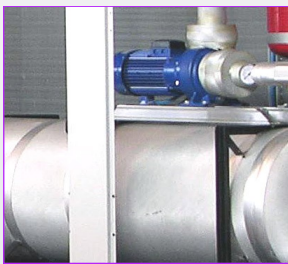


ICA^{EX}

Air Cooled Liquid Chiller Reversible Heat Pump



GAS
HFC R 410 A



15 ÷ 900 KW

Designed
by
IRICON[®]
Engineering Germany

Scroll - Compressors
Plate to Plate Exchanger
Electronic Thermostatic Expansion Valve
High Efficiency Technology

General Features

Frame

Self-supporting galvanized steel frame protected with polyester powdered painting. Panels are easy removable for maintenance and service activities.

Compressors

Hermetic "Scroll" type with overload protection by klixon and completed with oil sight glass. They are installed on vibration absorbing rubber and placed with a closed compartment to reduce sound level and to allow service and maintenance activities while unit is in operation condition.

Evaporator

Braze welded plate type with one or two independent refrigerant circuits and one water circuit. The circuit is made to guarantee a homogeneous cooling of all water flow even during partial load. The insulation is made of flexible closed cells lining. As protection a Flow Switch and/or a Differential Pressure Switch is recommended to be mounted to stop the unit in case of no water circulation.

Condenser

Copper tube and aluminium finned coil. As an option a protection grid is available.

Fans

Axial fans with aerodynamic outline blade section made of AL/Mg directly coupled to a three phase electric motor with external rotor. A safety fan guard is fitted on air flow discharge.

Refrigerant Circuit

Each unit is supplied with one or two independent refrigerant circuits; each one includes:

Filter dryer, sight glass, electronic thermostatic expansion valve, service valve.

To protect the refrigerant circuit the following devices are installed:

Manual reset high pressure switch and automatic reset low pressure switch, antifreeze thermostat.

The heat pump unit version (ICA^{EX}...H) contain, in addition:

Safety thermostat on compressor discharge line, 4-way-valve, non-return valve, electronic thermostatic valves, liquid receiver and if necessary check valve and a liquid separator on compressor suction line.

Electric Board

Weather proof type with protection grade IP 54 installed in the compressor box to enable service and maintenance activities while unit is in operation condition.

It includes:

- Main circuit automatic breaker with locking door device, main fuses, compressor contactor, fans fuses and fans contactors and relays, auxiliary circuit transformer.
- Microprocessor to control automatically the unit with a visual system to display the function as well as failures.

Versions

HRP

Partial condensing heat recovery. Each refrigerant circuit includes a de-super-heater insulated and installed in series between the compressors and the condenser.

HRL (15E1 ÷ 50E1 on request)

Condensing heat recovery from 70% to 90%; Each refrigerant circuit includes a heat exchanger insulated and mounted in series between compressor and condenser; Condensing control through pressure transducer.

HRS (15E1 ÷ 50E1 on request)

100% condensing heat recovery. Each refrigerant circuit includes:

A heat exchanger insulated and mounted in parallel to the condenser and the relevant solenoid valves.

P

Hydraulic kit version includes:

One or two pumps (the second as stand by pump), expansion vessel, gauges, flow switch, air purifier, shut-off valve and hydraulic circuit insulated. In case of stand – by pump non return valves are mounted, relevant electrical circuit.

As option, pumps with higher ESP are available.

PAC

Version with hydraulic kit and storage tank. It includes further everything which included in the P version, an insulated inertial storage tank is installed.

LN

Low noise version, it includes:

Equipped with low speed fans, 15E1 ÷ 50E1 with pressostatic fan speed control and compressor insulated with sound absorbing layer.

VLN (15E1 ÷ 50E1 on request)

Very low noise version, additional to the LN devices, this version is equipped with sound proofing on the compressors

Options

- Power factor capacitors (only for 42 ÷ 354)
- Fan speed control only for 42 ÷ 354)
- Cu/Cu or Epoxy protection coils
- Coils protection grid / filter (protection grid only in H-Units)
- Flow switch (standard mounted on P and PAC versions) only for 42 ÷ 354
- Differential pressure switch only for 15E1 ÷ 50E1
- Water pumps with higher ESP
- Pump shut-off valve
- Compressors shut-off valves
- Gauge and shut-off valves
- Programmer Clock card
- RS 485 card
- Remote control panel
- Evaporator electric heater (STD in H –Version)
- Electric heater for PAC version
- Rubber anti-vibrators
- Spring ant-vibration absorbers
- Wooden crate packing

