



# SMAEY

**Air cooled condensing units  
Reversible heat pump from 50 kW to 360 kW**



**R 410A**  
Compressori Scroll



ISO 9001  
FM 534490



according to  
97/23/CE  
n. 1131

Serie:	<b>SMAEY</b>	Catalogo:	<b>DE 68</b>
Series:		Leaflet:	
Emissione:	<b>12/10</b>	Sostituisce:	<b>03/10</b>
Issue:		Supersedes:	

## Index

Index .....	pag. <b>2</b>
Identification code .....	» <b>2</b>
General features and available versions .....	» <b>3</b>
Technical data from mod. 61 to 121 .....	» <b>4</b>
Technical data from mod. 131 to 222 .....	» <b>5</b>
Technical data from mod. 242 to 382 .....	» <b>6</b>
Performances and absorbed power from mod. 61 to 121.....	» <b>7</b>
Performances and absorbed power from mod. 131 to 222.....	» <b>8</b>
Performances and absorbed power from mod. 242 to 382.....	» <b>9</b>
Refrigerant circuit .....	» <b>10</b>
Dimensions and weight from mod. 61 to 121.....	» <b>11</b>
Dimensions and weight from mod. 131 to 222.....	» <b>12</b>
Dimensions and weight from mod. 262 to 382.....	» <b>13</b>
Clearance and support points from mod. 61 to 191.....	» <b>14</b>
Clearance and support points from mod. 222 to 382.....	» <b>15</b>

## Identification code

**S M A E Y – 151 H LN**  
**1 2 3 4 5 6 7 8 9 10**

<b>1</b>	<b>S</b>	Small series >40 kW
<b>2</b>	<b>C</b>	Chiller unit
<b>3</b>	<b>A</b>	Air cooled
<b>4</b>	<b>E</b>	Axial fans
<b>5</b>	<b>Y</b>	Refrigerant R410A
<b>6</b>	<b>-</b> <b>A</b>	Scroll Compressors Recip. Compressors
<b>7</b>	<b>15</b>	Capacity factors
<b>8</b>	<b>1</b>	Number of circuits
<b>9</b>	<b>-</b> <b>H</b>	Cooling only version Heat pump unit version
<b>10</b>	<b>DS</b>	Desuperheater
	<b>RCS</b>	Heat recovery fitted in series (70-90%)
	<b>RCP</b>	Heat recovery fitted in parallel (100%)
	<b>LN</b>	Low Noise
	<b>VLN</b>	Very Low Noise

## SMAEY

### General features

#### FRAME

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

#### COMPRESSORS

Hermetic «scroll» type with overload protection by a klixon and complete with oil sight glass. They are installed on vibration absorbing rubbers and *placed within a closed compartment to reduce sound level and to allow service and maintenance activities while unit is in operation.*

#### CONDENSER / EVAPORATOR

Copper tube and aluminium finned coil. As 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 equipped with one or two refrigerants circuits. Each refrigerant circuit is complete with 2 service valves: 1 off on the suction line, 1 off on the discharge line.

To protect the refrigerant circuits, following devices are installed: manual reset high pressure switch and manual reset low pressure switch. Besides, where foreseen, manual reset safety pressure switches and safety valves.

In the heat pump unit (H-version) the refrigerant circuit contains, in addition: safety thermostat on compressor discharge line, 4-way-valve, thermostatic valve, dryer, no-return valve, solenoid valve, liquid separator on compressor suction line.

#### ELECTRICAL BOARD

Weather proof type with protection grade IP54 installed in the compressor box to enable service and maintenance activities while unit is in operation.

It includes:

- Main circuit automatic breaker with locking door device, main fuses, compressor contactor and fuses, auxiliary circuits trafo, free contact to the room thermostat. Moreover microprocessor to control automatically the unit with a visual system to display the function as well as failures.

### Versions

#### DS

Partial condensing heat recovery. Each refrigerant circuit includes a desuperheater insulated and installed in series between the compressor and the condenser.

#### RCS

(Not available for heat pump units).

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.

#### RCP

(Not available for heat pump units).

100% condensing heat recovery. Each refrigerant circuit includes: a heat exchanger insulated and mounted in parallel to the condenser and the relevant solenoid valves.

#### LN

Low noise version. This version equipped with low speed fans.

#### VLN

(Not available for heat pump units).

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

#### OPTIONS

- Power factor correction.
- Fans speed control.
- Remote control panel.
- Programmer clock.
- RS 485 card.
- Compressor suction and discharge shut-off valves.
- Suction/liquid line shut off valve.
- Gauges with shut-off valves.
- Cu/Cu or Epoxy Protection coils.
- Coils protection grid.
- Liquid line kit (not mounted): dryer, sight glass, solenoid valve, shut off valve.
- Liquid receiver.
- T-connection for HGBP-valve.
- Thermostatic valve(not mounted).
- Power factor condensing capacitors.
- Solenoid valve on liquid line (units cooling only).
- Rubber antivibrators.
- Spring AV mounts.
- Wooden crate packing.

## SMAEY technical data

SIZE			61	71	81	91	101	121
<b>COOLING MODE SMAEY STD</b>								
Cooling capacity (1)	kW		51	57	68	73	90	107
Abs. power (2)	kW		17	21	22	26	29	34
EER (2)	-		3	2,7	3	2,8	3,1	3,1
<b>COOLING MODE SMAEY LN/VLN</b>								
Cooling capacity (1)	KW		49	54	65	70	85	100
Abs. power (2)	KW		17,7	30,6	23,1	26,3	30,1	34,7
<b>HEATIG MODE SMAEY...H</b>								
Heating capacity (1)	kW		53	58	70	76	93	107
Abs. power (2)	kW		14,6	16,8	18,6	20,4	23,8	29,1
COP	kW		3,6	3,4	3,7	3,7	3,9	3,7
<b>COMPRESSOR</b> (scroll type)								
Quantity	n°		2					
Refrigerant circuit	n°		1					
Capacity step	n°		2					
Refrigerant	-		R410A					
Refrigerant charge (5)	Kg		13	13	15	17	24	25
<b>CONDENSER</b> (vers. STD) (3)								
Axial fan	n°		2	2	2	2	2	2
Max abs power	kW		1,95	1,95	1,95	1,95	1,95	4
Max abs current	A		3,5	3,5	3,5	3,5	3,5	7
<b>CONDENSER</b> (vers. LN/VLN) (2)								
Axial fans	n°		2	2	2	2	2	2
Max abs power	kW		1,5	1,5	1,5	1,5	1,5	2,6
Max abs current	A		2,8	2,8	2,8	2,8	2,8	5
<b>UNIT ELECTRICAL DATA</b>								
Max abs current	A		42,6	48,8	53,6	58,8	69,2	78,7
LRC	A		136,3	146,4	148,8	173,4	212,6	267,2
Electrical supply	V/f/Hz		400/3/50					
<b>SOUND PRESSURE LEVEL AT 1 m</b> (4)								
STD version	dB(A)		69	72	72	72	77	77
LN version	dB(A)		66	69	69	69	74	74
VLN version	dB(A)		61	64	64	64	66	66

### Performances in cooling mode:

- evaporating temp. 7 °C (dew point);
- ambient air temperature 35 °C;
- subcooling 5K.

