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Building Trust since 1968

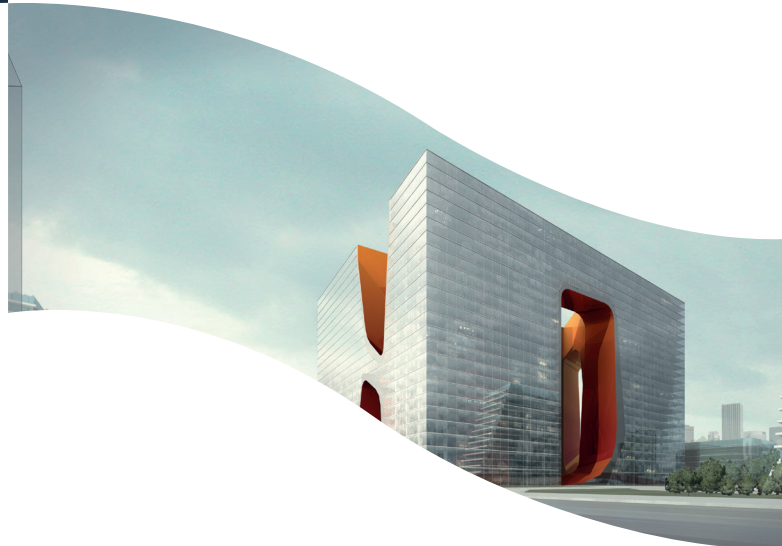
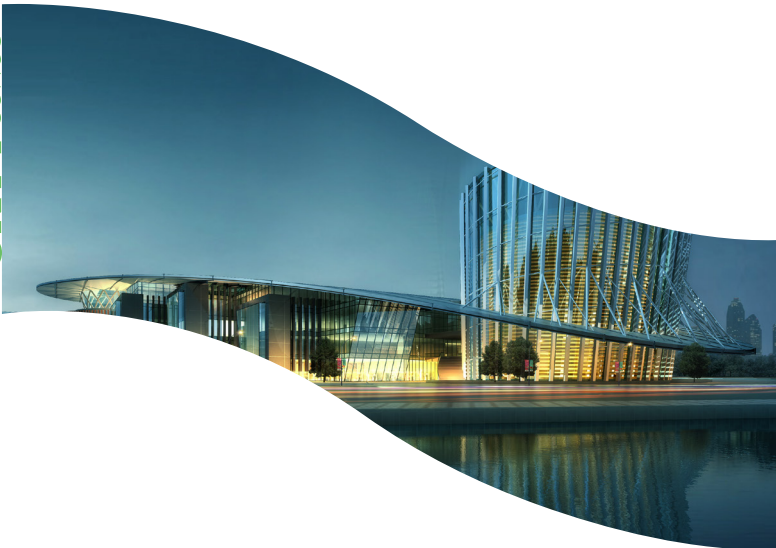
ROOFTOP PACKAGED

Air Conditioners

Tropical Range for **T3** Air Climates

URTTseries

**Technical
Catalogue**



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01

DESCRIPTION

1.1

NOMENCLATURE

URTT Series

Tropical Range Rooftop Packaged Unit for T3 Air Climates

❄️ 18 kW – 275 kW

- High Energy Efficient Packaged Air Conditioners
- Eco-Friendly R410A Refrigerant Gas
- Monoblock Compact Unit
- Advanced Control Options
- Optimal Energy Efficiency, Air Quality and Comfort
- Wide and Versatile Range
- Energy Saving Solutions for All Commercial Buildings

Each kW is under control!

plug & play



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The nomenclature of URTT units is as follows:

Unit Code	Version	Cooling Mode	Pressure Level	Model No
URTT	BSC ADV	SS: Cooling Only	YB: High Pressure OB: Medium Pressure DB: Low Pressure	018-276

02

INTRODUCTION

At Untes, we are dedicated to provide our customers with the highest quality products and the most innovative solutions. The ergonomic and compact design of Untes URTT packaged rooftop units makes them the perfect solution for the air conditioning of commercial spaces such as cinemas, shopping malls, storages and offices. URTT range packaged air conditioners are completely factory assembled, internally wired and charged with ecological R-410a refrigerant. The functional tests and tightness tests are conducted before delivery. The units are plug and play type and ready for installation. They are designed for ducted systems which will enable them to be installed on roof tops or on the ground.

03

GENERAL FEATURES

The unit casing and the access doors are made of high quality galvanized steel with polyester powder coating. The unit standard color code is **RAL 7035**.

A silent and efficient operation is guaranteed by the use of scroll compressors and eco-friendly refrigerant **R410A**. The global warming potential of this refrigerant is **GWP:2088**. All the models comprise oil crankcase with crankcase heater and anti-vibration mountings as standard.

URTT 018-023-032 contain one compressor each. **054-064-072-080-094-108-122-138-154-155-176-179-204** models contain two compressors with two step capacity control. **244-276** models contain four compressors with four step capacity control.

Evaporator and condenser coils are high quality copper tube/aluminum fin coils. If required a hydrophilic/ epoxy/heresite coating can be applied to these coils.

The outer part of the condenser coil fins can be easily distorted by external factors and can form in this case a cutting edge and thus become harmful hence protection grille option for the condenser.

G4 filters are available as standard inside URTT units. This filter is placed at the air inlet side of the unit as a protection for the inner components of the units.

The system is designed to generate a constant pressure and air flow, and in order to do this, it is necessary to adjust the rotational speed of the supply fans according to the system requirements. Normally standard pulleys are available. Optionally, the variable speed setting can also be made with the variable pitch pulleys.

04 COMPONENT FEATURES

4.1. COMPRESSOR

In order to satisfy the required performance and comfort, URTT range rooftop packaged units are equipped with high efficiency and silent hermetic scroll compressors. The compressors and their auxiliary equipment are sound-proofed and thermally insulated. The connections of the equipment to the device are made with specially designed parts and the vibration is reduced to a minimum to maintain a stable operation of the compressors.



The compressors are hermetic scroll. Scroll compressors have the following characteristics :

- High efficiency.
- Quiet operation, low sound levels.
- Fewer moving parts.
- Compact and light design.
- Crank case heater as standard feature to prevent liquid migration.
- Internal Thermal Protection.
- Two refrigerant circuits on larger units provide efficient part load.
- Anti-vibration kits for silent operation.

» Compressor

4.2. CONDENSER

Condenser coils are manufactured inner grooved copper tubes with corrugated aluminum fins to ensure optimum heat transfer. Each coil is manufactured with 5/16" (8.0mm) O.D and 0.3 mm thickness to handle the high pressure of R410A. Condenser coils are tested against leakage by air pressure at 45 bar (650 Psig). Dust storms and the general level of available maintenance in countries with tropical climate requires that the condenser coil design shall provide long life and maintenance-free operation with the least possible operational blockage in the condenser. Large condenser surface and sensible air flow across the condenser ensures a low temperature differential between condensing temperature and the high ambient making the URTT packaged unit perform efficiently and durably. All the condensers are designed for the unit operation up to 52°C ambient temperature. Epoxy, heresite or hydrophilic coil coatings are available as an option against corrosive air conditions.

4.3. REFRIGERANT CIRCUIT

R-410A eco-friendly refrigerant is used for the cooling process and provide an operation in "only cooling" mode. The asymmetric cooling design of the units ensures a three-step capacity control (for units with more than one compressor). The evaporator and the condenser are direct expansion type coils and made of copper tubes and aluminum fins. URTT series contains, as standard, correctly sized and piped refrigerant lines including sight glass, filter drier, thermostatic expansion valve, low and high pressure switches (before/after the compressors) and a full operating charge of R-410a in each circuit. Solenoid valves, shut-off valves and check valves are available as option.

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4.4. CONDENSER & EVAPORATOR FANS

Condenser fans are high efficiency fans with low sound levels. The condenser fan section has a special built-in design. These fans, which are located on the outside of the unit, have a single purpose which is allowing the air to flow through the condenser and cool down the refrigerant in the coil. Since these fans are placed in direct contact with the outside air, they might be exposed to harsh conditions, and thus a regular control needs to be conducted to check if they have been covered by any object. The materials that disrupt the air flow may prevent the fan from performing its duty which leads the system operation to deteriorate. Direct driven condenser fans made of Sickle-shaped Aluminum blades with serrated trailing edge powered by thermally protected TEAO motors with minimum IP54 protection. The motors are selected for high ambient operation.

