



*condensing unit*

*Technical Catalog*

**Scroll  
ICU-CM/CL**



*scroll CONDENSING UNIT*

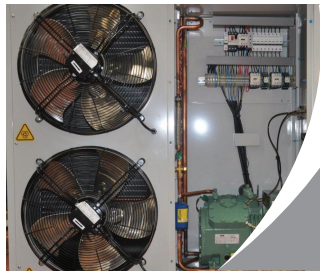
scroll split



## ICU-HM/HL

Hermetic Split System for small and medium size cold rooms, low noise condensing unit and evaporator with accessories installed, supplied without piping. Thermostatic expansion valve, remote control panel. Suitable for outdoor use.

Cooling Capacity:  
MT = from 1103 W to 13100 W (-5 °C / +45 °C)  
LT = from 753 W to 3550 W (-30 °C / +45 °C)



## ICU-SM/SL

Semi-Hermetic Split System for small and medium size cold rooms, low noise condensing unit and evaporator with accessories installed, supplied without piping. Thermostatic expansion valve, remote control panel. Suitable for outdoor use.

Cooling Capacity:  
MT = from 1960 W to 35530 W (-5 °C / +45 °C)  
LT = from 840 W to 17995 W (-30 °C / +45 °C)



## ICU-CM/CL

Scroll Split System for small and medium size cold rooms, low noise condensing unit and evaporator with accessories installed, supplied without piping. Thermostatic expansion valve, remote control panel. Suitable for outdoor use.

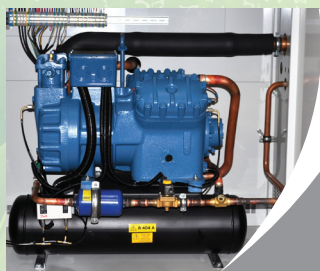
Cooling Capacity:  
MT = from 4040 W to 26300 W (-5 °C / +45 °C)  
LT = from 2250 W to 12200 W (-30 °C / +45 °C)



## ICU-TS

Shock Cooling Split System for small and medium size cold rooms, low noise condensing unit and evaporator with accessories installed, supplied without piping. Thermostatic expansion valve, remote control panel. Suitable for outdoor use.

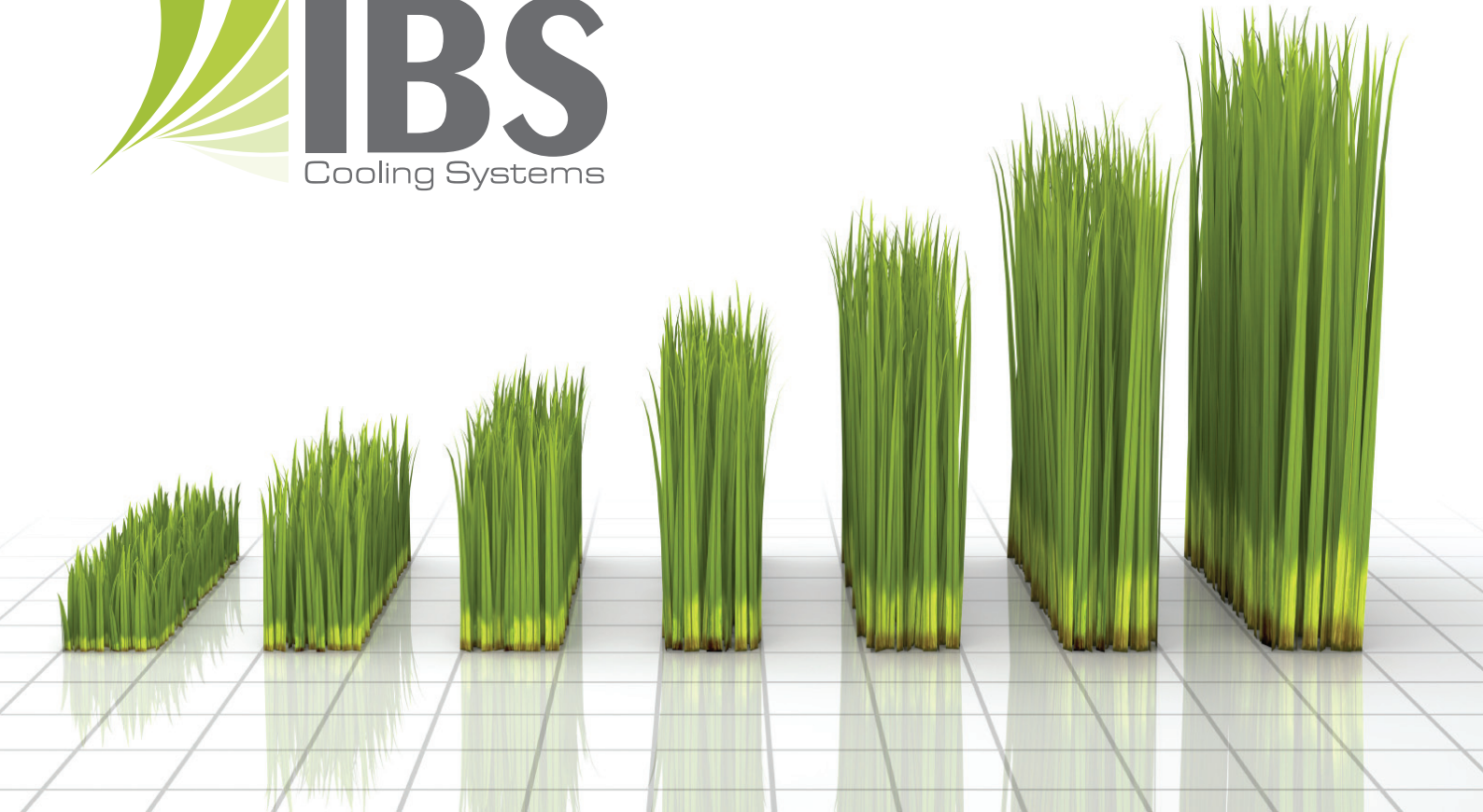
Cooling Capacity:  
LT = from 5970 W to 29500 W (-35 °C / +45 °C)