Size ICA ^{EY} - (H)		15E1	18E1	20E1	22E1	25E1	30E1	35E1	40E1	45E1	50E1	
Cooling Mode	Standard	Ambient Air Temperature 32°C										
Cooling Capacity	*1	kW	15	17	19	22	24	30	34	39	44	52
Absorberd Power	*2	kW	3,62	4,49	5,26	5,35	6,39	6,82	8,02	8,54	10,53	14,67
EER	-		4,1	3,8	3,6	4,1	3,8	4,4	4,2	4,5	4,2	3,5
Heating Mode	ICA ^{EY} ...H	Water Temperature 40/45°C										
Heating Capacity	*1 *5	kW	16	18	21	23	26	32	35	40	47	56
Absorberd Power	*2	kW	4,95	5,7	6,4	6,9	7,7	9,5	10,5	11,5	13,4	17,1
COP	-		3,2	3,2	3,3	3,3	3,4	3,4	3,3	3,5	3,5	3,2
Compressors (Scroll Type)												
Quantity	No.		1	1	1	1	1	1	1	1	1	1
Refrigerant Circuits	No.		1	1	1	1	1	1	1	1	1	1
Capacity steps	No.		1	1	1	1	1	1	1	1	1	1
Refrigerant	Type	R 410 A										
Evaporator plate to plate type *3												
Water Flow	m ³ /h		2,4	2,7	3,1	3,4	3,8	4,9	5,4	6,2	7,1	8,3
Pressure drop	kPa		28	35	44	54	54	50	51	49	66	78
Water Volume	l		0,5	0,6	0,7	0,8	0,9	1,1	1,1	1,3	1,3	1,6
Water Connections	Ø		1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"
Condenser (STD / LN version) *4												
Axial Fans	No.		1	1	1	1	1	2	2	2	2	2
Max. absorbed power	kW		0,5	0,5	0,5	0,5	0,5	1	1	1	1	1
Max. absorbed current	A		2,5	2,5	2,5	2,5	2,5	5	5	5	5	5
Condenser (VLN version)*4 on request												
Electrical Data *6												
Max. absorbed current	A		19	23	23	24	29	33	36	42	45	50
LRC	A		72	84	110	104	120	130	130	150	185	240
Electrical Supply	V/t/Hz	400 / 3 / 50										
PAC Version (plate to plate)												
Storage tank Water Volume	l		100	100	100	100	100	100	100	100	100	100
Water Pump nominal Power	kW		0,37	0,37	0,37	0,37	0,37	0,55	0,55	0,55	0,55	0,55
Water Pump nominal Current	A		1,5	1,5	1,5	1,5	1,5	1,7	1,7	1,7	1,7	1,7
ESP (Plate to Plate)	kPa		130	130	130	110	110	130	110	110	80	60
HRP Partial Heat Recovery *7												
Heating Capacity	kW		4	4	4	5	5	7	7	9	10	12
Water Flow	m ³ /h		0,7	0,7	0,7	0,9	0,9	1,2	1,2	1,5	1,7	2,1
Pressure drop	kPa		18	18	18	20	20	22	22	24	25	27
Sound pressure level - 1 m *6 *8												
STD Version	dB(A)		60	60	60	60	60	61	61	61	61	61
LN Version	dB(A)		57	57	57	57	57	58	58	58	58	58
VLN Version	dB(A)	on request										

Please attend following technical informations:

*1 Cooling Mode: water temp. 12/7°C; air temp. 32°C

Heating mode: water temperature 40/45°C; air temperature 7°C d.b., 6°Cw.b.

*2 Compressors and fans only. No water pump (s)

*3 In ICA^{EY}...H (heat pump) version it becomes condenser

*4 In ICA^{EY}...H (heat pump) version it becomes evaporator

*5 Max. air flow, LN and Heat Pump - Version

*6 Without water pump (s) Std. -Version

*7 Water temp. from 40°C to 50°C.