Belt driven high efficient and silent centrifugal fans are used for evaporator fan. These fans are forward curved centrifugal double inlet, double width, statically and dynamically balanced. Bearings used in the fans are self-aligning and lubricated for life. Fans are connected to the structure with flexible connection to minimize the vibration. The motors are factory wired to the control panel where the motor starters are located to control the operation of the motors. The motors conform to relevant IEC standards. IE2 electrical motors, totally Enclosed Fan Cooled (TEFC), IP-55 protected with Class F insulation. Supply air fans are equipped with fixed pulleys and variable pitch pulleys can be added as option to ensure variable rotational speed.



» Condenser &
Evaporator Fans



4.5. EVAPORATOR

Evaporator coils are made of copper tubes and aluminum fins to ensure optimum heat transfer. Each coils are manufactured with 5/16" (7.93 mm) O.D and 0.35 mm thickness. Evaporator coils are tested against leakage by air pressure at 35 bar (508 Psig). The DX evaporator coils are complete with seamless copper headers. Supply headers incorporate a correctly sized distributor.

Evaporator coil are supplied with suitable size thermostatic expansion valve(s) and multi-circuited distributors providing capacity modulation to match the compressors. Corrugated fins and inner grooved tubes design uses the evaporator surface effectively by creating uniform air turbulence and optimum heat transfer over the entire finned surface. Epoxy, heresite or hydrophilic coil coatings are available as an option against corrosive air conditions.



» Evaporator



4.6. CASING / STRUCTURE

Designed for easy handling and low cost, for installation and shipment. Each Packaged Unit is factory assembled and mounted on a rigid base. URTT units are made of load bearing structures and high quality galvanized steel with minimum 80 microns electrostatic powder coated sheets. The entire casing panels are designed to be leak proof and resistant against severe atmospheric conditions and sunlight. Drain pans are made of coated and sloped galvanized steel or optionally of stainless steel. Plastic alloy materials are used to protect the accessories and the devices mounted on the units against rain water and sunlight. The units are designed and installed with several access doors to provide easy maintenance. The evaporator section is insulated from all sides with EPDM insulation. The insulation material meets the fire requirements of BS476 (United Kingdom Fire Regulations) and is secured with mechanical fasteners in addition to water resistant adhesive.

4.7. CONTROL PANEL

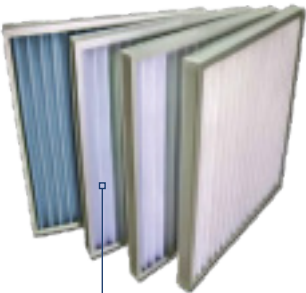
The unit mounted control panel enclosure is fabricated out of heavy gauge sheet steel in powder coated baked finish. The enclosure conforms to IP54 (standard) and IP55 (option). Unit control provides a reliable cooling control utilizing inputs from relevant sensors and other elements. Control system improves compressor life and enhances the reliability of the compressor and increase the efficiency at part loads. With the standard control board and the remote keyboard, turning on/off the unit or choosing the heating/cooling mode is possible. The optional microprocessor electronic control comprises automatic transition between heating and cooling, dehumidifying control, error detection, service intervention warning, dirty filter warning, daily and weekly programs and Modbus RTU for BMS. Additionally, the room control unit provided as an option with the microprocessor control allows the control of the unit power (on/off), heating/cooling and the temperatures set point as well as general warning display.



- Individual compressor, condenser fan motors and evaporator fan motor contactors.
- Motor protector circuit breaker for condenser and evaporator fan motors.
- Voltage monitoring module for protection against under voltage, over voltage, phase loss, phase reversal and phase unbalance of the incoming voltage.
- Unit Controller for the operational and safety control.
- Control circuit breaker.
- Control circuit on/off switch.
- Control Relays.
- Power and control terminal blocks.
- Compressor short cycling protection.
- High pressure protection.
- Low pressure protection.

4.8. FILTER

Special mounting cases are designed for the filters to be used in the units. 50 mm G4 class synthetic filters are available as standard. Metal filters and bag filters are optional for different applications. Filters are located on a slide rail to provide easy access for removal and for maintenance.



>> Filter

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05 OPERATION TEMPERATURE LIMITS

Cooling	Outdoor Air Temperature		Evaporator Inlet Temperature	
	DB [°C]	WB [°C]	DB [°C]	WB [°C]
Minimum	15	-	18	14
Maximum	52	-	38	24

06 OPTIONS AND FEATURES

6.1. FILTER CLOGGING ALARM - OFKI

Clogged filters will cause decrease airflow so the room will suffer from low airflow, so this will make uncomfortable indoor air conditions. In such case the clogged will be detected by differential pressure switch and the controller will generate an alarm thru the control panel. This option is only available with ADV SS type.

6.2. OUTDOOR AND INDOOR COIL COATING

Coils frames in units are painted as standard. Depending on the operating conditions, the following coating alternatives are offered against corrosion of the internal and external coils of the device;

- Indoor Coil Coating - Heresite- **EBKA**
(Whole indoor coil and all copper pipes of indoor side)
- Indoor + Outdoor Coil Coating Heresite- **EKBK**
(Whole indoor and outdoor coils and all copper pipes)
- Indoor Coil Fin Coating Hydrophilic- **ELRA**
- Indoor +Outdoor Coil Fin Coating Hydrophilic- **ELXA**
- Indoor +Outdoor Coil Fin Coating Hydrophilic- **EKRK**
- Indoor +Outdoor Coil Fin Coating Epoxy- **EKXK**

6.3. OUTDOOR COIL PROTECTION GRILL - POLYETHYLENE (PE) MESH- KBKT

The surface areas of the coils are optionally covered by a painted plastic protection grill.

6.4. — Drain pan is made of stainless steel.
**STAINLESS STEEL
DRAIN PAN - PZDT**

6.5. — An electrical heater may be used in all models of URTT to heat the air and/or to control dehumidification as reheat. Please check section 6.10 for further detailed information about dehumidification control.
**SUPER/HIGH/
LOW CAPACITY
ELECTRICAL
HEATER- EISK/EIDK/
EIYK**

6.6. — Electronic expansion valve option is available for the applications that require sensitive superheating control through evaporator. This option also enhance the life cycle of the compressors.
**ELECTRONIC
EXPANSION
VALVE - EXPV**

6.7. — This is an option that is to be used for controlling evaporator pressure when the thermal load is decreased in the units that are operating with higher fresh air rates. If this option is used a capacity control is also possible by the supply air temperature. This option is only available with ADV SS type.
**HOT GAS
BYPASS - HGBS**

6.8. — Room Control is used to enable the control the ADVSS series from the room instead return air sensors. (Room displays are standard for BSC series.)
**ROOM DISPLAY
UNIT - ODUN**

6.9. — This option closes the solenoid valves before the compressor stops and prevents the liquid flow to the compressor during cycling off.
**PUMP-DOWN
APPLICATION -
PUDN**

6.10. — This option measures the relative humidity of the room via return air. If the measured value is higher than the pre-set point then dehumidification mode starts on. This option is only available with ADV SS type.
**DEHUMIDIFICA-
TION CONTROL
FEATURE - NAKO**

6.11. — Supply air temperature is measured and controlled by a duct type temperature sensor (supplied loose). This option is only available with ADV SS type.
**SUPPLY TEMPE-
RATURE CONT-
ROL - BSKO**

6.12. — This option is used to detect any smoke caused by a possible fire. If smoke is sensed and then the sensor sends signal to the controller, controller stops the unit and generate fire alarm. In addition to this this option can also be used with the directly external fire management system if available in the building. In this case the alarm will be generated by the external fire system and the controller will again stop the unit. This option is only available with ADV SS type.
**SMOKE DETEC-
TOR- DDYA**

6.13. — The unit is stopped if an alarm is received from the external fire system. This option is standard in ADV SS type. For BSC SS type is available optional.
**EXTERNAL FIRE
ALARM - EFAL**

6.14. — This option enables the compressor suction gas pressure to be monitored from the user panel. This option is only available with ADV SS type.
**LOW PRESSURE
TRANSMITTER -
ALBT**

6.15. — This option enables the compressor gas discharge pressure to be monitored from the controller screen. This option is only available with ADV SS type.
**HIGH PRESSURE
TRANSMITTER -
YKBT**

6.16. — BMS communication is possible by adding an additional module of building automation system (BMS) (Modbus RTU). This option is only available with ADV SS type.
**MODBUS RTU
COMMUNICATION
CARD - MBUS**

6.17. — During maintenance and service periods, this switch enables the users to cut the main electricity power of the unit from the electrical panel that is placed onto the unit, thus there will not be any need to go to the main board in order to isolate the power.
**MAIN LOAD
DISCONNECT
SWITCH - AYAY**

6.18. — This option provides the unit an IP55 type electrical protection that is enduring against the outdoor conditions.
**IP55 ELECTRICAL
PANEL - EP55**

6.19. — A high pressure switch is available in the units as an electrical safety component, and in case this safety component breaks downs this valve is used as a mechanical safety valve.
**SAFETY RELIEF
VALVE - EMVT**

6.20. — This option provides a free maintenance of the refrigerant piping (cleaning of the refrigerant piping from dirt, humidity and residue) without emptying the gas in the system. In order to enable the users to change the filter, shut-off valves are placed before and after the filter dryer.
**BALL TYPE
SHUT-OFF VALVE
(BEFORE AND
AFTER FILTER
DRIER) - KSSV**

6.21. FILTER

The units have G4 filters as standard, and also available to place additional following filter class;

G4 panel + F7 Bag filter (Combined Filter) G4F7
Metallic panel + F7 Bag filter (Combined Filter) MFF7
Metallic panel + M5 Bag filter (Combined Filter) MFF5
M5 Bag filter (535 mm Length) URM5
Metallic washable panel filter URMF (50 mm Thickness)

6.22. ADJUSTABLE BELT PULLEY SYSTEM-AYKS

This option not only prevents low pressure problems in the cooling circuits of the device operated at low ambient temperatures, but also contributes to energy efficiency. This option is only available in ADV SS type.