## ICU-IM/IL

Industrial Split System for small and medium size cold rooms, low noise condensing unit and evaporator with accessories installed, supplied without piping. Thermostatic expansion valve, remote control panel. Suitable for outdoor use.

Cooling Capacity:  
MT = from 42950 W to 105560 W (-5 °C / +45 °C)  
LT = from 20090 W to 31950 W (-30 °C / +45 °C)



## About IBS

IBS likes to describe itself as a business based on a distinct work ethic, love of innovation, the will to invest, and above all on an unrivaled respect for its customers and their satisfaction. These business characteristics are also shared by the companies that work with IBS, in a technical-economic network that generates products and services in the commercial refrigeration sector. The remarkable growth of IBS's supply companies, from components to service providers, should be considered the most positive and stabilizing aspect of the modern development of IBS.

IBS is the leading company in cooling and servicing in Turkey.

We produce everykind of cooling equipments in a variety of system solutions and scale in many countries in Europe.

IBS with the brand name IBS is produced by the largest producer of this type of cooling systems in Turkey. The company has all their departments (development production administration etc.) beneath one roof and they meet the ISO 9001 -2000 standards.

We also develop special systems for special projects from heatrecovery upto automisation and temporization of any kind of product.

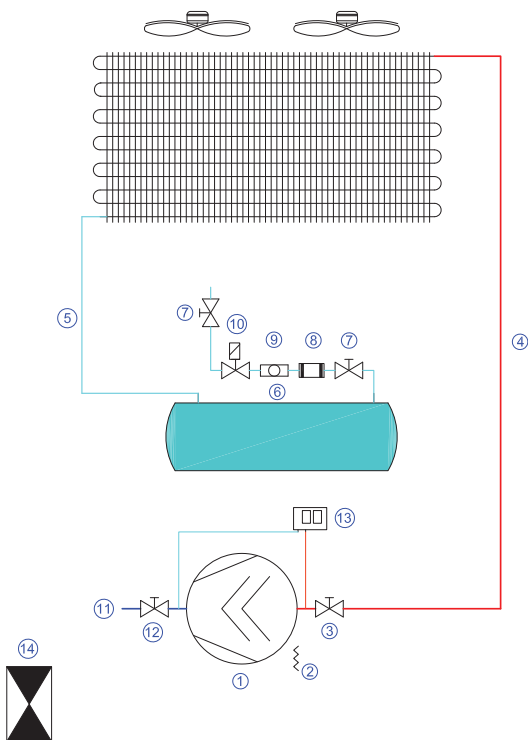
Products

We care for our customers for equipment ergonomy and for our inviorment. The future is energy and according to that point we use energy very efficient.