*8 Compressors site and according to ISO 3744

Size ICA ^{EY} - (H)		42	52	62	72	82	92	102	122	132
Cooling Mode	Standard Ambient Air Temperature 32°C									
Cooling Capacity	*1 kW	53	59	69	75	92	108	114	128	137
Absorberd Power	*2 kW	13,3	16,5	17,9	20,6	24,3	27,1	31,2	35,3	40,7
EER	*2	-	3,8	3,5	3,8	3,6	3,8	3,9	3,6	3,3
Cooling Mode	Low Noise and Very Low Noise									
Cooling Capacity	*1 kW	48	52	61	67	82	93	101	111	118
Absorberd Power	*2 kW	17	21	22	26	29	33	38	39	48
Heating Mode ICA ^{EY} ...H	Water Temperature 40/45°C									
Heating Capacity	*1 kW	48	56	65	71	86	99	109	122	133
Absorberd Power	*2 kW	16	19	21	23	27	32	36	39	42
COP	*2	3	2,9	3,1	3,1	3,2	3,1	3	3,1	3,2
Compressors (Scroll Type)										
Quantity	No.					2				
Refrigerant Circuits	No.					1				
Capacity steps	No.					2				
Refrigerant	Type					R 410 A				
Refrigerant charge	kg	15	16	17	19	21	25	25	30	31
Evaporator plate to plate type *3										
Water Flow	m ³ /h	8	8,9	10,4	11,3	14,1	16,3	17,3	19,4	20,8
Pressure drop	kPa	31	37	32	35	28	27	32	38	44
Water Volume	l	2	2	2,4	2,4	4,8	4,8	6,8	6,8	6,8
Condenser (STD version) *4 *5										
Axial Fans	No.	2	2	2	2	2	2	2	3	3
Max. absorbed power	kW	2,2	2,2	2,2	2,2	2,2	4	4	3,3	3,3
Max. absorbed current	A	4,6	4,6	4,6	4,6	4,6	8	8	6,9	6,9
Condenser (VL/VLN version) *4										
Axial Fans	No.	2	2	2	2	2	2	2	3	3
Max. absorbed Power	kW	1,5	1,5	1,5	1,5	1,5	2,6	2,6	2,3	2,3
Max. absorbed Current	A	2,8	2,8	2,8	2,8	2,8	5	5	4,2	4,2
Electrical Data *6										
Max. absorbed current	A	43	49	54	59	69	79	81	91,6	99,7
LRC	A	136	146	149	173	213	267	270	319	327
Electrical Supply	V/Hz					400 / 3 + N / 50				
PAC Version (plate to plate)										
Storage tank Water Volume	l	200	200	200	200	300	300	300	500	500
Water Pump nominal Power	kW	0,75	0,75	0,75	0,75	1,1	1,1	1,1	1,5	1,5
Water Pump nominal Current	A	2,2	2,2	2,2	2,2	3,5	3,5	3,5	5	5
ESP (Plate to Plate)	kPa	120	120	120	110	140	115	110	130	120
HRP Partial Heat Recovery *7										
Heating Capacity	kW	11	12	14	16	19	22	24	28	33
Water Flow	m ³ /h	0,9	1	1,2	1,4	1,6	1,8	2	2,4	2,8
Pressure drop	kPa	10	10	15	15	16	16	15	18	18
Sound pressure level - 1 m *6 *8										
STD Version	dB(A)	72	72	72	72	73	77	77	74	74
LN Version	dB(A)	66	66	66	66	67	71	71	68	68
VLN Version	dB(A)	64	64	64	64	65	69	66	66	66

Please attend following technical informations:

*1 Cooling Mode: water temp. 12/7°C; air temp. 32°C

Heating mode: water temperature 40/45°C; air temperature 7°C d.b., 6°Cw.b.

*2 Compressors and fans only. No water pump (s)

*3 In ICA^{EY} ...H (heat pump) version it becomes condenser

*4 In ICA^{EY} ...H (heat pump) version it becomes evaporator

*5 Max. air flow

*6 Without water pump (s) Std. -Version

*7 Water temp. from 40°C to 50°C.

*8 Compressors site and according to ISO 3744

Size ICA ^{EY} - (H)		152	172	194	214	234	254	284	324	354
Cooling Mode Standard Ambient Air Temperature 32°C										
Cooling Capacity *1	kW	147	172	207	216	240	257	293	327	346
Absorberd Power *2	kW	46,8	51,4	54,3	63,0	72,9	68,3	74,0	88,3	102,9
EER *2	-	3,1	3,3	3,8	3,4	3,3	3,6	3,9	3,7	3,3
Cooling Mode Low Noise and Very Low Noise										
Cooling Capacity *1	kW	140	165	185	205	230	245	275	305	330
Absorberd Power *2	kW	48	51	53	62	72	68	73	89	103
Heating Mode ICA ^{EY} ...H Water Temperature 40/45°C										
Heating Capacity *1	kW	153	174	197	218	245	250	280	316	348
Absorberd Power *2	kW	49	57	64	72	77	84	93	103	114
COP *2		3,1	3,0	3,0	3,0	3,2	3,0	3,0	3,0	3,0
Compressors (Scroll Type)										
Quantity	No.	2	4	4	4	4	4	4	4	4
Refrigerant Circuits	No.	1	2	2	2	2	2	2	2	2
Capacity steps	No.	2	4	4	4	4	4	4	4	4
Refrigerant	Type					R 410 A				
Refrigerant charge	kg	35	36	23+23	25+25	29+29	31+31	34+34	36+36	38+38
Evaporator plate to plate type *3										
Water Flow	m ³ /h	22,3	26,3	30,2	34,4	38,1	40,9	46,6	52,1	55
Pressure drop	kPa	43	40	41	50	42	48	59	52	56
Water Volume	l	8,2	8,4	9,8	10	13	13	13	18	21
Condenser (STD version) *4 *5										
Axial Fans	No.	3	3	4	4	6	6	6	6	6
Max. absorbed power	kW	3,3	6	8	8	6,6	12	12	12	12
Max. absorbed current	A	6,9	12	16	16	14	24	24	24	24
Condenser (VL/VLN version) *4										
Axial Fans	No.	3	3	4	4	6	6	6	6	6
Max. absorbed Power	kW	2,3	4,8	5,2	5,2	4,5	7,8	7,8	7,8	7,8
Max. absorbed Current	A	4,2	7,5	10	10	8,4	15	15	15	15
Electrical Data *6										
Max. absorbed current	A	114	134	154	166	180	191	207	236	265
LRC	A	365	385	343	355	408	418	435	487	516
Electrical Supply	V/Hz					400 / 3 + N / 50				
PAC Version (plate to plate)										
Storage tank Water Volume	l	500	500	500	500	500	500	750	750	750
Water Pump nominal Power	kW	1,85	1,85	2,2	2,2	3	3	3	4	4
Water Pump nominal Current	A	5	5	5,1	5	6,5	6,5	6,5	7,7	7,7
ESP (Plate to Plate)	kPa	140	120	140	110	130	120	110	140	130
HRP Partial Heat Recovery *7										
Heating Capacity	kW	38	42	46	52	62	65	75	83	88
Water Flow	m ³ /h	3,2	3,6	3,9	4,4	5,3	5,5	6,4	7,1	7,5
Pressure drop	kPa	20	20	20	20	22	22	24	26	26
Sound pressure level - 1 m *6 *8										
STD Version	dB(A)	74	79	82	82	80	84	84	84	84
LN Version	dB(A)	68	73	76	76	74	78	78	78	78
VLN Version	dB(A)	66	71	73	73	72	76	76	76	76