### Performances in heating mode:

- condensing temperature 45 °C (dew point);
- ambient air temperature 7 °C db / 6 wb;
- subcooling 5K.

### Note:

- 1) Compressors + fans.
- 2) As version SMAEY...H (condensing unit) it works as evaporating unit.
- 3) Max air flow.
- 4) Compressor site and according to ISO 3744.
- 5) This data has only to be considered to charge the system as the unit leaves the factory with nitrogen.

The performances don't consider the outside pipes pressure drop.

## SMAEY technical data

SIZE			131	141	151	161	191	222
<b>COOLING MODE SMAEY STD</b>								
Cooling capacity	(1)	kW	113	126	134	156	181	215
Abs. power	(2)	kW	39,8	43,9	50,3	56,4	64,4	69
EER	(2)	-	2,8	2,9	2,7	2,8	2,8	3,1
<b>COOLING MODE SMAEY LN/VLN</b>								
Cooling capacity	(1)	KW	108	121	129	148	172	199
Abs. power	(2)	KW	40,4	45,5	51,8	59,1	66,6	69,4
<b>HEATIG MODE SMAEY...H</b>								
Heating capacity	(1)	kW	117	132	144	165	187	214
Abs. power	(2)	32,2	34,8	38,5	43,4	50,2	58,2	
COP	(2)	kW	3,6	3,8	3,7	3,8	3,7	3,7
<b>COMPRESSOR</b> (scroll type)								
Quantity		n°					2	4
Refrigerant circuit		n°					1	2
Capacity step		n°					2	4
Refrigerant		-					R410A	
Refrigerant charge	(5)	Kg	25	3	36	38	39	23+23
<b>CONDENSER</b> (vers. STD) (3)								
Axial fan		n°	2	3	3	3	3	4
Max abs power		kW	4	2,9	2,9	2,9	6	8
Max abs current		A	7	5,2	5,2	5,2	10,5	14
<b>CONDENSER</b> (vers. LN/VLN) (2)								
Axial fans		n°	2	3	3	3	3	4
Max abs power		kW	2,6	2,2	2,2	2,2	4,8	5,2
Max abs current		A	5	4,2	4,2	4,2	7,5	10
<b>UNIT ELECTRICAL DATA</b>								
Max abs current		A	81	91,6	99,7	114,1	133,9	154,4
LRC		A	269,5	319	327,1	365,1	384,9	342,9
Electrical supply		V/f/Hz	400/3/50					
<b>SOUND PRESSURE LEVEL AT 1 m</b> (4)								
STD version		dB(A)	77	74	74	74	79	82
LN version		dB(A)	74	71	71	71	72	75
VLN version		dB(A)	66	66	66	66	67	70

**Performances in cooling mode:**

- evaporating temp. 7 °C (dew point);
- ambient air temperature 35 °C;
- subcooling 5K.

**Performances in heating mode:**

- condensing temperature 45 °C (dew point);
- ambient air temperature 7 °C db / 6 wb;
- subcooling 5K.

**Note:**

- 1) Compressors + fans.
- 2) As version SMAEY...H (condensing unit) it works as evaporating unit.
- 3) Max air flow.
- 4) Compressor site and according to ISO 3744.
- 5) This data has only to be considered to charge the system as the unit leaves the factory with nitrogen.

The performances don't consider the outside pipes pressure drop.

## SMAEY technical data

SIZE			242	262	282	312	342	382
<b>COOLING MODE SMAEY STD</b>								
Cooling capacity	(1)	kW	226	250	272	309	334	361
Abs. power	(2)	kW	79,6	88	89,2	96	111,6	128,8
EER	(2)	-	2,8	2,8	3	3,2	3	2,8
<b>COOLING MODE SMAEY LN/VLN</b>								
Cooling capacity	(1)	KW	216	240	255	287	317	345
Abs. power	(2)	KW	80,8	91	89,8	97,6	114,2	133,2
<b>HEATIG MODE SMAEY...H</b>								
Heating capacity	(1)	kW	235	264	271	304	339	374
Abs. power	(2)	kW	64,4	69,8	76	83,6	93,4	102,8
COP	(2)	kW	3,6	3,8	3,6	3,6	3,6	3,6
<b>COMPRESSOR</b> (scroll type)								
Quantity		n°	4					
Refrigerant circuit		n°	2					
Capacity step		n°	4					
Refrigerant		-	R410A					
Refrigerant charge	(5)	Kg	23+23	25+25	26+26	33+33	34+34	36+36
<b>CONDENSER</b> (vers. STD) (3)								
Axial fan		n°	4	6	6	6	6	6
Max abs power		kW	8	5,8	12	12	12	12
Max abs current		A	14	10,4	21	21	21	21
<b>CONDENSER</b> (vers. LN/VLN) (2)								
Axial fans		n°	4	6	6	6	6	6
Max abs power		kW	5,2	4,4	9,6	9,6	9,6	9,6
Max abs current		A	10	8,4	15	15	15	15
<b>UNIT ELECTRICAL DATA</b>								
Max abs current		A	166,2	180,2	191	207,2	236	264,8
LRC		A	354,7	407,6	418,4	434,6	487	515,8
Electrical supply		V/f/Hz	400/3/50					
<b>SOUND PRESSURE LEVEL AT 1 m</b> (4)								
STD version		dB(A)	82	77	85	85	85	85
LN version		dB(A)	75	74	78	78	78	78
VLN version		dB(A)	70	68	73	73	73	73

### Performances in cooling mode:

- evaporating temp. 7 °C (dew point);
- ambient air temperature 35 °C;
- subcooling 5K.