Our solutions includes Central Refrigeration Systems, Split Type Condensing Unit, Air Cooler, Turnkey Projects, Automation, Special Projects, 7/24 Service.



## scroll



- |                              |                        |
|------------------------------|------------------------|
| 1. Compressor                | 8. Gas Flow Gauge      |
| 2. Crankcase Heater          | 9. Filter              |
| 3. Discharge Line Valve      | 10. Solenoid Valve     |
| 4. Discharge Line            | 11. Suction Line       |
| 5. Condenser Return Line     | 12. Suction Line Valve |
| 6. Liquid Tank               | 13. Pressure Control   |
| 7. Liquid Line Service Valve | 14. Electrical Box     |

### Advantages

- Appropriate to standards
- High efficiency/High quality components
- Full cabinet unit for outside applications
- Easy assembling and mounting
- Designed for easy maintenance and mounting
- Floor or wall mount opportunities
- Wide product range
- Complete, ready to install unit
- Special models/designs are also available

### Technical specifications

- Electrostatic painted, steel galvanized unit
- Voltage protection relay
- Magneto-thermal switch on three phase models
- Contactor on all model range
- Crankcase heater
- Cu/Al Condenser
- Electronic fan speed control
- Liquid receiver
- Drier filter
- Gas flow gauge with humidity indicator
- Service/maintenance valve on liquid line
- LP/HP combined pressure on-off
- Integrated electric box
- Pressure relay valve
- Acoustic insulation
- Electric isolator
- Specially designed mounting brackets

### Optional

- Electronic fan speed control
- Soundproofing kit
- Suction Line Accumulators
- Muffler
- Oil Separator



### ICU-CM Technical Specifications

Model (With Condanser)	Compressor Model	Cooling Capacity W						Current Max. A	Electrical Power kW (-10°C) 400 V / 3 / 50Hz	Sound Power dB	Condanser		Connection Suction line Discharge Line	Weight Kg	Cabin Type
		-5/+45	-5/+50	-10/+45	-10/+50	-15/+45	-15/+50				m <sup>2</sup>	Fan			
<b>COPELAND / Scroll Compressor / High Speed Fan</b>															
ICU-CM 06 Z.C-4	ZB 15 KCE	4040	3590	3320	2940	2690	2360	6,4	2,16	44	15,33	1x450	5/8"	76	F 11
ICU-CM 07 Z.C-4	ZB 19 KCE	5000	4550	4160	3770	3430	3110	9,9	2,84	44	15,33	1x500	3/4"	96	F 11
ICU-CM 08 Z.C-4	ZB 21 KCE	6070	5500	5050	4570	4160	3770	8,7	2,85	48	28,1	1x450	3/4"	96	F 21