6.23. LOW AMBIENT KIT – DOSK

This option not only prevents low pressure problems in the cooling circuits of the device operated at low ambient temperatures, but also contributes to energy efficiency. This option is only available in ADV SS type.

6.24. HIGH THERMAL INSULATION CLASS – YIYS

This option minimizes heat loss by extra strengthening of the insulation in the suction line and the base sheet. The panel insulations are increased from 10 mm to 19 mm and pipe insulations are increased from 7 mm to 13 mm.



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07

CAPACITY RATINGS

URTT Series		018-094									
		018	023	032	037	047	054	064	072	80 7	94 7
Technical Specifications											
Gross Cooling Capacity (1)	kW	18,81	23,61	32,08	37,87	47,9	55,97	64,13	73,79	82,18	95,05
Net Cooling Capacity (1)	kW	18,54	23,06	31,38	37,17	46,95	55,07	62,91	72,09	80,53	92,64
Nominal Absorbed Power (2)	kW	6,1	7,8	11,5	12,9	15,5	18,77	22,9	26,0	28,5	32,1
EER (3)	BtuW-h	10,16	9,71	9,08	9,68	9,95	9,81	9,17	9,25	9,48	9,72
IEER (4)	BtuW-h	11,1	10,1	9,6	10,4	10,6	11,1	10,3	10,4	10,4	10,4
Condenser Fan											
Circuit 1 Air Flow	m³/h	9.857	9.773	16.161	10.130	10.659	9.830	16.129	17.767	18.890	21.039
Circuit 2 Air Flow	m³/h	9.857	9.773	16.161	10.130	10.659	16.129	16.129	18.890	18.890	21.039
Type		Axial									
Quantity	pcs.	1					2				
Fan Diameter	mm	560	560	630	710	800	560/630	630	630/710	710	800
Power	kW	0,9	0,9	2,5	2,2	1,7	3,35	5,0	4,7	4,7	3,5
Supply Fan											
Nominal Air Flow	m³/h	2.800	3.600	4.750	5.600	7.200	8.200	9.300	10.800	12.100	14.000
Minimum Air Flow	m³/h	2.000	2.400	3.400	4.000	4.800	6.100	6.800	7.650	8.500	10.400
Maximum Air Flow	m³/h	3.800	4.400	6.000	6.800	8.800	10.100	12.000	13.400	14.900	17.000
ESP (5)	Pa	518	530	606	511	571	590	564	676	583	670
Type		Radial									
Quantity	pcs.	1									
Fan Diameter	mm	230	230	255	305	381	381	381	458	458	458
Motor Power (Low)	kW	0,55	0,75	1,1	1,1	1,5	2,2	3	3	3	4
Motor Power (Medium)	kW	0,75	1,1	1,5	1,5	2,2	3	4	4	4	5,5
Motor Power (High)	kW	1,1	1,5	2,2	2,2	3	4	5,5	5,5	5,5	7,5
Number of Poles (L/M/H)	-	4P/4P/4P									
Compressor											
Compressor Quantity	pcs.	1			2						
Capacity Control											
Steps	pcs.	1			2						
Energy											
Power Data		380-420V / 3Ph / 50 Hz / Neutral + earthing									
Refrigerant											
Type		R410a									
Quantity	kg	5	6	8	5/5	7/7	7/8	8/8	8/10	10/10	13/13
Sound Information											
Sound Power Level	dB(A)	81	81	86	86	77	87	89	89	89	79
Sound Pressure Level (6)	dB(A)	59	59	64	64	55	65	67	67	67	57
Other											
Weight	kg	374	402	459	512	648	814	836	895	966	1.095
Drain diameter	inch	¾"	¾"	¾"	1"	1"	1"	1"	1"	1"	1"

1) Capacities as per AHRI 340/360-2019 standard @ 26,67/19,4 °C coil inlet and 35°C DB ambient temperature.
2) Nominal Absorbed Power values are calculated at high pressure conditions according to metal filter and in accordance with AHRI 340/360-2019 standard.
3) Energy Efficiency Ratio at full load as per AHRI 340/360-2019 standard.
4) Integrated Energy Efficiency Ration as per AHRI 340/360-2019 standard.
5) Maximum ESP at nominal airflow rate for high pressure class units according to metal filter.
6) Sound pressure value is at a distance of 5 meters from the source and direction factor is Q:2.
7) AHRI certified products.



URTT Series		108-276									
		108 ⁷	122 ⁷	138	154	155	176	179	204	244	276
Technical Specifications											
Gross Cooling Capacity (¹)	kW	100,08	113,1	136,66	153,22	154,07	176,32	177,16	201,06	241,36	273,28
Net Cooling Capacity (¹)	kW	96,73	109,76	133,03	149,29	151,18	171,22	173,2	197,32	234,99	267,2
Nominal Absorbed Power (²)	kW	39,1	46,8	50,3	54,6	50,72	64,4	59,16	65,89	82,48	90,37
EER (³)	BtuW-h	8,28	7,91	8,93	9,26	10,11	9,00	9,92	10,17	9,68	10,04
IEER (⁴)	BtuW-h	8,3	7,9	9,8	10,2	11,5	9,90	11,3	11,7	10,4	11
Condenser Fan											
Circuit 1 Air Flow	m³/h	21.039	34.925	34.925	37.086	41.321	37.086	41.321	45.597	62.793	59.821
Circuit 2 Air Flow	m³/h	34.925	34.925	37.086	37.086	41.321	49.148	45.597	45.597	62.793	59.821
Type		Axial									
Quantity	pcs.	3	4							6	
Fan Diameter	mm	800/630	630	630/710	710	800	710/800	800/910	910	800	800
Power	kW	6,5	9,5	9,5	9,4	6,8	11,1	6,9	6,9	10,2	10,3
Supply Fan											
Nominal Air Flow	m³/h	16.600	18.800	21.200	23.700	23.700	27.000	27.000	30.500	37.400	42.500
Minimum Air Flow	m³/h	11.800	13.300	15.000	16.800	16.800	19.600	19.800	21.950	26.000	30.500
Maximum Air Flow	m³/h	20.000	22.600	25.400	28.000	27.800	32.000	31.500	35.500	43.000	48.500
ESP (⁵)	Pa	447	410	705	541	863	587	847	943	824	741
Type		Radial									
Quantity	pcs.	1									
Fan Diameter	mm	450	500	500	458	630	458	630	710	710	800
Motor Power (Low)	kW	4	4	5,5	5,5	5,5	7,5	7,5	7,5	11	11
Motor Power (Medium)	kW	5,5	5,5	7,5	7,5	7,5	11	11	11	15	15
Motor Power (High)	kW	7,5	7,5	11	11	11	15	15	15	18,5	18,5
Number of Poles (L/M/H)	-	4P/4P/4P									
Compressor											
Compressor Quantity	pcs.	2								4	
Capacity Control											
Steps	pcs.	2								4	
Energy											
Power Data		380-420V / 3 ph / 50 Hz / Neutral + earthing									
Refrigerant											
Type		R410a									
Quantity	kg	13/14	15/15	14/19	19/19	19/20	19/24	19/25	25/25	29/30	31/31
Sound Information											
Sound Power Level	dB(A)	89	92	92	92	86	96	86	86	87	88
Sound Pressure Level (⁶)	dB(A)	67	70	70	70	64	74	64	64	65	66
Other											
Weight	kg	1.304	1.390	1.579	1.702	1.936	2.016	2.097	2.230	2.676	3.006
Drain diameter	inch	1 ¼"									

- 1) Capacities as per AHRI 340/360-2019 standard @ 26,67/19,4 °C coil inlet and 35°C DB ambient temperature.
- 2) Nominal Absorbed Power values are calculated at high pressure conditions according to metal filter and in accordance with AHRI 340/360-2019 standard.
- 3) Energy Efficiency Ratio at full load as per AHRI 340/360-2019 standard.
- 4) Integrated Energy Efficiency Ration as per AHRI 340/360-2019 standard.
- 5) Maximum ESP at nominal airflow rate for high pressure class units according to metal filter.
- 6) Sound pressure value is at a distance of 5 meters from the source and direction factor is Q:2.
- 7) AHRI certified products.