### Performances in heating mode:

- condensing temperature 45 °C (dew point);
- ambient air temperature 7 °C db / 6 wb;
- subcooling 5K.

### Note:

- 1) Compressors + fans.
- 2) As version SMAEY...H (condensing unit) it works as evaporating unit.
- 3) Max air flow.
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- 5) This data has only to be considered to charge the system as the unit leaves the factory with nitrogen.

The performances don't consider the outside pipes pressure drop.

# SMAEY: PERFORMANCES

## COOLING CAPACITY AND ABSORBED POWER

MOD.	EVAP	CONDENSER ambient air temperature °C													
	Te °C	26		29		32		35		38		41		44	
	out.	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa
61	5	55	12,9	53	13,4	50	14,4	48	15,1	46	16,1	43	17,2	41	18,3
	6	56	12,9	54	13,7	52	14,5	49	15,3	47	16,2	44	17,3	42	18,4
	7	58	13,1	56	13,9	53	14,7	<b>51</b>	<b>15,6</b>	48	16,4	46	17,5	43	18,6
	8	60	13,3	57	14,0	55	14,8	52	15,8	50	16,7	47	17,6	44	18,7
	9	61	13,4	59	14,2	56	15,0	54	15,9	51	16,8	48	17,8	46	18,9
	10	63	13,7	60	14,4	58	15,1	55	16,1	53	17,0	50	18,1	-	-
71	5	61	16,0	59	16,7	56	17,8	54	18,8	51	20,0	48	21,3	46	22,7
	6	63	16,1	60	17,1	58	18,0	55	19,0	52	20,2	50	21,5	47	22,9
	7	65	16,3	62	17,3	60	18,2	<b>57</b>	<b>19,4</b>	54	20,4	51	21,7	48	23,1
	8	67	16,5	64	17,5	61	18,4	58	19,6	56	20,8	53	21,9	50	23,3
	9	68	16,7	66	17,7	63	18,6	60	19,8	57	21,0	54	22,1	51	23,5
	10	70	17,1	67	17,8	64	18,8	62	20,0	59	21,1	56	22,5	-	-
81	5	73	17,0	70	17,7	67	19,0	64	20,0	61	21,2	58	22,7	55	24,1
	6	75	17,1	72	18,1	69	19,2	66	20,2	63	21,4	59	22,9	56	24,3
	7	77	17,3	74	18,3	71	19,4	<b>68</b>	<b>20,6</b>	65	21,6	61	23,1	58	24,5
	8	79	17,5	76	18,5	73	19,6	69	20,8	67	22,0	63	23,3	59	24,7
	9	82	17,7	78	18,7	75	19,8	71	21,0	68	22,2	65	23,5	61	24,9
	10	84	18,1	80	19,0	77	20,0	73	21,2	70	22,5	67	23,9	-	-
91	5	78	19,6	75	20,5	72	21,9	69	23,1	66	24,5	62	26,2	59	27,8
	6	81	19,8	77	20,9	74	22,1	71	23,3	67	24,8	64	26,4	61	28,1
	7	83	20,0	80	21,2	76	22,4	<b>73</b>	<b>23,8</b>	69	25,0	66	26,7	62	28,3
	8	85	20,2	82	21,4	79	22,6	74	24,0	72	25,5	68	26,9	64	28,6
	9	88	20,5	84	21,7	80	22,8	77	24,3	73	25,7	69	27,1	66	28,8
	10	90	20,9	86	21,9	82	23,1	79	24,5	75	25,9	72	27,6	-	-
101	5	97	22,4	93	23,4	89	25,0	85	26,4	81	28,0	77	29,9	73	31,8
	6	99	22,6	95	23,9	91	25,3	87	26,7	83	28,3	78	30,2	75	32,1
	7	102	22,8	98	24,2	94	25,6	<b>90</b>	<b>27,2</b>	86	28,6	81	30,5	77	32,4
	8	105	23,1	101	24,5	97	25,8	92	27,5	88	29,1	84	30,7	78	32,6
	9	108	23,4	104	24,8	99	26,1	95	27,7	90	29,4	86	31,0	81	32,9
	10	111	23,9	106	25,0	102	26,4	97	28,0	93	29,6	88	31,6	-	-
121	5	115	25,2	110	26,2	106	28,1	101	29,6	96	31,4	91	33,6	86	35,7
	6	118	25,3	113	26,8	108	28,4	104	29,9	98	31,7	93	33,9	89	36,0
	7	121	25,6	117	27,1	112	28,7	<b>107</b>	<b>30,5</b>	102	32,0	96	34,2	91	36,3
	8	125	25,9	120	27,5	115	29,0	109	30,8	105	32,6	100	34,5	93	36,6
	9	128	26,2	123	27,8	118	29,3	112	31,1	107	32,9	102	34,8	96	36,9
	10	132	26,8	126	28,1	121	29,6	116	31,4	110	33,2	105	35,4	-	-

**Note:**

Te - Evaporating temperature  
kWf - Cooling capacity  
kWa - Abs. power (compressor only)