ICU-CM 10 Z.C-4	ZB 26 KCE	7020	6380	5840	5300	4820	4370	12,3	3,68	48	28,1	1x500	7/8"	96	F 21
ICU-CM 12 Z.C-4	ZB 30 KCE	8280	7510	6870	6210	5640	5090	13,7	4,09	45	37,47	1x500	7/8"	138	F 21
ICU-CM 15 Z.C-4	ZB 38 KCE	10250	9330	8530	7740	7030	6360	15,9	4,88	47	44,07	2x450	1"1/8	138	F 31
ICU-CM 17 Z.C-4	ZB 45 KCE	12100	10950	10050	9120	8290	7520	19,8	6,29	51	58,75	2x500	1"1/8'	138	F 31
ICU-CM 21 Z.C-4	ZB 58 KCE	16100	14600	13300	12000	10750	9570	28,8	9,27	51	72,75	4x500	1"1/8	138	F 51
ICU-CM 29 Z.C-4	ZB 76 KCE	21400	19550	17850	16200	14700	13250	26,6	9,51	52	87,3	4x450	1"3/8	185	F 51
ICU-CM 36 Z.C-4	ZB 92 KCE	26300	23700	21700	19500	17650	15650	34,4	11,86	53	116,4	4x450	1"3/8	185	F 51
<b>COPELAND / Scroll Compressor / Low Speed Fan</b>															
ICU-CM 06 Z.C-6	ZB 15 KCE	4040	3590	3320	2940	2690	2360	5,6	1,97	41	15,33	1x500	5/8"	76	F 11
ICU-CM 07 Z.C-6	ZB 19 KCE	5000	4550	4160	3770	3430	3110	7,8	2,38	41	28,1	1x450	3/4"	96	F 11
ICU-CM 08 Z.C-6	ZB 21 KCE	6070	5500	5050	4570	4160	3770	7,9	2,66	45	28,1	1x500	3/4"	96	F 21
ICU-CM 10 Z.C-6	ZB 26 KCE	7020	6380	5840	5300	4820	4370	10,2	3,22	45	37,47	1x500	7/8"	96	F 21
ICU-CM 12 Z.C-6	ZB 30 KCE	8280	7510	6870	6210	5640	5090	11,6	3,63	42	44,07	2x400	7/8"	138	F 21
ICU-CM 15 Z.C-6	ZB 38 KCE	10250	9330	8530	7740	7030	6360	14,2	4,50	44	58,75	2x500	1"1/8	138	F 31
ICU-CM 17 Z.C-6	ZB 45 KCE	12100	10950	10050	9120	8290	7520	15,6	5,37	48	72,75	2x500	1"1/8'	138	F 31
ICU-CM 21 Z.C-6	ZB 58 KCE	16100	14600	13300	12000	10750	9570	20,5	7,43	48	87,3	4x450	1"1/8	138	F 51
ICU-CM 29 Z.C-6	ZB 76 KCE	21400	19550	17850	16200	14700	13250	23,1	8,75	49	87,3	4x500	1"3/8	185	F 51
ICU-CM 36 Z.C-6	ZB 95 KCE	26300	23700	21700	19500	17650	15650	30,9	11,10	50	116,4	4x500	1"3/8	185	F 51
<b>SANYO / Scroll Compressor / Low Speed Fan</b>															
ICU-CM 10 Z.S	CSBN263H8A	7024	6520	5712	5260	4661	4263	5,70	2,71	47	28,01	1x500	7/8"	94	F 21
ICU-CM 12 Z.S	CSBN303H8G	8964	8178	7360	6720	6090	5560	6,20	3,07	48	37,47	1x500	7/8"	94	F 21
ICU-CM 15 Z.S	CSBN373H8G	10774	9954	8746	8053	7140	6573	7,80	3,96	50	44,07	2x450	7/8"	135	F 31
ICU-CM 17 Z.S	CSBN453H8G	13269	12970	10804	9891	8867	8085	9,10	4,56	52	58,75	2x500	1"1/8	135	F 31
ICU-CM 20 Z.S	CSBS235H38B	14730	13910	12223	11529	10185	9607	10,40	4,89	52	72,75	2x500	1"1/8	135	F 31