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MODEL	Indoor Coil			Outdoor Coil Inlet Temperature																
				35°C				40°C				46°C				52°C				
	*Airflow Rate [m3/h]	*DB Temp [°C]	*WB Temp [°C]	*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]	*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]	*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]	*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]	
URTT 018	2000	24	17.1	16.36	16.25	11.22	4.66	15.69	15.59	10.90	5.14	14.75	14.64	10.43	5.79	13.70	13.60	9.92	6.49	
		27	19.0	17.37	17.27	11.87	4.69	16.68	16.58	11.55	5.19	15.74	15.64	11.09	5.83	14.66	14.56	10.57	6.54	
		30	21.1	18.46	18.36	12.32	4.73	17.72	17.61	12.01	5.23	16.76	16.66	11.59	5.88	15.59	15.49	11.08	6.59	
		34	23.2	19.75	19.65	13.35	4.77	18.96	18.86	13.05	5.27	17.94	17.84	12.63	5.93	16.79	16.69	12.18	6.64	
	2800	24	17.1	17.58	17.31	12.78	4.70	16.82	16.55	12.42	5.19	15.79	15.52	11.93	5.83	14.56	14.29	11.36	6.53	
		27	19.0	18.65	18.38	13.56	4.74	17.68	17.41	13.13	5.23	16.64	16.37	12.70	5.87	15.49	15.22	12.24	6.58	
		30	21.1	19.76	19.49	14.26	4.77	18.91	18.65	13.93	5.27	17.83	17.57	13.48	5.93	16.61	16.35	12.98	6.63	
		34	23.2	21.09	20.83	15.63	4.82	20.10	19.83	15.26	5.32	18.96	18.70	14.85	5.97	17.69	17.42	14.35	6.67	
	3800	24	17.1	18.38	17.77	14.28	4.73	17.55	16.95	13.93	5.22	16.48	15.88	13.45	5.87	15.66	15.06	13.09	6.33	
		27	19.0	19.43	18.83	15.37	4.76	18.57	17.97	15.03	5.26	17.47	16.87	14.58	5.91	16.67	16.07	14.26	6.37	
		30	21.1	20.72	20.12	16.29	4.80	19.78	19.17	15.94	5.30	18.49	17.89	15.43	5.95	17.65	17.05	15.12	6.42	
		34	23.2	22.04	21.43	18.02	4.85	21.01	20.41	17.59	5.35	19.81	19.21	17.10	6.00	18.98	18.38	16.74	6.47	
URTT 023	2400	24	17.1	20.38	20.20	13.81	5.85	19.47	19.29	13.37	6.47	18.28	18.10	12.77	7.31	17.02	16.84	12.16	8.27	
		27	19.0	21.66	21.48	14.60	5.92	20.72	20.54	14.18	6.54	19.49	19.31	13.58	7.39	18.15	17.97	12.93	8.35	
		30	21.1	23.02	22.84	15.17	5.98	22.02	21.84	14.75	6.62	20.73	20.56	14.18	7.47	19.26	19.08	13.54	8.43	
		34	23.2	24.64	24.46	16.44	6.06	23.58	23.40	16.04	6.70	22.21	22.03	15.47	7.56	20.67	20.49	14.81	8.53	
	3600	24	17.1	22.24	21.68	16.07	5.94	21.16	20.60	15.67	6.57	19.70	19.14	14.88	7.40	18.73	18.18	14.46	8.03	
		27	19.0	23.28	22.72	16.96	6.00	22.23	21.67	16.55	6.63	20.85	20.29	15.99	7.48	19.86	19.30	15.58	8.11	
		30	21.1	25.00	24.44	18.03	6.07	23.82	23.26	17.58	6.72	22.34	21.78	16.97	7.57	21.20	20.64	16.50	8.19	
		34	23.2	26.54	25.98	19.79	6.14	25.30	24.74	19.36	6.80	23.72	23.16	18.76	7.66	22.55	21.99	18.27	8.29	
	4400	24	17.1	22.82	21.88	17.18	5.97	21.71	20.77	16.71	6.60	20.31	19.37	16.08	7.44	19.26	18.32	15.61	8.06	
		27	19.0	24.12	23.18	18.48	6.04	22.97	22.03	18.03	6.67	21.52	20.58	17.44	7.52	20.48	19.54	17.01	8.15	
		30	21.1	25.76	24.82	19.59	6.11	24.49	23.55	19.13	6.75	22.78	21.84	18.46	7.60	21.68	20.74	18.05	8.23	
		34	23.2	27.36	26.42	21.73	6.18	26.02	25.08	21.18	6.83	24.41	23.47	20.52	7.70	23.31	22.37	20.03	8.34	
3400	24	17.1	28.01	27.72	19.14	7.59	26.56	26.27	18.41	8.44	24.86	24.57	17.59	9.65	22.97	22.68	16.69	11.06		
	27	19.0	29.79	29.50	20.35	7.68	28.37	28.08	19.70	8.54	26.54	26.25	18.79	9.74	24.36	24.07	17.68	11.14		
	30	21.1	31.66	31.37	21.15	7.77	30.19	29.90	20.54	8.64	28.15	27.86	19.58	9.83	26.06	25.77	18.72	11.24		
	34	23.2	33.92	33.63	22.96	7.88	32.34	32.05	22.35	8.76	30.32	30.02	21.51	9.96	27.85	27.56	20.45	11.33		
URTT 032	4750	24	17.1	30.09	29.39	21.81	7.70	28.60	27.90	21.11	8.56	26.47	25.77	20.07	9.73	24.31	23.61	19.09	11.14	
		27	19.0	31.68	30.98	23.02	7.77	30.04	29.34	22.35	8.63	28.03	27.33	21.52	9.83	25.85	25.15	20.60	11.22	
		30	21.1	33.88	33.19	24.41	7.88	32.21	31.51	23.75	8.75	30.07	29.37	22.85	9.94	27.56	26.86	21.79	11.32	
		34	23.2	36.02	35.32	26.70	7.98	34.27	33.57	26.09	8.86	32.01	31.31	25.24	10.05	29.46	28.76	24.14	11.43	
	6000	24	17.1	31.10	29.81	23.59	7.74	29.50	28.22	22.90	8.60	27.44	26.16	21.97	9.79	25.86	24.58	21.22	10.69	
		27	19.0	32.91	31.62	25.37	7.83	31.25	29.96	24.71	8.70	29.12	27.83	23.82	9.89	27.58	26.29	23.17	10.79	
		30	21.1	35.19	33.90	26.90	7.94	33.32	32.03	26.20	8.80	30.87	29.58	25.23	9.99	29.23	27.95	24.61	10.88	
		34	23.2	37.36	36.08	29.77	8.04	35.44	34.15	28.97	8.92	33.12	31.84	28.01	10.12	31.49	30.21	27.29	11.02	
	URTT 037	4000	24	17.1	33.11	32.80	22.57	9.29	31.64	31.34	21.83	10.26	29.83	29.53	20.96	11.54	27.74	27.44	19.96	12.96
			27	19.0	35.16	34.86	23.88	9.36	33.73	33.43	23.23	10.35	31.84	31.54	22.31	11.64	29.70	29.40	21.28	13.05
			30	21.1	37.35	37.05	24.81	9.44	35.84	35.53	24.18	10.43	33.81	33.51	23.27	11.72	31.54	31.23	22.31	13.14
			34	23.2	39.97	39.67	26.91	9.52	38.34	38.04	26.29	10.52	36.28	35.98	25.44	11.82	33.82	33.52	24.39	13.24
5600		24	17.1	35.55	34.84	25.67	9.37	34.01	33.31	24.96	10.36	31.86	31.16	23.94	11.63	29.45	28.75	22.84	13.04	
		27	19.0	37.42	36.72	27.12	9.44	35.67	34.97	26.40	10.42	33.61	32.91	25.57	11.71	31.31	30.61	24.63	13.13	
		30	21.1	39.94	39.24	28.69	9.52	38.21	37.51	28.02	10.52	36.02	35.32	27.12	11.81	33.53	32.83	26.12	13.22	
		34	23.2	42.43	41.73	31.40	9.60	40.59	39.89	30.76	10.60	38.29	37.58	29.92	11.90	35.65	34.95	28.86	13.31	
6800		24	17.1	36.60	35.43	27.50	9.41	34.85	33.68	26.73	10.39	32.75	31.58	25.81	11.68	31.21	30.04	25.12	12.60	
		27	19.0	38.55	37.38	29.42	9.48	36.85	35.68	28.76	10.47	34.70	33.53	27.88	11.76	33.13	31.96	27.24	12.69	
		30	21.1	41.30	40.13	31.23	9.56	39.30	38.13	30.44	10.55	36.83	35.66	29.49	11.85	35.11	33.94	28.83	12.77	
		34	23.2	43.78	42.61	34.54	9.63	41.75	40.58	33.71	10.63	39.33	38.16	32.70	11.94	37.66	36.49	32.01	12.87	
4800	24	17.1	41.13	40.79	27.92	11.64	39.32	38.99	27.11	12.88	36.89	36.56	25.86	14.54	34.34	34.01	24.63	16.45		
	27	19.0	43.75	43.42	29.63	11.77	41.83	41.50	28.77	13.02	39.34	39.01	27.59	14.70	36.63	36.30	26.38	16.61		
	30	21.1	46.53	46.20	30.94	11.90	44.51	44.18	30.11	13.16	41.92	41.59	28.95	14.86	38.93	38.59	27.60	16.77		
	34	23.2	49.87	49.53	33.50	12.05	47.68	47.35	32.68	13.33	44.91	44.58	31.54	15.04	41.84	41.51	30.25	16.97		
URTT 047	7200	24	17.1	45.01	44.07	33.04	11.83	42.90	41.95	32.06	13.07	39.87	38.93	30.57	14.73	36.92	35.98	29.25	16.63	
		27	19.0	47.24	46.30	34.81	11.93	45.08	44.14	33.97	13.20	42.26	41.32	32.81	14.88	39.22	38.28	31.54	16.79	
		30	21.1	50.68	49.73	36.99	12.08	48.29	47.34	36.05	13.36	45.26	44.32	34.80	15.06	41.71	40.77	33.28	16.95	
		34	23.2	53.89	52.94	40.51	12.21	51.36	50.42	39.62	13.51	48.15	47.20	38.34	15.23	44.59	43.65	36.84	17.15	
	8800	24	17.1	46.25	44.61	35.36	11.88	44.03	42.39	34.40	13.14	41.16	39.52	33.11	14.81	39.06	37.42	32.13	16.05	
		27	19.0	48.98	47.34	38.00	12.01	46.64	45.00	37.07	13.28	43.67	42.03	35.84	14.97	41.52	39.88	34.94	16.21	
		30	21.1	52.40	50.76	40.31	12.15	49.67	48.04	39.23	13.43	46.26	44.62	37.88	15.12	43.99	42.35	37.03	16.37	
		34	23.2	55.58	53.94	44.47	12.28	52.83	51.20	43.33	13.58	49.58	47.94	41.99	15.31	47.24	45.60	41.01	16.58	
	6100	24	17.1	49.26	48.83	33.90	13.47	46.85	46.42	32.74	14.95	43.89	43.45	31.70	16.99	40.64	40.21	29.79	19.37	
		27	19.0	52.42	51.99	36.10	13.64	49.96	49.53	34.96	15.13	46.81	46.38	34.11	17.17	42.89	42.46	31.40	19.50	
		30	21.1	55.72	55.29	37.56	13.80	53.19	52.76	36.51	15.31	49.67	49.24	36.90	17.34	46.04	45.61	33.39	19.70	
		34	23.2	59.67	59.24	40.80	13.98	56.92	56.49	39.73	15.51	53.42	52.99	38.28	17.57	49.17	48.74	36.50	19.90	
URTT 054	8200	24	17.1	52.50	51.60	38.27	13.64	49.95	49.05	37.09	15.13	46.35	45.45	35.32	17.14	42.69	41.78	33.66	19.49	
		27	19.0	55.26	54.36	40.35	13.78	52.49	51.59	39.24	15.27	49.07	48.17	37.83	17.31	45.36	44.46	36.29	19.66	
		30	21.1	59.12	58.															