# SMAEY: PERFORMANCES

## COOLING CAPACITY AND ABSORBED POWER

MOD.	EVAP	CONDENSER ambient air temperature °C													
	Te °C	26		29		32		35		38		41		44	
	out.	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa
131	5	121	29,5	116	30,8	112	32,9	106	34,7	102	36,9	96	39,4	91	41,9
	6	125	29,7	120	31,5	114	33,3	110	35,1	104	37,2	98	39,7	94	42,2
	7	128	30,1	123	31,9	118	33,7	<b>113</b>	<b>35,8</b>	107	37,6	102	40,1	96	42,6
	8	132	30,4	127	32,2	122	34,0	115	36,2	111	38,3	105	40,5	98	43,0
	9	136	30,8	130	32,6	124	34,4	119	36,5	113	38,7	107	40,8	102	43,3
	10	139	31,5	133	32,9	128	34,7	122	36,9	116	39,0	111	41,5	-	-
141	5	135	33,8	130	35,3	125	37,7	118	39,8	113	42,2	107	45,1	102	48,0
	6	139	34,0	134	36,1	127	38,1	122	40,2	116	42,6	110	45,5	105	48,4
	7	143	34,4	137	36,5	132	38,5	<b>126</b>	<b>41,0</b>	120	43,1	113	45,9	107	48,8
	8	147	34,9	141	36,9	136	39,0	129	41,4	123	43,9	117	46,3	110	49,2
	9	151	35,3	145	37,3	139	39,4	132	41,8	126	44,3	120	46,7	113	49,6
	10	155	36,1	149	37,7	142	39,8	136	42,2	130	44,7	123	47,6	-	-
151	5	144	39,1	138	40,8	133	43,6	126	46,0	121	48,8	114	52,1	108	55,5
	6	148	39,3	142	41,7	135	44,1	130	46,5	123	49,3	117	52,6	111	55,9
	7	152	39,8	146	42,2	140	44,6	<b>134</b>	<b>47,4</b>	127	49,8	121	53,1	114	56,4
	8	156	40,3	150	42,7	144	45,0	137	47,9	131	50,7	125	53,6	117	56,9
	9	161	40,8	154	43,1	147	45,5	141	48,3	134	51,2	127	54,0	121	57,4
	10	165	41,7	158	43,6	151	46,0	145	48,8	138	51,7	131	55,0	-	-
161	5	168	44,1	161	46,0	154	49,2	147	51,9	140	55,1	133	58,9	126	62,6
	6	172	44,4	165	47,1	158	49,8	151	52,4	144	55,6	136	59,4	129	63,1
	7	177	44,9	170	47,6	163	50,3	<b>156</b>	<b>53,5</b>	148	56,2	140	59,9	133	63,7
	8	182	45,5	175	48,2	168	50,8	159	54,0	153	57,2	145	60,5	136	64,2
	9	187	46,0	179	48,7	172	51,4	164	54,6	156	57,8	148	61,0	140	64,7
	10	192	47,1	184	49,2	176	51,9	168	55,1	161	58,3	153	62,1	-	-
191	5	195	48,2	186	50,2	179	53,7	170	56,6	163	60,2	154	64,2	146	68,3
	6	200	48,5	192	51,4	183	54,3	176	57,2	167	60,7	157	64,8	150	68,9
	7	205	49,1	197	52,0	190	54,9	<b>181</b>	<b>58,4</b>	172	61,3	163	65,4	154	69,5
	8	211	49,6	203	52,6	195	55,5	185	59,0	177	62,5	168	66,0	157	70,1
	9	217	50,2	208	53,1	199	56,1	190	59,6	181	63,1	172	66,6	163	70,7
	10	223	51,4	214	53,7	205	56,6	195	60,2	186	63,7	177	67,7	-	-
222	5	231	50,3	221	52,5	213	56,1	202	59,2	194	62,8	183	67,1	173	71,4
	6	238	50,6	228	53,7	217	56,7	209	59,8	198	63,4	187	67,7	178	72,0
	7	244	51,2	234	54,3	225	57,3	<b>215</b>	<b>61,0</b>	204	64,1	194	68,3	183	72,6
	8	251	51,9	241	54,9	232	58,0	219	61,6	211	65,3	200	68,9	187	73,2
	9	258	52,5	247	55,5	237	58,6	226	62,2	215	65,9	204	69,5	194	73,8
	10	265	53,7	254	56,1	243	59,2	232	62,8	221	66,5	211	70,8	-	-

**Note:**

Te - Evaporating temperature  
 kWf - Cooling capacity  
 kWa - Abs. power (compressor only)



# SMAEY: PERFORMANCES

## COOLING CAPACITY AND ABSORBED POWER

MOD.	EVAP	CONDENSER ambient air temperature °C													
	Te °C out.	26		29		32		35		38		41		44	
		kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa	kWf	kWa
<b>242</b>	5	243	59,1	233	61,6	224	65,9	212	69,5	203	73,7	192	78,8	182	83,8
	6	250	59,4	240	63,0	228	66,6	219	70,2	208	74,5	197	79,5	188	84,5
	7	257	60,1	246	63,7	237	67,3	<b>226</b>	<b>71,6</b>	215	75,2	203	80,2	192	85,2
	8	264	60,9	253	64,4	243	68,0	231	72,3	221	76,6	210	80,9	197	85,9
	9	271	61,6	260	65,2	249	68,7	237	73,0	226	77,3	215	81,6	203	86,6
	10	278	63,0	267	65,9	255	69,5	244	73,7	233	78,0	221	83,1	-	-
<b>262</b>	5	269	67,7	258	70,5	248	75,4	235	79,5	225	84,5	213	90,2	202	95,9
	6	276	68,1	265	72,2	253	76,3	243	80,4	230	85,3	218	91,0	208	96,8
	7	284	68,9	273	73,0	262	77,1	<b>250</b>	<b>82,0</b>	238	86,1	225	91,8	213	97,6
	8	292	69,7	280	73,8	269	77,9	255	82,8	245	87,7	233	92,7	218	98,4
	9	300	70,5	288	74,6	275	78,7	263	83,6	250	88,6	238	93,5	225	99,2
	10	308	72,2	295	75,4	283	79,5	270	84,5	258	89,4	245	95,1	-	-
<b>282</b>	5	292	63,7	280	66,4	269	71,0	256	74,9	245	79,5	231	84,9	219	90,3
	6	301	64,1	288	67,9	275	71,8	264	75,7	250	80,3	237	85,7	226	91,1
	7	309	64,8	296	68,7	285	72,6	<b>272</b>	<b>77,2</b>	258	81,1	245	86,5	231	91,9
	8	317	65,6	305	69,5	293	73,3	277	78,0	267	82,6	253	87,2	237	92,6
	9	326	66,4	313	70,3	299	74,1	286	78,7	272	83,4	258	88,0	245	93,4
	10	335	67,9	321	71,0	307	74,9	294	79,5	280	84,1	267	89,6	-	-
<b>312</b>	5	332	69,3	318	72,2	306	77,3	290	81,5	278	86,5	263	92,4	249	98,3
	6	341	69,7	328	73,9	312	78,1	300	82,3	284	87,4	269	93,2	256	99,1
	7	351	70,6	337	74,8	324	79,0	<b>309</b>	<b>84,0</b>	294	88,2	278	94,1	263	100,0
	8	361	71,4	346	75,6	333	79,8	315	84,8	303	89,9	287	94,9	269	100,8
	9	371	72,2	355	76,4	340	80,6	324	85,7	309	90,7	294	95,8	278	101,6
	10	381	73,9	365	77,3	349	81,5	334	86,5	318	91,6	303	97,4	-	-
<b>342</b>	5	359	82,2	344	85,7	331	91,6	314	96,6	301	102,6	284	109,6	269	116,5
	6	369	82,7	354	87,6	337	92,6	324	97,6	307	103,6	291	110,6	277	117,5
	7	379	83,7	364	88,6	350	93,6	<b>334</b>	<b>99,6</b>	317	104,6	301	111,6	284	118,5
	8	390	84,7	374	89,6	360	94,6	341	100,6	327	106,6	311	112,5	291	119,5
	9	401	85,7	384	90,6	367	95,6	351	101,6	334	107,6	317	113,5	301	120,5
	10	411	87,6	394	91,6	377	96,6	361	102,6	344	108,6	327	115,5	-	-
<b>382</b>	5	388	96,4	372	100,4	357	107,5	339	113,3	325	120,3	307	128,5	291	136,7
	6	399	96,9	383	102,8	365	108,6	350	114,5	332	121,5	314	129,6	300	137,8
	7	410	98,1	393	104,0	378	109,8	<b>361</b>	<b>116,8</b>	343	122,6	325	130,8	307	139,0
	8	421	99,3	404	105,1	389	111,0	368	118,0	354	125,0	336	132,0	314	140,2
	9	433	100,4	415	106,3	397	112,1	379	119,1	361	126,1	343	133,2	325	141,3
	10	445	102,8	426	107,5	408	113,3	390	120,3	372	127,3	354	135,5	-	-