Please attend following technical informations:

*1 Cooling Mode: water temp. 12/7°C; air temp. 32°C

Heating mode: water temperature 40/45°C; air temperature 7°C d.b., 6°Cw.b.

*2 Compressors and fans only. No water pump (s)

*3 In ICA^{EY} ...H (heat pump) version it becomes condenser

*4 In ICA^{EY} ...H (heat pump) version it becomes evaporator

*5 Max. air flow

*6 Without water pump (s) Std. -Version

*7 Water temp. from 40°C to 50°C.

*8 Compressors site and according to ISO 3744

Size ICA ^{EY} - (H)		424	474	564	616	656	696	728	848	938	
Cooling Mode	Standard	Ambient Air Temperature 32°C									
Cooling Capacity	*1	kW	420	470	540	605	643	675	726	840	939
Absorberd Power	*2	kW	109,0	126,0	154,0	161,0	179,0	197,0	202,0	218,0	253,0
EER	*2	-	3,8	3,7	3,5	3,7	3,5	3,4	3,6	3,8	3,7
Cooling Mode	Low Noise and Very Low Noise										
Cooling Capacity	*1	kW	410	459	530	580	620	650	660	805	918
Absorberd Power	*2	kW	108	126	160	165	185	215	206	218	255
Heating Mode ICA ^{EY} ...H	Water Temperature	40/45°C evaporator temperature 7/6°C									
Heating Capacity	*1	kW	420	467	546	596	647	697	745	840	934
Absorberd Power	*2	kW	121,8	135,2	162,6	176	189,4	207,8	224	244	275
COP	*2		3,4	3,4	3,3	3,4	3,3	3,3	3,3	3,4	3,4
Compressors (Scroll Type)											
Quantity	No.		4			6			8		
Refrigerant Circuits	No.		2			2			4		
Capacity steps	No.		4			6			8		
Refrigerant	Type	R 410 A									
Refrigerant charge	kg		109	113	117	125	133	138	158	208	228
Evaporator plate to plate type *3	Water connection 3" Ø										
Water Flow	m ³ /h		66,5	74,3	85,5	95,8	102	107	110	133	150
Pressure drop	kPa		51	49	52	60	60	66	66	67	67
Water Volume	l		76	88	104	112	124	124	142	152	175
Condenser (STD version) *4 *5											
Axial Fans	No.		8	8	8	10	10	10	12	16	16
Max. absorbed power	kW		15,3	15,3	15,3	19	19	19	24	32	32
Max. absorbed current	A		32	32	32	40	40	40	48	64	64
Condenser (VL/VLN version) *4											
Axial Fans	No.		8	8	8	10	10	10	12	16	16
Max. absorbed Power	kW		10,5	10,5	10,5	13	13	13	16	22	22
Max. absorbed Current	A		20	20	20	25	25	25	30	40	40
Electrical Data *6											
Max. absorbed current	A		337	370	435	475	510	545	560	670	740
LRC	A		661	696	678	800	835	870	1032	1350	1402
Electrical Supply	V/Hz										
PAC Version (plate to plate)											
Storage tank Water Volume	l		750	750	750	1000	1000	1000	1000	1000	1000
Water Pump nominal Power	kW		4	5,5	5,5	7,5	7,5	7,5	7,5	9,5	9,5
Water Pump nominal Current	A		8,5	11	11	15	15	15	15	18	18
ESP (Plate to Plate)	kPa		90	100	90	115	110	110	130	160	160
Water connections	Ø		4"	4"	4"	DN 125	DN 125	DN 125	DN 125	DN125	DN 125
HRP Partial Heat Recovery *7											
Heating Capacity	kW		97	108	125	140	150	156	176	195	216
Water Flow	m ³ /h		8,4	9,3	10,8	12	13	14	15	17	19
Pressure drop	kPa		33	35	36	40	42	42	42	66	70
Sound pressure level - 1 m *6 *8											
STD Version	dB(A)		82	82	82	85	85	85	86	86	86
LN Version	dB(A)		79	79	79	82	82	82	83	83	83
VLN Version	dB(A)		76	76	76	79	79	79	80	80	80