MODEL	Indoor Coil			Outdoor Coil Inlet Temperature															
	*Airflow Rate [m ³ /h]	*DB Temp. [°C]	*WB Temp. [°C]	35°C				40°C				46°C				52°C			
				*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]	*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]	*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]	*Gross Cooling Capacity [kW]	*Net Cooling Capacity [kW]	*Net Sens. Cooling Capacity [kW]	*Compressor(s) Absorbed Power [kW]
URTT 072	7650	24	17.1	64.19	63.50	43.63	17.75	61.14	60.45	42.14	19.71	57.28	56.59	40.21	22.37	53.14	52.45	38.23	25.41
		27	19.0	68.22	67.53	46.24	17.96	65.11	64.42	44.89	19.94	60.38	59.68	42.93	22.61	56.46	55.77	40.62	25.63
		30	21.1	72.51	71.81	48.12	18.17	69.24	68.54	46.77	20.17	64.90	64.21	44.80	22.85	60.17	59.48	42.76	25.87
		34	23.2	77.63	76.94	52.19	18.40	74.13	73.43	50.84	20.43	69.64	68.95	48.08	23.14	64.46	63.77	46.79	26.16
	10800	24	17.1	69.18	67.48	49.85	18.00	65.82	64.12	48.28	19.98	61.22	59.52	46.04	22.62	56.40	54.70	43.83	25.62
		27	19.0	72.93	71.23	52.62	18.18	69.14	67.44	51.04	20.17	64.68	62.98	49.24	22.84	59.87	58.17	47.23	25.85
		30	21.1	77.83	76.13	55.72	18.41	74.08	72.38	54.25	20.43	69.30	67.61	52.26	23.12	63.90	62.20	49.99	26.12
		34	23.2	82.80	81.10	60.98	18.62	78.77	77.07	59.55	20.67	73.72	72.02	57.60	23.38	68.09	66.40	53.32	26.40
	13400	24	17.1	71.46	68.40	53.46	18.11	67.77	64.71	51.85	20.09	63.21	60.14	49.81	22.74	59.87	56.81	48.26	24.70
		27	19.0	75.44	72.38	57.35	18.30	71.73	68.67	55.89	20.31	67.01	63.95	53.93	22.98	63.63	60.57	52.52	24.95
		30	21.1	80.70	77.64	60.85	18.53	76.50	73.44	59.23	20.55	71.04	67.98	57.05	23.22	67.40	64.34	55.68	25.19
		34	23.2	85.67	82.61	67.24	18.73	81.27	78.21	65.52	20.78	76.05	72.99	63.33	23.51	72.40	69.34	61.78	25.50
URTT 080	8500	24	17.1	71.94	71.25	49.25	19.94	68.75	68.07	47.68	22.01	64.88	64.20	45.83	24.83	60.60	59.92	43.80	28.02
		27	19.0	76.41	75.73	52.23	20.28	73.20	72.52	50.75	22.36	69.06	68.38	48.73	25.19	64.14	63.46	46.22	28.34
		30	21.1	81.13	80.45	54.30	20.65	77.78	77.10	52.92	22.76	73.10	72.42	50.75	25.56	68.32	67.64	48.81	28.77
		34	23.2	86.76	86.08	58.94	21.13	83.14	82.46	57.54	23.23	78.52	77.83	55.66	26.09	72.74	72.06	53.22	29.23
	12100	24	17.1	77.35	75.71	56.48	20.35	73.84	72.19	54.88	22.42	68.93	67.29	52.56	25.18	64.13	62.49	50.45	28.35
		27	19.0	81.11	79.46	59.68	20.85	77.55	75.91	58.31	22.73	72.98	71.34	56.43	25.55	67.98	66.34	54.37	28.73
		30	21.1	86.81	85.17	63.30	21.14	82.97	81.33	61.80	23.22	78.08	76.43	59.81	26.05	72.09	70.45	57.33	29.17
		34	23.2	92.15	90.51	69.45	21.61	88.08	86.44	68.02	23.71	82.78	81.14	65.86	26.54	77.01	75.37	63.57	29.71
	14900	24	17.1	79.40	76.50	60.66	20.52	75.79	72.88	59.12	22.59	71.14	68.24	57.07	25.39	67.57	64.67	55.40	27.43
		27	19.0	83.93	81.02	65.24	20.89	80.17	77.27	63.77	22.97	75.34	72.43	61.78	25.78	71.79	68.88	60.32	27.84
		30	21.1	89.47	86.57	69.08	21.37	85.06	82.16	67.42	23.43	79.64	76.74	65.37	26.21	75.91	73.00	63.98	28.28
		34	23.2	94.89	91.99	76.45	21.87	90.61	87.70	74.70	23.97	85.28	82.38	72.51	26.82	81.52	78.61	70.85	28.91
URTT 094	10400	24	17.1	84.12	83.01	57.87	23.42	80.76	79.64	56.30	25.89	76.31	75.19	54.16	29.20	71.35	70.23	51.84	32.94
		27	19.0	89.62	88.51	61.58	23.82	85.92	84.80	59.88	26.28	81.17	80.05	57.57	29.60	75.04	73.93	54.49	33.26
		30	21.1	95.07	93.96	64.08	24.25	91.13	90.01	62.39	26.71	85.85	84.73	60.10	30.00	80.31	79.20	57.85	33.73
		34	23.2	101.56	100.45	69.64	24.79	97.40	96.28	68.04	27.26	90.87	89.75	65.58	30.56	85.48	84.37	63.19	34.22
	14000	24	17.1	89.55	87.14	64.77	23.82	85.64	83.23	62.94	26.27	80.19	77.78	60.39	29.52	74.66	72.25	57.94	33.22
		27	19.0	93.78	91.37	68.31	24.15	89.84	87.43	66.80	26.60	84.71	82.30	64.71	29.90	79.07	76.66	62.40	33.62
		30	21.1	100.39	97.98	72.52	24.69	96.07	93.66	70.84	27.14	90.55	88.14	68.58	30.43	84.00	81.58	65.86	34.08
		34	23.2	106.50	104.09	79.52	25.22	101.92	99.51	77.93	27.67	96.09	93.68	75.53	30.96	89.45	87.04	72.92	34.63
	17000	24	17.1	91.71	87.63	68.79	23.99	87.68	83.60	67.09	26.43	82.47	78.39	64.78	29.71	78.68	74.60	63.10	32.13
		27	19.0	96.88	92.80	73.94	24.40	92.66	88.58	72.30	26.85	87.25	83.17	70.09	30.13	83.37	79.29	68.50	32.55
		30	21.1	103.30	99.22	78.30	24.95	98.53	94.45	76.53	27.36	92.24	88.16	74.08	30.60	88.08	84.00	72.56	33.00
		34	23.2	109.49	105.41	86.70	25.50	104.56	100.48	84.68	27.93	99.65	95.57	82.67	30.65	94.39	90.31	80.48	33.65
URTT 108	18800	24	17.1	87.67	86.3	59.94	26.02	84.03	82.66	58.23	28.72	79.32	77.95	55.97	32.37	74.12	72.75	53.54	36.51
		27	19.0	93.33	91.96	63.79	26.47	89.42	88.05	61.98	29.17	84.4	83.03	59.55	32.83	78.06	76.69	56.34	36.89
		30	21.1	99.05	97.68	66.39	26.97	94.94	93.57	64.65	29.69	89.33	87.95	62.15	33.33	83.49	82.12	59.76	37.46
		34	23.2	105.86	104.49	72.13	27.62	101.46	100.09	70.44	30.34	95.86	94.49	68.15	34.02	88.89	87.52	65.27	38.08
	16600	24	17.1	94.3	90.95	68.02	26.55	89.89	86.55	65.98	29.21	84.13	80.79	63.33	32.8	78.32	76.95	60.76	36.9
		27	19.0	98.79	95.44	71.98	26.94	94.51	91.16	70.31	29.63	89.02	85.67	68.07	32.27	82.99	79.64	65.58	37.39
		30	21.1	105.69	102.35	76.39	27.6	101.06	97.71	74.59	30.29	95.14	91.79	72.16	33.93	87.91	84.56	69.19	37.95
		34	23.2	112.14	108.79	83.96	28.26	107.25	103.9	82.25	30.96	100.76	97.42	79.7	34.58	93.94	90.6	76.82	38.69
	20000	24	17.1	96.52	91.71	72.55	26.73	92.2	87.38	70.72	29.41	86.64	81.82	68.25	33.03	82.42	77.61	66.32	35.68
		27	19.0	101.98	97.16	78.08	27.22	97.47	92.65	76.31	29.91	91.69	86.87	73.94	33.54	87.48	82.67	72.21	36.22
		30	21.1	108.63	103.81	82.68	27.88	103.45	98.63	80.75	30.53	96.92	92.1	78.25	34.12	92.44	87.63	76.6	36.79
		34	23.2	115.2	110.39	91.58	28.58	110.04	105.22	89.46	31.27	103.69	98.87	86.85	34.92	99.2	94.38	84.9	37.63
URTT 122	13300	24	17.1	98.97	97.54	67.73	30.31	94.79	93.37	65.77	33.43	89.42	88.00	63.19	37.66	83.5	82.08	60.41	42.46
		27	19.0	105.36	103.94	72.05	30.85	100.92	99.5	70.00	33.98	95.18	93.75	67.21	38.22	87.92	86.5	63.54	42.92
		30	21.1	111.85	110.42	74.99	31.47	107.18	105.76	73.03	34.61	100.75	99.33	70.16	38.83	94.1	92.68	67.43	43.65
		34	23.2	119.58	118.15	81.49	32.27	114.57	113.15	79.55	35.42	108.17	106.74	76.94	39.71	100.21	98.79	73.66	44.43
	18800	24	17.1	106.55	103.21	77.3	30.95	101.49	98.15	74.96	34.03	94.94	91.6	71.93	38.19	88.29	84.95	69.00	42.96
		27	19.0	114.64	108.3	81.8	31.43	106.75	103.4	79.89	34.54	100.46	97.12	77.31	38.78	93.58	90.24	74.47	43.56
		30	21.1	119.48	116.14	86.8	32.24	114.19	110.85	84.73	35.36	107.38	104.04	81.96	39.59	99.12	95.77	78.55	44.27
		34	23.2	126.8	123.45	95.38	33.06	121.21	117.87	93.43	36.19	113.77	110.42	90.5	40.41	105.99	102.65	87.21	45.22
	22600	24	17.1	109.01	104.2	82.51	31.17	104.06	99.26	80.43	34.27	97.71	92.9	77.6	38.47	92.88	88.08	75.38	41.