#### Model Designation

ICU	C	M	15	Z	C	4
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

- Production Serie
- Compressor Make Model  
**H:** Hermetic **C:** Scroll **S:** Semi-Hermetic
- Application Temperature  
**M:** -5/+5 °C **L:** -15 / -25 °C
- Total Displacement

- Refrigerant  
**E:** R 22 **Z:** R 404 A **Y:** R 134 A
- Compressor Make  
**B:** Bitzer **F:** Frascold **T:** Tecumseh **C:** Copeland **BS:** Bristol **S:** Sanyo
- Fan Speed  
**4:** 1400 d/d **6:** 900 d/d **8:** 660 d/d **12:** 330 d/d

### ICU-CL Technical Specifications

Model (With Condenser)	Compressor Model	Cooling Capacity W						Current Max.	Electrical Power kW (-30°C)	Sound Power	Condenser		Connection  Suction line Discharge Line	Weight  Kg	Cabin Type
		-25/+45	-25/+50	-30/+45	-30/+50	-35/+45	-35/+50				m <sup>2</sup>	Fan			
<b>COPELAND / Scroll Compressor / High Speed Fan</b>															
ICU-CL 08 Z.C-4	ZF 09 K4E	2760	2530	2250	2070	1810	1670	5,5	2,14	43	15,33	1x450	3/4"	76	F 11
ICU-CL 10 Z.C-4	ZF 11 K4E	3450	3160	2830	2590	2290	2100	6,2	2,55	43	28,10	1x400	7/8"	96	F 21
ICU-CL 12 Z.C-4	ZF 13 K4E	3970	3620	3200	2900	2400	2400	7,3	2,99	44	28,10	1x450	7/8"	96	F 21
ICU-CL 15 Z.C-4	ZF 15 K4E	4870	4460	4000	3600	2920	2920	10,0	3,99	48	37,47	1x450	7/8"	96	F 21
ICU-CL 17 Z.C-4	ZF 18 K4E	5910	5410	4800	4400	3560	3560	8,7	4,18	45	44,07	2x400	1"1/8	138	F 31
ICU-CL 21 Z.C-4	ZF 24 K4E	7330	6710	6000	5500	4360	4360	14,7	5,83	47	44,07	2x450	1"1/8	138	F 42
ICU-CL 29 Z.C-4	ZF 33 K4E	10050	9200	8180	7480	6550	5990	20,7	8,68	51	58,75	2x500	1"3/8	138	F 42
ICU-CL 36 Z.C-4	ZF 40 K4E	12450	11400	10150	9290	8130	7430	22,0	9,98	51	87,30	4x450	1"3/8	138	F 51
ICU-CL 42 Z.C-4	ZF 48 K4E	15050	13750	12200	11200	9800	8990	27,5	11,66	52	116,40	4x450	1"3/8	185	F 51
<b>COPELAND / Scroll Compressor / Low Speed Fan</b>															
ICU-CL 08 Z.C-6	ZF 09 K4E	2760	2530	2250	2070	1810	1670	6,1	2,27	40	15,33	1x500	3/4"	76	F 11
ICU-CL 10 Z.C-6	ZF 11 K4E	3450	3160	2830	2590	2290	2100	6,2	2,55	40	28,10	1x450	7/8"	96	F 21
ICU-CL 12 Z.C-6	ZF 13 K4E	3970	3620	3200	2900	2400	2400	6,7	5,69	41	28,10	1x500	7/8"	96	F 21
ICU-CL 15 Z.C-6	ZF 15 K4E	4870	4460	4000	3600	2920	2920	8,2	7,18	45	37,47	1x500	7/8"	96	F 21
ICU-CL 17 Z.C-6	ZF 18 K4E	5910	5410	4800	4400	3560	3560	8,5	7,46	42	44,07	2x450	1"1/8	138	F 31
ICU-CL 21 Z.C-6	ZF 24 K4E	7330	6710	6000	5500	4360	4360	4,3	11,31	44	58,75	2x500	1"1/8	138	F 42
ICU-CL 29 Z.C-6	ZF 33 K4E	10050	9200	8180	7480	6550	5990	16,1	7,26	48	88,10	2x500	1"3/8	138	F 42
ICU-CL 36 Z.C-6	ZF 40 K4E	12450	11400	10150	9290	8130	7430	20,3	9,61	48	87,30	4x500	1"3/8	138	F 51
ICU-CL 42 Z.C-6	ZF 48 K4E	15050	13750	12200	11200	9800	8990	25,4	12,17	49	116,40	4x500	1"3/8	185	F 51
<b>SANYO / Scroll Compressor / High Speed Fan</b>															
ICU-CL 12 Z.S	CSBN303L8A	3865	3535	3060	2790	2530	2305	6,4	3,48	43	28,01	1x450	5/8"	95	F 21
ICU-CL 15 Z.S	CSBN373L8A	5675	5210	4480	4100	3700	3380	7,7	5,05	45	37,47	1x500	5/8"	97	F 21

### Model Designation

ICU	C	L	21	Z	C	4
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

**1** Production Serie

**2** Compressor Make Model  
**H:** Hermetic **C:** Scroll **S:** Semi-Hermetic  
**3** Application Temperature  
**M:** -5/+5 °C **L:** -15 / -25 °C

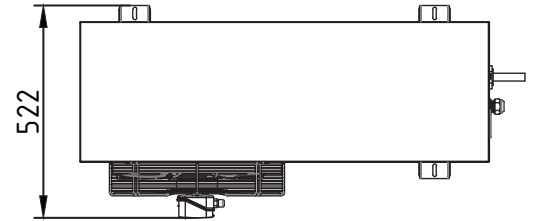
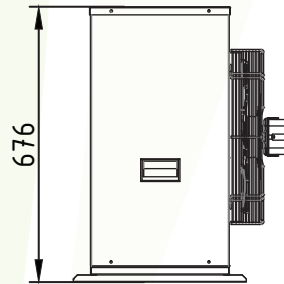
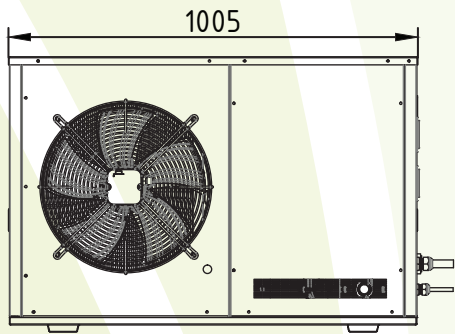
**4** Total Displacement