Please attend following technical informations:

*1 Cooling Mode: water temp. 12/7°C; air temp. 32°C

Heating mode: water temperature 40/45°C; air temperature 7°C d.b., 6°Cw.b.

*2 Compressors and fans only. No water pump (s)

*3 In ICA^{EY} ...H (heat pump) version it becomes condenser

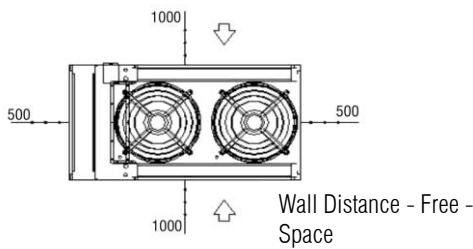
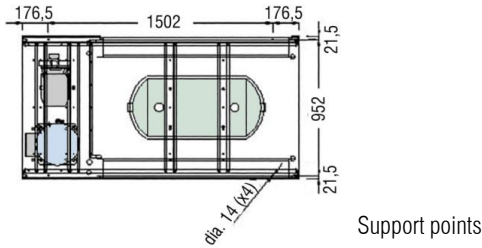
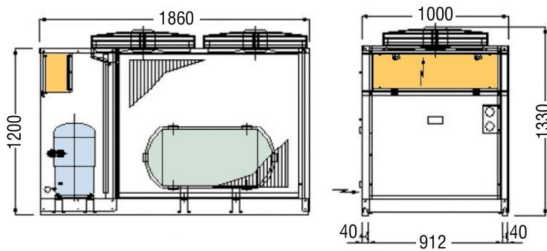
*4 In ICA^{EY} ...H (heat pump) version it becomes evaporator

*5 Max. air flow

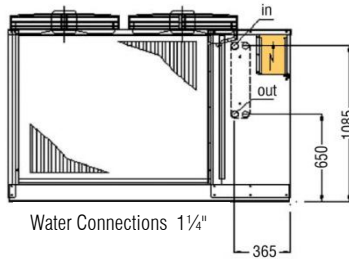
*6 Without water pump (s) Std. -Version

*7 Water temp. from 40°C to 50°C.

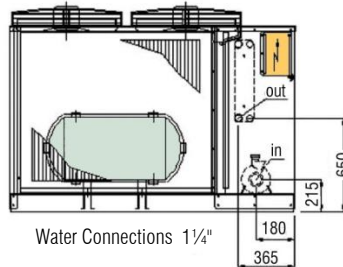
*8 Compressors site and according to ISO 3744



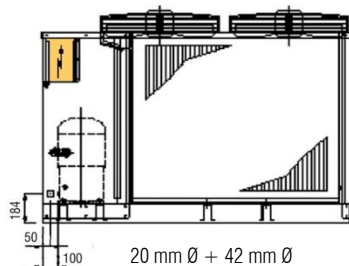
Hydraulic Connection
Standard Version



Hydraulic Connection for P1
and PAC - Version



Electric Connections



ICA EY		STD	P	PAC	LN	P	PAC
15E1	Transport kg	380	400	430	390	410	440
	Operation kg *	380	400	550	390	410	560
18E1	Transport kg	390	415	450	400	425	460
	Operation kg *	390	415	570	400	425	580
20E1	Transport kg	420	430	480	430	440	490
	Operation kg *	420	430	600	430	440	610
22E1	Transport kg	450	460	510	470	490	540
	Operation kg *	450	460	660	470	490	690
25E1	Transport kg	480	500	550	500	520	570
	Operation kg *	480	500	660	500	520	700
30E1	Transport kg	510	540	590	530	560	610
	Operation kg *	510	540	710	530	560	730
35E1	Transport kg	540	570	620	560	590	640
	Operation kg *	540	570	740	560	590	760
40E1	Transport kg	570	600	650	590	620	670
	Operation kg *	570	600	770	590	620	790
45E1	Transport kg	590	620	670	610	640	690
	Operation kg *	590	620	790	610	640	810
50E1	Transport kg	620	650	700	640	670	720
	Operation kg *	620	650	820	640	670	840