08
CONTROL
UNITS

8.1. — BSC CONTROL
FEATURES

There is a room control unit as standard with the unit.

- Stylish Design, Room Unit with Digital Screen
- Room Unit Key Lock
- Internal Temperature Sensor
- Temperature Set Value Alteration
- Cooling/Off/Heating and Fan Automatic/On Mode Selection
- Filter Usage Counter
- Optional External Fire Alarm
- Optional Pump-Down Control



8.2. — ADV CONTROL
FEATURES

In the ADV type, advanced control is provided with the control unit on the unit as standard, and the room control unit can be used as an option.

- Stylish Design, Room Unit with LCD Panel Type Screen
- Heating, Cooling, Automatic Mode Options
- Temperature Set Value Alteration
- Weekly Work Programme Configuration
- Alarm State Monitoring and Reset
- Supply Fan, Compressor Maintenance Time Management
- Building Automation System Integration for the Optional Modbus RTU Communication Card
- Optional Smoke Detector and External Fire Alarm Input
- Optional Pump-Down Control
- Optional Room Unit with Internal Temperature Sensor
- Optional Supply Temperature Control
- Optional Dehumidification Control
- Optional Hot-Gas Bypass Control
- Optional Low Ambient Temperature Control
- Optional DX Circuit Low and/or High Pressure Information Visualization
- Optional Filter Clogging Control



(ADV Type Room Control Unit)

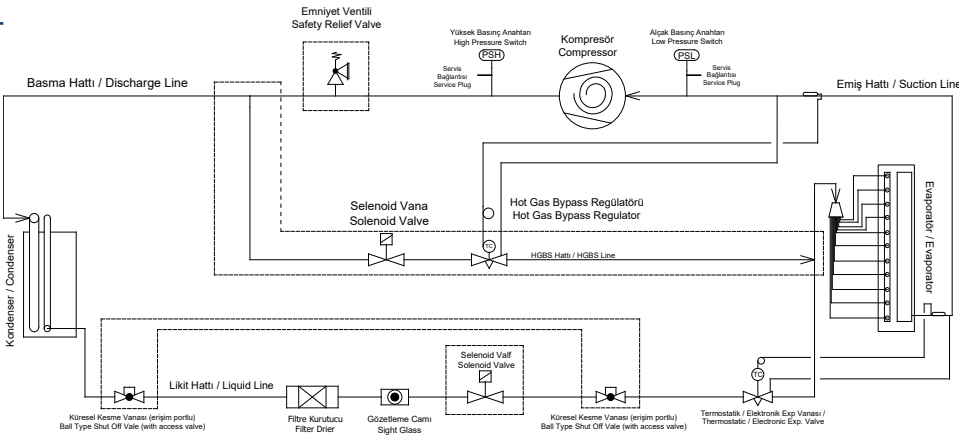


(ADV Type On-Device Control Unit)

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09
REFRIGERANT
CIRCUIT &
ELECTRICAL
CONNECTION

9.1. — REFRIGERANT
CIRCUIT



9.2. — ELECTRICAL
CONNECTION

The electrical connections of the control panel must comply with the following rules. These rules must be followed for the sake of the user safety and to ensure the expected operation of the unit.