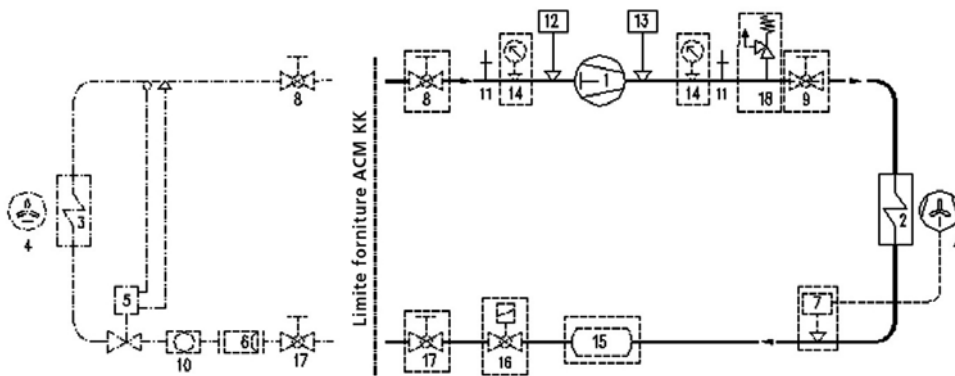
**Note:**

Te - Evaporating temperature

kWf - Cooling capacity

kWa - Abs. power (compressor only)

## Refrigerant circuit SMAEY



\*\* The outlined components are optional

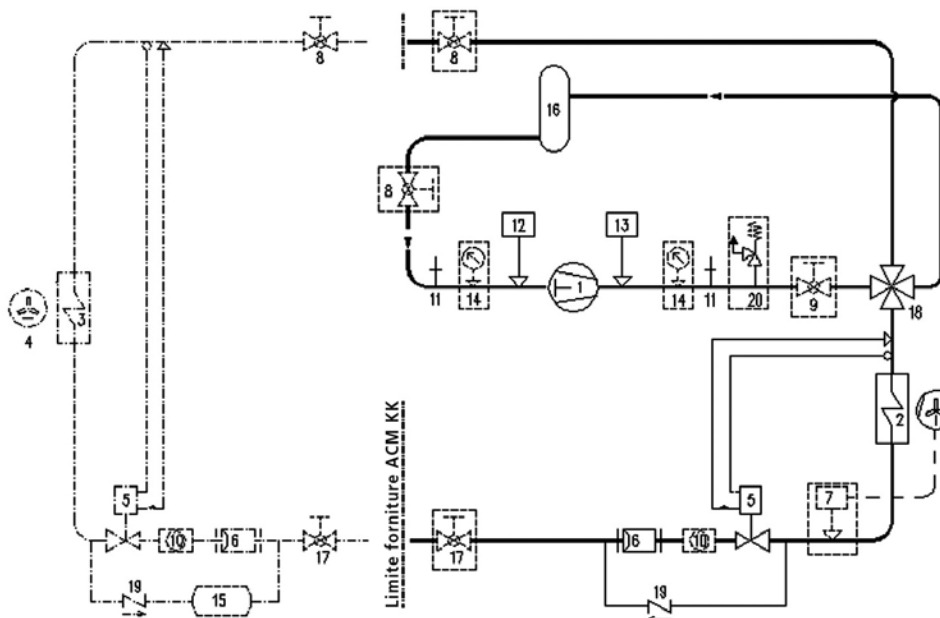
- 1 = Compressor
- 2 = Condensator
- 3 = vaporator
- 4 = Fan
- 5 = Thermal expansion valve
- 6 = Refrigerant filter
- 7 = Fan speeregulator
- 8 = Suction line valve \*\*
- 9 = Supply cock \*\*
- 10 = Humidity indicator
- 11 = Schrader service valve
- 12 = Low pressure switch
- 13 = High pressure switch
- 14 = Gauge \*\*
- 15 = Liquid receiver \*\*
- 16 = Solenoid valve \*\*
- 17 = Liquid line cock\*\*
- 18 = Relief valve

### Operating range

EVAPORATING RANGE (dew point)	Max °C	10
	Min °C	-2
AMBIENT AIR TEMPERATURE	Max °C	44 (1)
	Min °C	10

(1) Except what indicated in the sheet pages 7 and 9

## Refrigerant circuit SMAEY...H



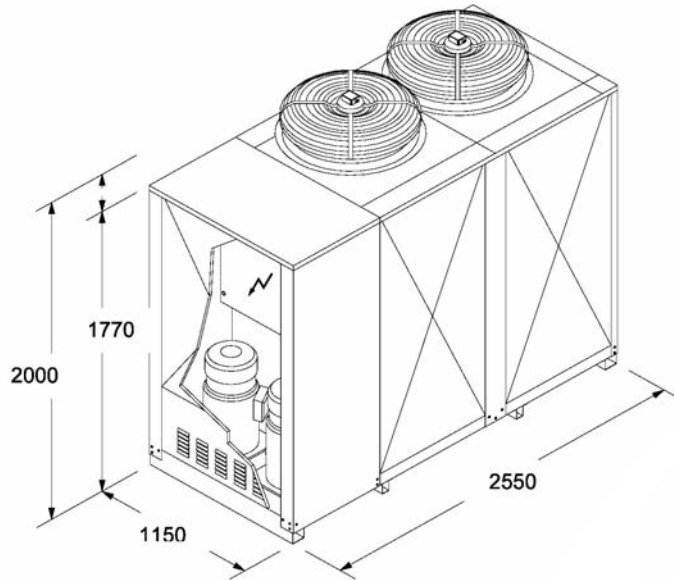
\*\* The outlined components are optional

