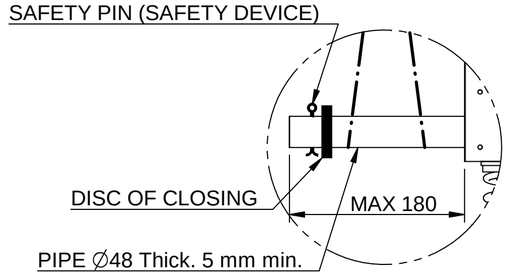
ELECTRICAL FEED



DETAIL A



SAFETY PIN (SAFETY DEVICE)



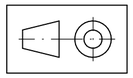
DETAIL B

LEGEND

HPG	High pressure gauge
LPG	Low pressure gauge
MW	Water pressure gauge
RM	Manual water filling cap
SFAS	Tank manual air vent
SFA	Manual air vent
VSCS	Tank water drain valve
ATS	Spring type antivibrant mounting (Opt)
ATV	Rubber type antivibrant mounting (Opt)

LIFTING AND CARRIAGE PRECAUTIONS

- Check the weight on the CE label to select appropriate lift equipment .
- Before lifting the unit make sure that the external panel is firmly fixed in place.
- To use only lifting points provided.
- The chains or slings must be of equal length.
- To use a spread-bar to avoid damage to the unit.
- The movement must be performed with caution and avoid abrupt movements.
- Never move the unit on rollers.
- Never lift the unit using a fork-lift.



WEIGHT
ENW.200 EMPTY 1930 kg
ENW.230 EMPTY 2210 kg
ENW.280 EMPTY 2270 kg
ENW.340 EMPTY 2730 kg

Scala-Scale	Data-Date 23/03/16	Dis.to-Drawn M.M.	N°Pezzi	HITEMA
Peso-Weight Kg.	Materiali-Materials			
Denominazione-Denomination WATER CHILLER mod. ENW.200÷340			DIS.-DRAW N.	DIM-ENW-200ST01
Particolare-Detail OVERALL DIMENSIONS - LIFT INSTRUCTION			Revisione	00
REFRIGERANT R410a			PROGRAM.N.	