- EThe equipment and cables to be used for the wiring must be selected in accordance with the maximum current values given in the following charts and catalogues. The schematics will also appear on the cover of the control panel.
- The supply line must reach the control panel directly after the thermic magnetic switch installed outside. There should be no interruption, insertion or intermediate element on the line.
- Connections, overcurrent protection and magnetic switches must comply with CEI EN 60204 European norms. In addition to magnetic protection, if the leakage current protection relay is to be used, this relay should have a 30-300mA block. This will protect the operator against insulation failures.
- Grounding cable cross sections must absolutely not be below the values given in the diagrams.
- The route of the power supply cables should not interfere with the service doors of the unit. These instructions must be completed by the user before the commissioning!

10

POWER
INFORMATION
INCLUDING
OPTIONS

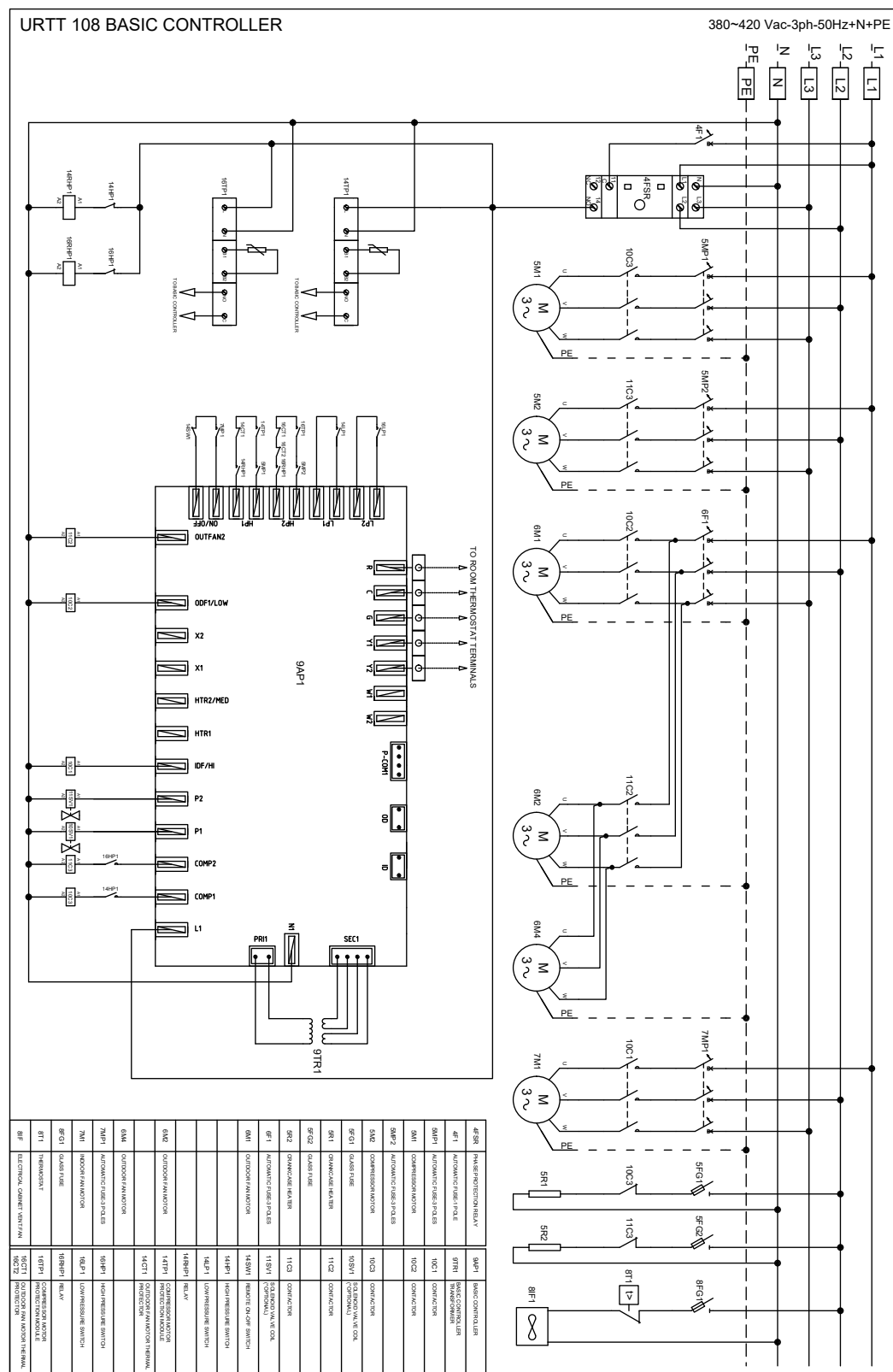
MODEL	Pressure Class	UNIT			Compressor		Outdoor Fan Motor		Indoor Fan Motor		Electrical Heater(*) Low Capacity	Electrical Heater(*) High Capacity	Electrical Heater(*) Superior Capacity
		MOP	MCA	ICF	RLA	LRA	FLA	LRA	FLA	LRA	RLA	RLA	RLA
018	Low	40	21	91	12,5	75	2,2	6,5	1,7	6	8,3	16,6	30,0
	Med.	40	21	91					2,2	11			
	High	40	22	92					2,7	15			
023	Low	40	29	129	14,5	101	2,2	6,5	2,2	11	8,3	16,6	38,0
	Med.	40	30	130					2,7	15			
	High	50	31	131					3,7	22			
032	Low	63	35	133	18,8	123	5	19	2,7	15	16,6	30,0	23 23
	Med.	63	36	134					3,7	22			
	High	63	38	135					5,3	31			
037	Low	63	38	108	12.7 12.7	75 75	4,8	20	2,7	15	16,6	30,0	29 29
	Med.	63	39	109					3,7	22			
	High	63	40	110					5,3	31			
047	Low	80	53	153	14.6 14.6	101 101	3,9	13	3,7	22	16.6 16.6	23.2 23.2	35 35
	Med.	80	54	154					5,3	31			
	High	80	56	156					6,9	43			
054	Low	100	60	155	14.6 18.2	101 123	2.2 5.0	6.5 19	5,3	31	16.6 16.6	23.2 23.2	38 38
	Med.	100	62	156					6,9	43			
	High	100	63	158					8,6	57			
064	Low	100	67	164	18.2 18.2	123 123	5.0 5.0	19 19	6,9	43	16.6 16.6	23.2 23.2	48 48
	Med.	100	68	166					8,6	57			
	High	100	72	169					11,8	83			
072	Low	125	78	197	18.9 24.0	123 145	5.0 4.8	19 20	6,9	43	21.5 21.5	29.5 29.5	56 56
	Med.	125	79	199					8,6	57			
	High	125	82	202					11,8	83			
080	Low	100	71	186	24.0 24.0	145 145	4.8 4.8	20 20	6,9	43	21.5 21.5	33.2 33.2	60 60
	Med.	100	72	187					8,6	57			
	High	100	75	190					11,8	83			