- 1 = Compressor
- 2 = Outdoor exchanger
- 3 = Indoor exchanger
- 4 = Fan
- 5 = Thermal expansion valve
- 6 = Refrigerant filter
- 7 = Fan speeregulator
- 8 = Suction line valve \*\*
- 9 = Supply cock \*\*
- 10 = Humidity indicator
- 11 = Schrader service valve
- 12 = Low pressure switch
- 13 = High pressure switch
- 14 = Gauge \*\*
- 15 = Liquid receiver \*\*
- 16 = Suction separator \*\*
- 17 = Liquid line cock\*\*
- 18 = 4way solenoid valve
- 19 = Check valve
- 20 = Relief valve

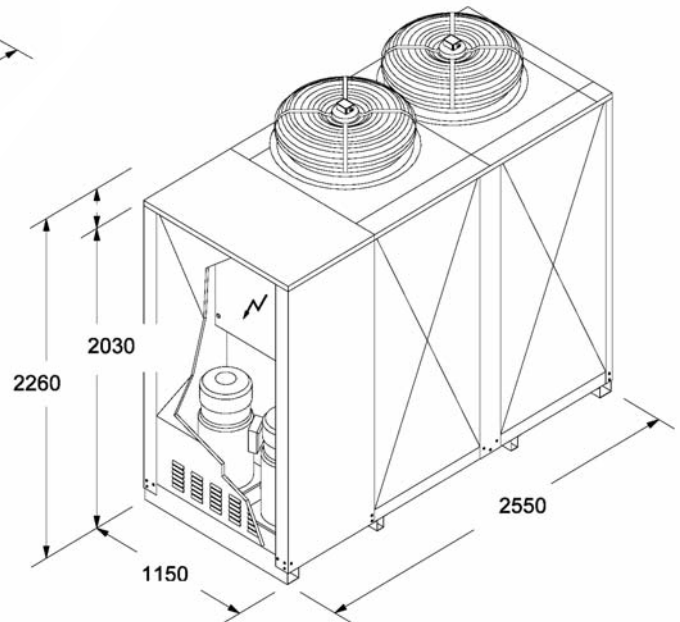
**N.B.: piping between the SMAEY (SMAEY...H) and the terminal unit must guarantee the oil return to the compressor.**

## DIMENSIONS:

**Fig. A**  
From mod. **61** to **91**



**Fig. B**



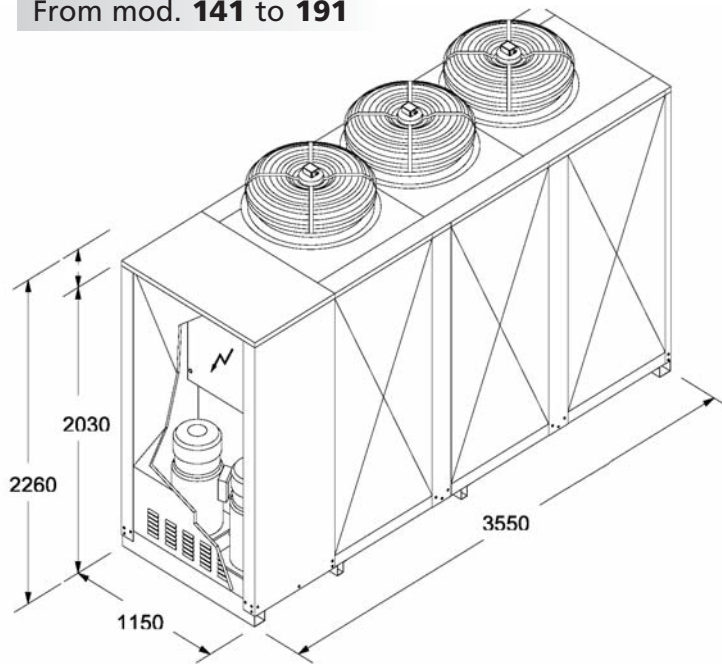
## WEIGHTS (Kg)

VERSION	STD							LN / VLN						
Mod.	61	71	81	91	101	121	132	61	71	81	91	101	121	131
Fig.	A	A	A	A	B	B	B	A	A	A	A	B	B	B
Trasport Kg. (1)	650	680	690	730	865	1050	1090	670	700	710	750	885	1070	1110

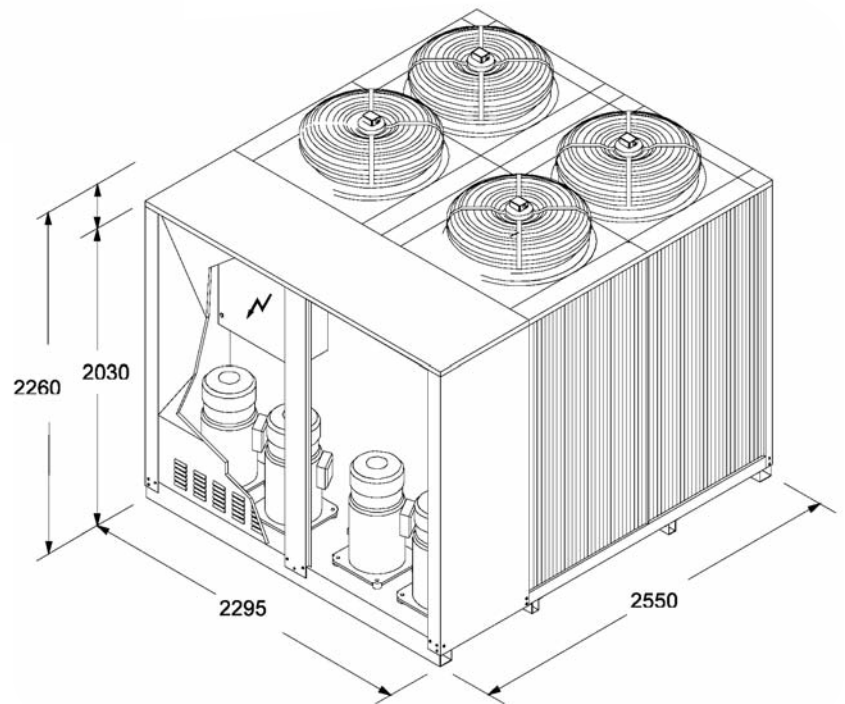
(1) **OPERATING WEIGHT:** add to the transport weight the refrigerant charge and the accessories.