**5** Refrigerant  
**E:** R 22 **Z:** R 404 A **Y:** R 134 A

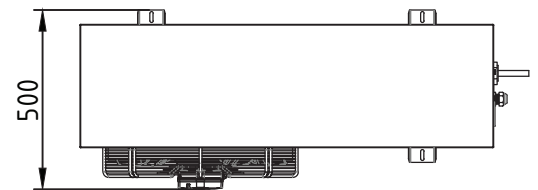
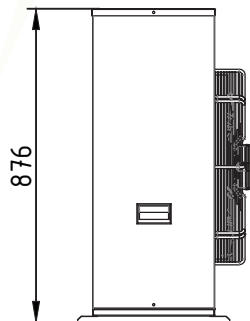
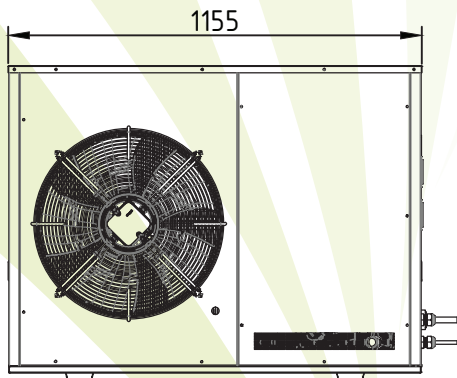
**6** Compressor Make  
**B:** Bitzer **F:** Frascoltd **T:** Tecumseh **C:** Copeland **BS:** Bristol **S:** Sanyo  
**7** Fan Speed  
**4:** 1400 d/d **6:** 900 d/d **8:** 660 d/d **12:** 330 d/d



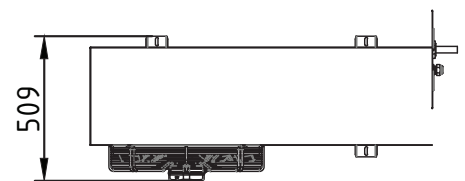
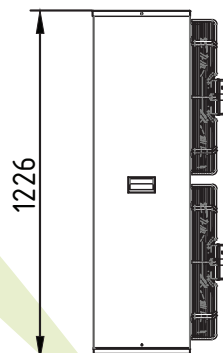
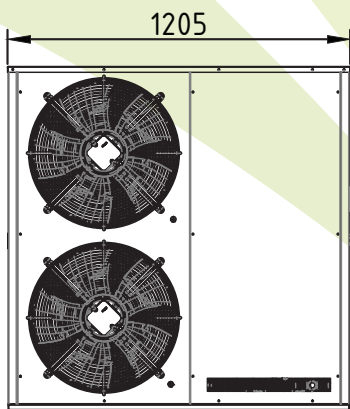
### F11