Correction factors

Ethylen glycol percentage by weight	10%	20%	30%	40%	50%
Freezing point °C	-3,6	-8,7	-15,3	-23,5	-35,5
Cooling capacity	0,986	0,98	0,973	0,966	0,96
Power input	1	0,995	0,99	0,985	0,975
Mixture flow	1,023	1,054	1,092	1,14	1,2
Pressure drop	1,061	1,114	1,19	1,244	1,31

Operating Range

		Cooling	Heating
Inlet Water Temperature	Max °C	17	45
	Min. °C	9	30
Outlet Water Temperature	Max °C	10	50
	Min. °C	5	35
Ambient Air Temperature	Max °C	46	20
	Min. °C	15 *	-5

* This temperature can be down to - 15°C only if the appropriate kit has been mounted

Legend

STD = Standard Model

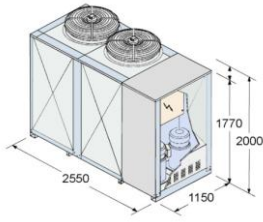
P = Model completed with Hydraulic Kit and Pump

PAC = Model completed with Hydraulic Kit with Pump and Container (tank)

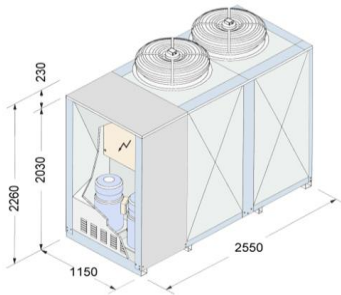
LN - Low Noise Version

H - Version: The operation weight has to be increased by +5%

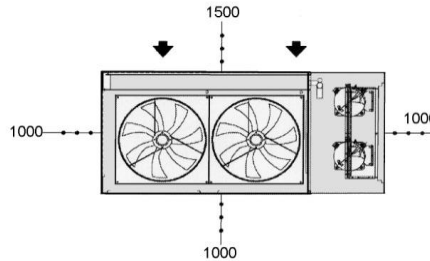
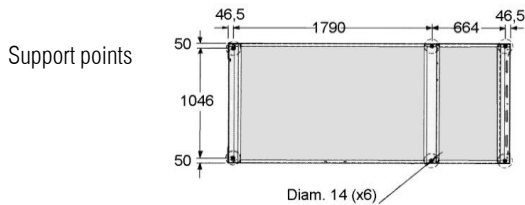
(*) The data has to be added to the evaporator volume in reference to the selected model



ICA ^{EY}		STD	P	PAC	LN	P	PAC	Plate*	PAC**
42	Transport kg	710	725	795	730	745	845	Ø	Ø
	Operation kg *	710	725	1035	730	745	1085	2½"	1½"
52	Transport kg	750	775	835	775	795	885	Ø	Ø
	Operation kg *	750	775	1070	775	795	1120	2½"	1½"
62	Transport kg	790	815	920	810	830	970	Ø	Ø
	Operation kg *	790	815	1150	810	830	1200	2½"	1½"
72	Transport kg	870	895	990	888	910	1040	Ø	Ø
	Operation kg *	870	895	1210	888	910	1260	2½"	1½"



ICA ^{EY}		STD	P	PAC	LN	P	PAC	Plate*	PAC**
82	Transport kg	1050	1080	1180	1075	1105	1230	Ø	Ø
	Operation kg *	1050	1080	1505	1075	1105	1555	2½"	2"
92	Transport kg	1105	1155	1260	1140	1190	1310	Ø	Ø
	Operation kg *	1105	1155	1595	1140	1190	1645	2½"	2"
102	Transport kg	1200	1260	1380	1240	1300	1430	Ø	Ø
	Operation kg *	1200	1260	1710	1240	1300	1760	2½"	2"



Wall Distance - Free - Space

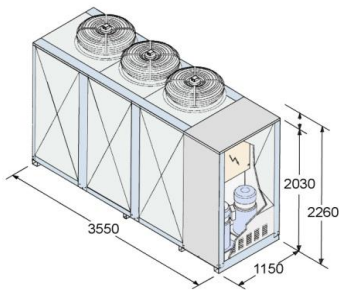
STD = Standard Model

P = Model completed with Hydraulic Kit and Pump

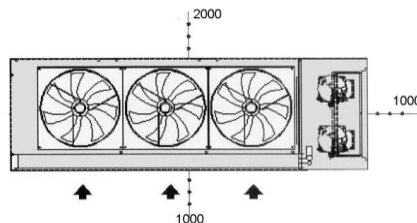
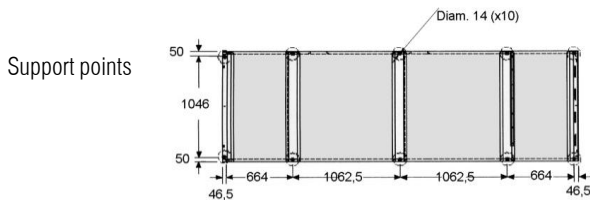
PAC = Model completed with Hydraulic Kit with Pump and Container (tank)