(2) The data are referred to SMAEY cooling only; for SMAE...H increase the value of 5%.

**Fig. C**  
From mod. 141 to 191



**Fig. D**



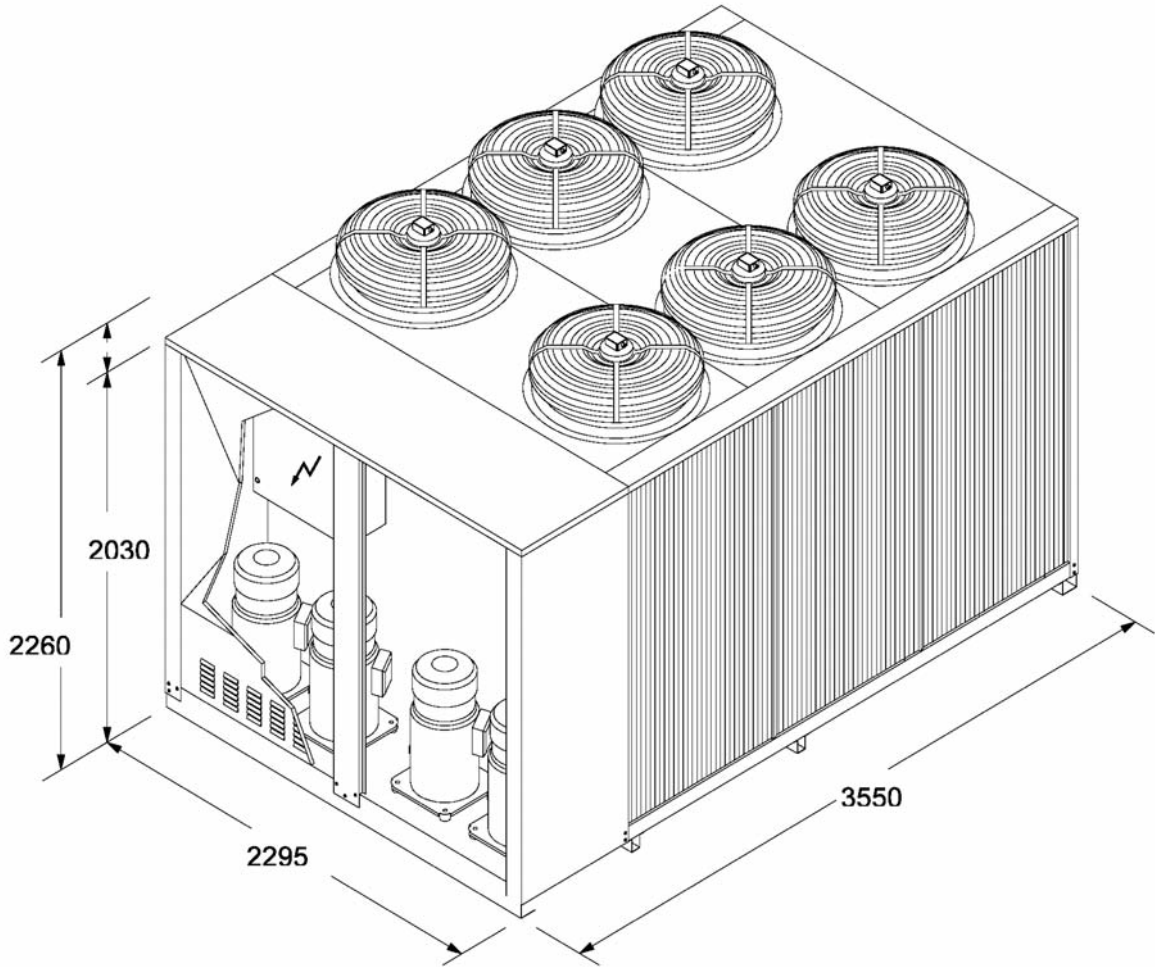
**WEIGHTS (Kg)**

VERSION	STD						LN / VLN					
Mod.	141	151	161	191	222	242	141	151	161	191	222	242
Fig.	C	C	C	C	D	D	C	C	C	C	D	D
Transport Kg. (1)	1150	1260	1440	1530	1920	2120	1180	1290	1480	1570	1980	2200

(1) **OPERATING WEIGHT:** add to the transport weight the refrigerant charge and the accessories.

(2) The data are referred to SMAEY cooling only; for SMAE...H increase the value of 5%.

**Fig. E**  
From mod. 262 to 382 STD



## WEIGHTS (Kg)

VERSION	STD					LN / VLN				
Mod.	262	282	312	342	382	262	282	312	342	382
Fig.	E	E	E	E	E	E	E	E	E	E
Trasport Kg. (1)	2180	2290	2540	2690	2910	2260	2380	2620	2770	2990

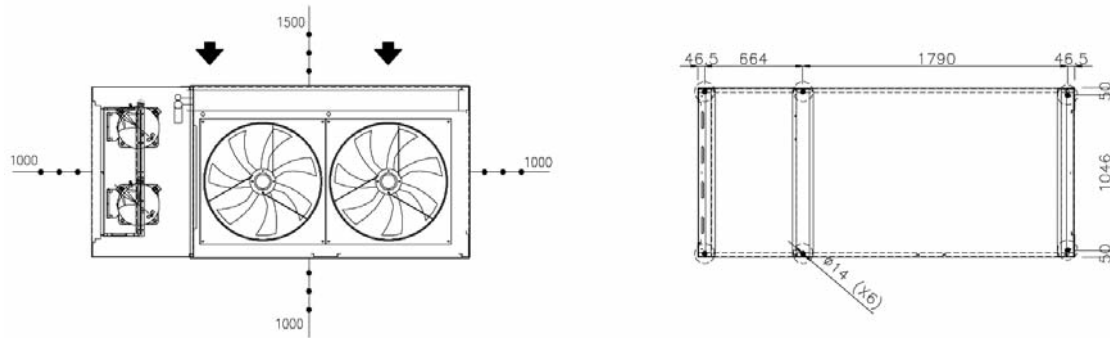
(1) **OPERATING WEIGHT:** add to the transport weight the refrigerant charge and the accessories.