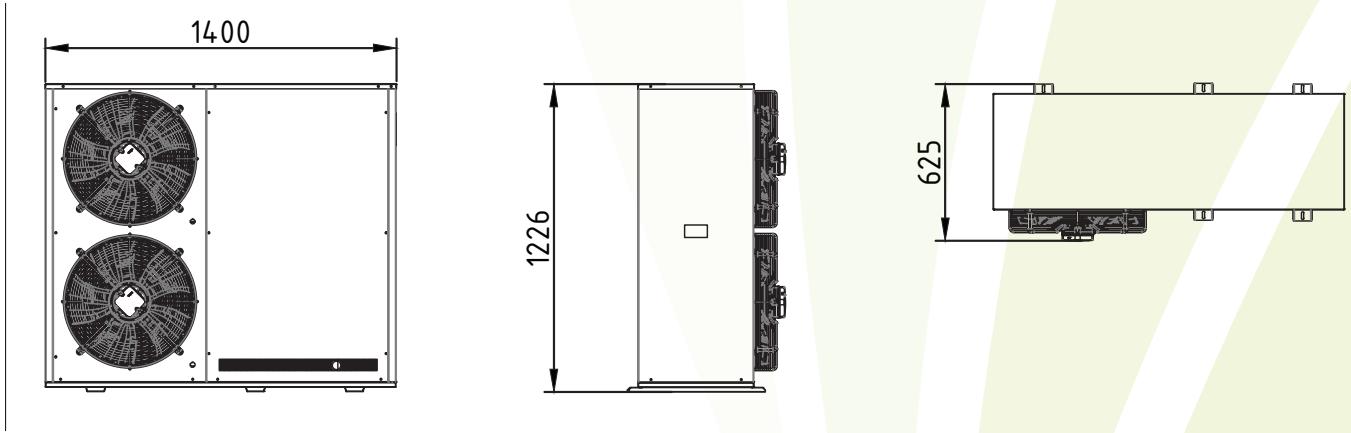
### F21



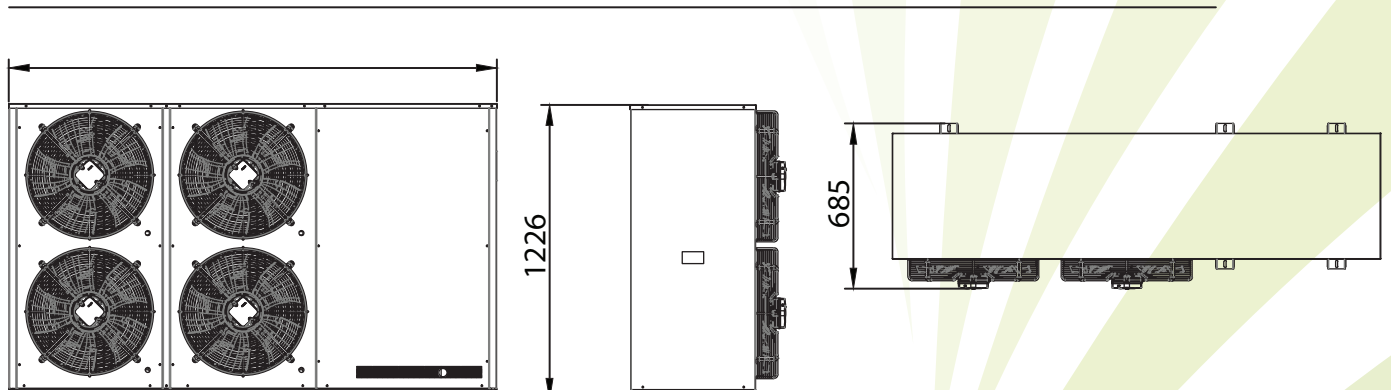
### F31



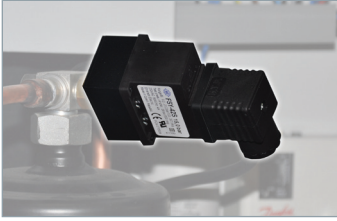
F42



F51







Fan Speed Control



Combine Pressure Control



Safety Switch



Liquid Indicators Unit



Solenoid Valves



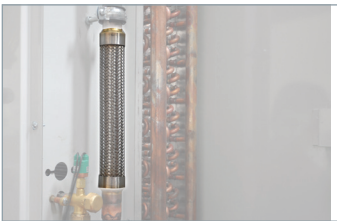
Fan



Pressure Manometer



Helical Oil Separators



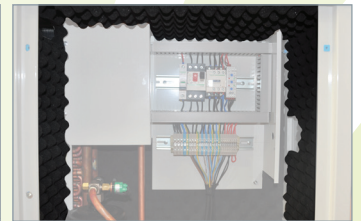
Vibration Eliminators



Vertical Liquid Receivers



Easy to Carry



Acoustic Insulation



Connection



Electrical Board



Efficient use of Condanser



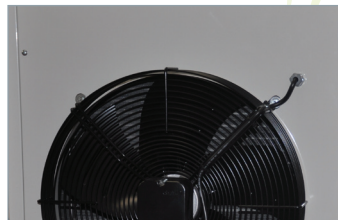
Suction Line Accumulators



Easy Installation Equipment



Sound Jacket



Cabinet Unit for Outside Applications



Filter Driers



Selenoid Valves



Rotolock Valves



Subcooling



Pressure Switch



**IBS Isıtma Soğutma Havalandırma Taah. San. ve Tic. Ltd. Şti.**

Dudullu Organize Sanayi Bölgesi 2.Cadde No:39 34776 Y. Dudullu - İstanbul

Tel: +90 (216) 466 04 05 - 06 Fax: +90 (216) 466 05 70

info@ibs.info.tr www.ibs.info.tr



Registered ISO 9001:2000