Plate* = Hydraulic Connection of Plate to Plate Exchanger

PAC* = Hydraulic Connection for PAC - Version (Pump and Container)



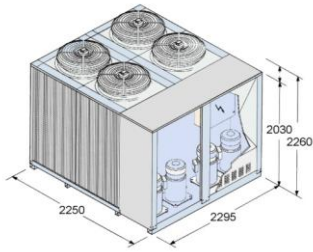
ICA ^{EY}		STD	P	PAC	LN	P	PAC	Plate*	PAC**
122	Transport kg	1280	1320	1450	1320	1360	1500	Ø	Ø
	Operation kg *	1280	1320	1790	1320	1360	1840	2½"	2½"
132	Transport kg	1355	1395	1515	1395	1435	1565	Ø	Ø
	Operation kg *	1355	1395	2065	1395	1435	2115	2½"	2½"
152	Transport kg	1490	1540	1660	1530	1580	1710	Ø	Ø
	Operation kg *	1490	1540	2190	1530	1580	2240	2½"	2½"
172	Transport kg	1580	1620	1770	1620	1660	1820	Ø	Ø
	Operation kg *	1580	1620	2300	1620	1660	2350	2½"	2½"



Wall Distance - Free - Space

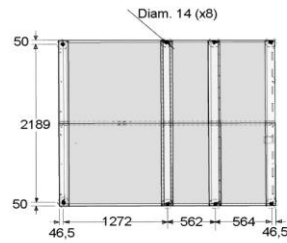
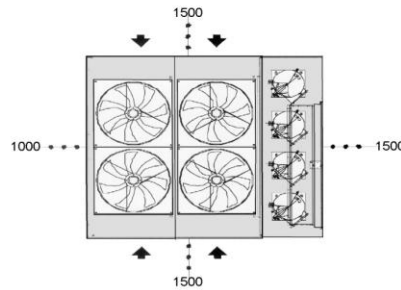
H - Version: The operation weight has to be increased by +5%

(*) The data has to be added to the evaporator volume in reference to the selected model



ICA EY		STD	P	PAC	LN	P	PAC	Plate*	PAC**
192	Transport kg	1970	2030	2180	2050	2100	2230	Ø	Ø
	Operation kg *	1970	2030	2700	2050	2100	2750	2½"	3"
212	Transport kg	2190	2260	2410	2260	2330	2460	Ø	Ø
	Operation kg *	2190	2260	2960	2260	2330	3010	2½"	3"

Wall Distance - Free - Space



Support points

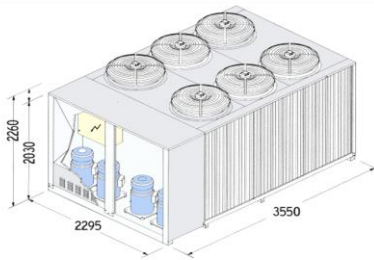
STD = Standard Model

P = Model completed with Hydraulic Kit and Pump

PAC = Model completed with Hydraulic Kit with Pump and Container (tank)

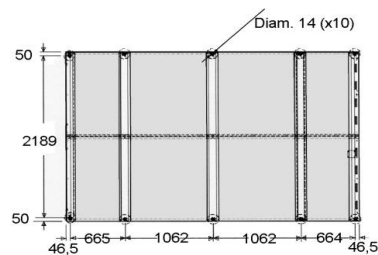
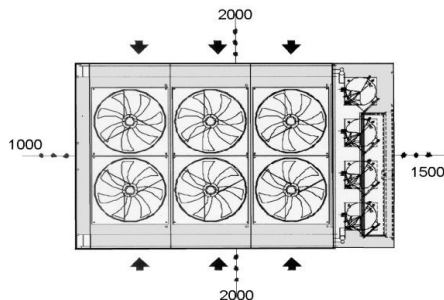
Plate* = Hydraulic Connection for Models with Plate to Plate Exchanger

PAC* = Hydraulic Connection for PAC - Version (Pump and Container)



ICA EY		STD	P	PAC	LN	P	PAC	Plate*	PAC**
234	Transport kg	2230	2300	2470	2300	2370	2520	Ø	Ø
	Operation kg *	2230	2300	3020	2300	2370	3070	2½"	3"
254	Transport kg	2340	2410	2550	2410	2470	2600	Ø	Ø
	Operation kg *	2340	2410	3100	2410	2470	3150	2½"	3"
284	Transport kg	2590	2670	2820	2660	2730	2890	Ø	Ø
	Operation kg *	2590	2670	3620	2660	2730	3690	2½"	4"
324	Transport kg	2750	2840	2980	2820	2910	3060	Ø	Ø
	Operation kg *	2750	2840	3780	2820	2910	3860	2½"	4"
354	Transport kg	2970	3090	3200	3050	3170	3260	Ø	Ø
	Operation kg *	2970	3090	3990	3050	3170	4050	2½"	4"