(2) The data are referred to SMAEY cooling only; for SMAE...H increase the value of 5%.

## CLEARANCE AND SUPPORT POINTS:

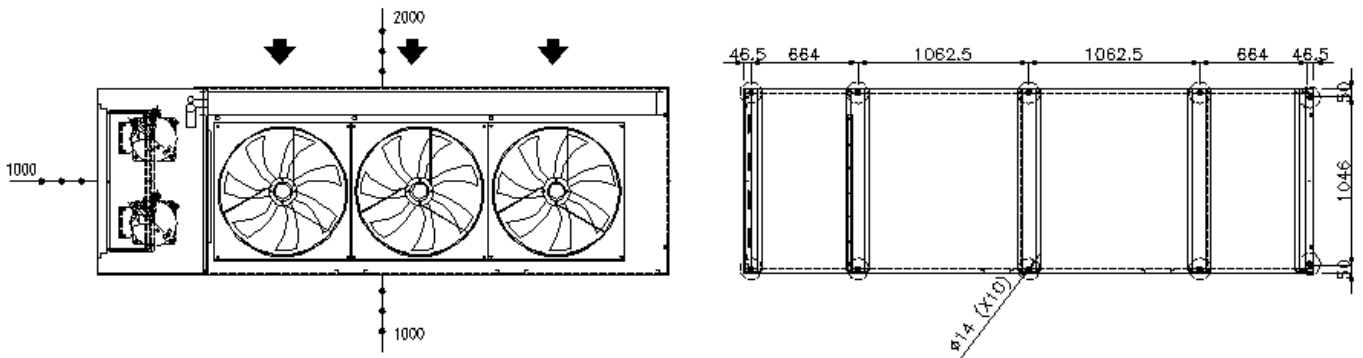
**Fig. A**

From mod. **61** to **101**

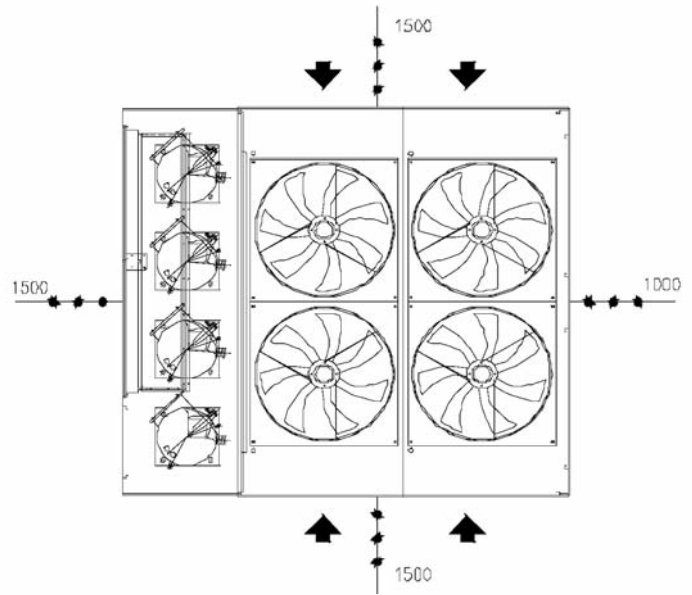
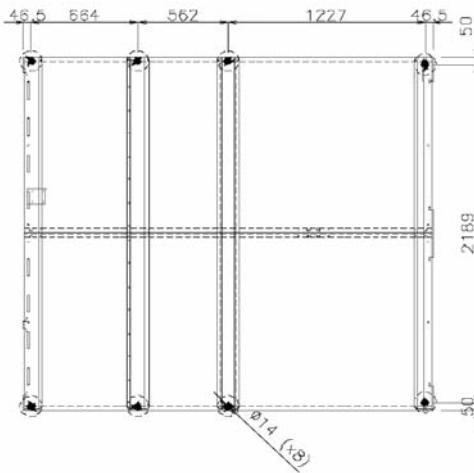


**Fig. B**

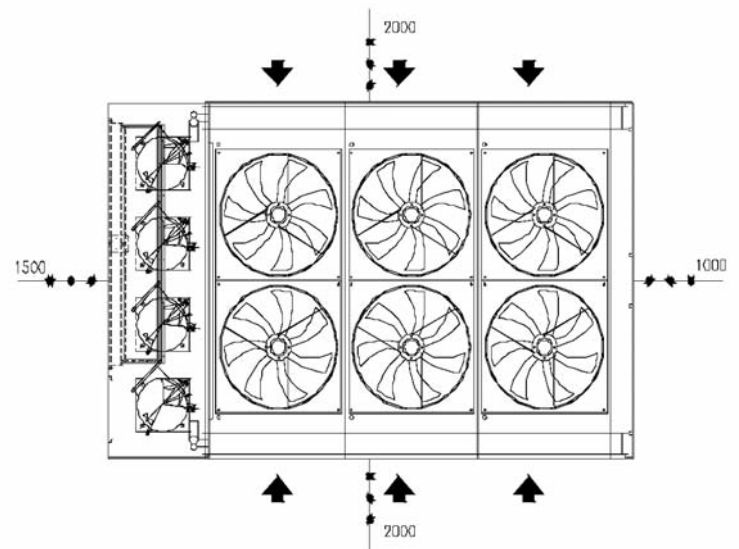
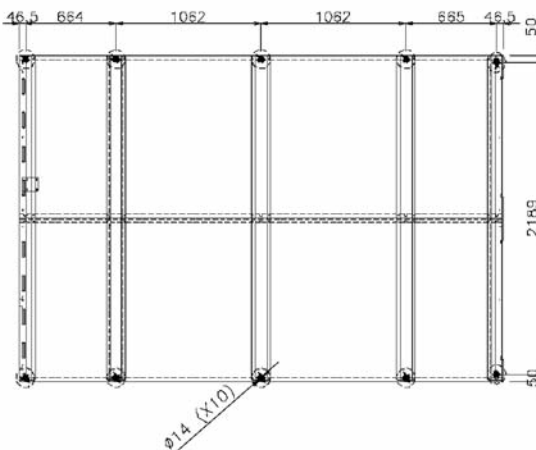
From mod. **121** to **191**



**Fig. C**  
From mod. 222 to 242



**Fig. D**  
From mod. 262 to 382



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