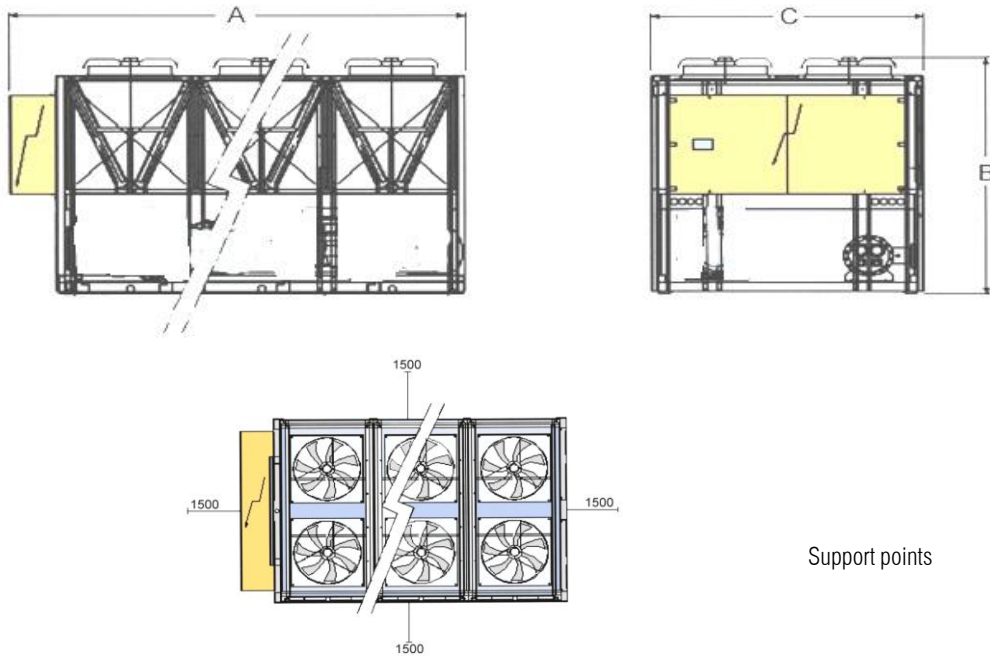
Wall Distance - Free - Space



Support points

(*) The data has to be added to the evaporator volume in reference to the selected model

ICA ^{EY}	Dimensions (mm)			Weights	STD/LN	P	PAC	VLN	P	PAC	Plate*	PAC**
	A	B	C									
424	5600	2350	2300	Transport kg Operation kg *	4450 4550	4600 4750	4900 5750	4490 4590	4640 4790	4940 5790	∅ 3"	∅ 4"
474	5600	2350	2300	Transport kg Operation kg *	4630 4650	4780 4850	5080 5930	4670 4690	4820 4890	5120 5970	∅ 3"	∅ 4"
564	6600	2350	2300	Transport kg Operation kg *	5250 5380	5430 5580	5730 6580	5310 5440	5490 5640	5790 6640	∅ 3"	∅ 4"
616	7600	2350	2300	Transport kg Operation kg *	6110 6260	6310 6510	6810 7660	6170 6720	6370 6570	6870 7720	∅ 3"	∅ DN 125
656	7600	2350	2300	Transport kg Operation kg *	6550 6700	6750 6950	7250 8100	6610 6760	6810 7010	7310 8160	∅ 3"	∅ DN 125
696	7600	2350	2300	Transport kg Operation kg *	6940 7200	7140 7450	7640 8490	7000 7260	7200 7510	7700 855	∅ 3"	∅ DN 125
728	7600	2350	2300	Transport kg Operation kg *	7150 7320	8180 8460	8650 8870	7210 7450	7410 7690	7980 8470	∅ 3"	∅ DN 125
848	11000	2350	2300	Transport kg Operation kg *	8900 9100	9200 9500	9800 11500	8980 9180	9280 9580	9880 11580	∅ 3"	∅ DN 125
938	11000	2350	2300	Transport kg Operation kg *	9260 9450	9560 9700	10160 11860	9340 9490	9640 9780	10250 11940	∅ 3"	∅ DN 125



Support points

STD = Standard Model

P = Model completed with Hydraulic Kit and Pump

PAC = Model completed with Hydraulic Kit with Pump and Container

Plate* = Hydraulic Connection for Models with Plate to Plate Exchanger

PAC* = Hydraulic Connection for PAC - Version (Pump and Container)

(*) The data has to be added to the evaporator volume in reference to the selected model