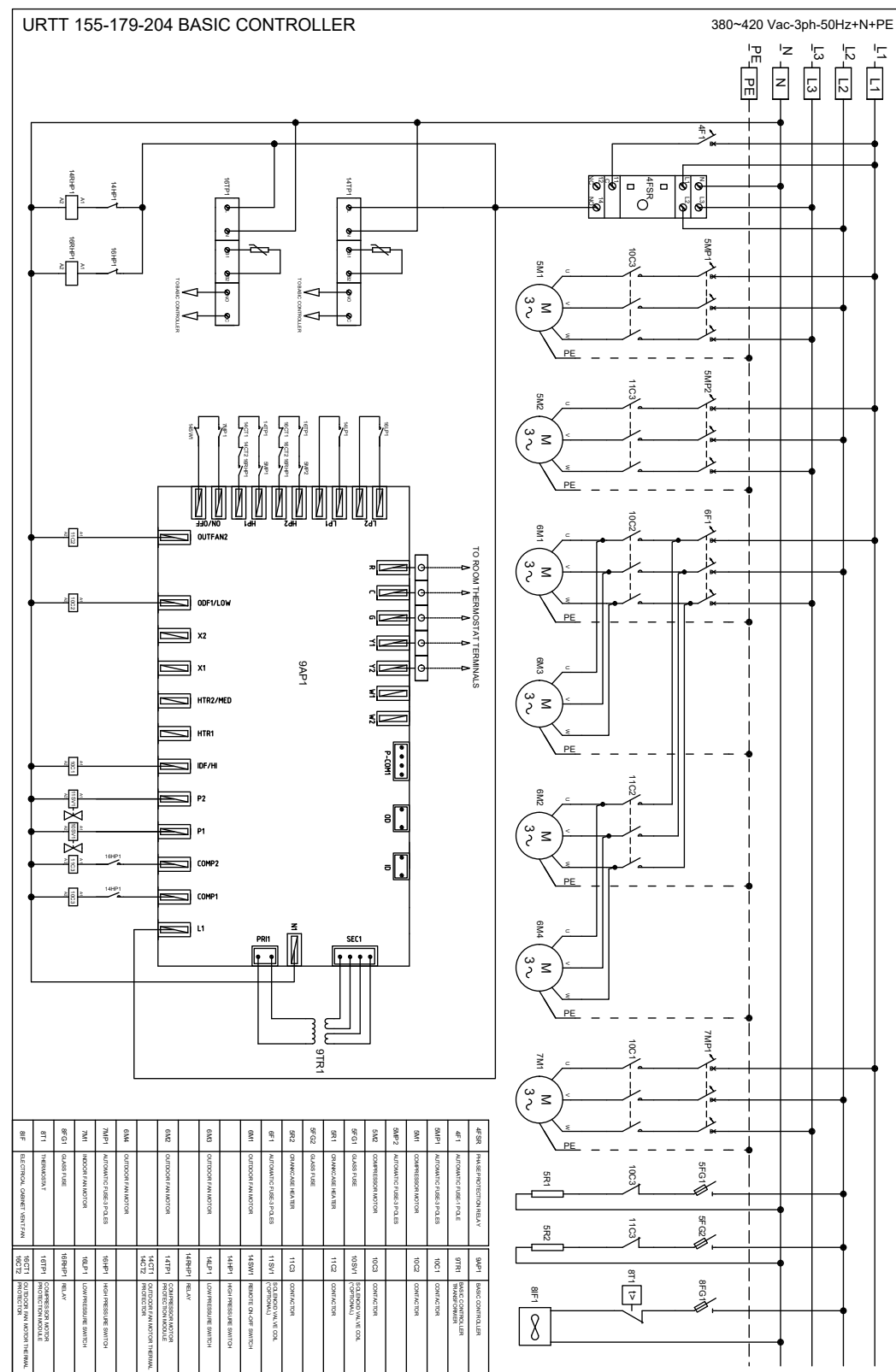
MOP Maximum Ov ercurrent Protection (circuit breaker sizing) as per NEC article 440-22 & 430-52.
MCA Maximum Circuit Amps. (wiri sizing) as per NEC article 440-33.
ICF Maximum Instantaneous Current F low
RLA Rated Load Amps. (at worst operation conditions)
FLA Full Load Amps.
LRA Locked Rotor Amps.

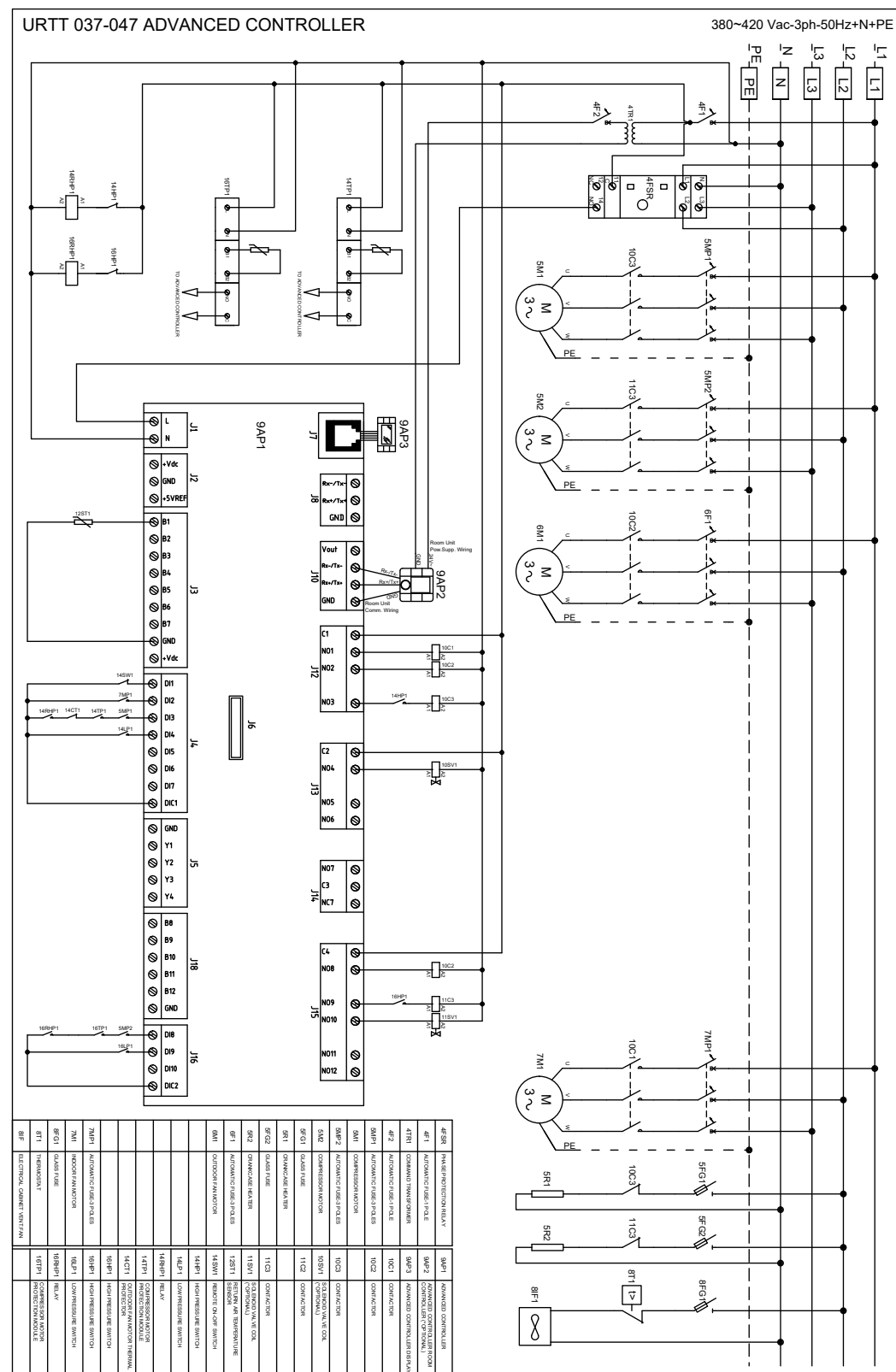
MODEL	Pressure Class	UNIT			Compressor		Outdoor Fan Motor		Indoor Fan Motor		Electrical Heater(*) Low Capacity	Electrical Heater(*) High Capacity	Electrical Heater(*) Superior Capacity
		MOP	MCA	ICF	RLA	LRA	FLA	LRA	FLA	LRA	RLA	RLA	RLA
094	Low	125	80	217	28.1 28.1	172 172	3.9 3.9	13 13	8,6	57	21.5 21.5	35 35	68 68
	Med.	125	83	220					11,8	83			
	High	125	87	224					16,2	115			
108	Low	160	97	262	28.1 37.2	172 211	3.9 5.0+5.0	15.6 19+19	8,6	57	28.2 28.2	44 44	77 77
	Med.	160	100	265					11,8	83			
	High	160	105	269					16,2	115			
122	Low	160	112	277	37.2 37.2	211 211	5.0+5.0 5.0+5.0	19+19 19+19	8,6	57	34.4 34.4	53 53	88 88
	Med.	160	115	280					11,8	83			
	High	160	120	284					16,2	115			
138	Low	200	131	292	37.2 50.1	211 210	5.0+5.0 4.8+4.8	19+19 20+20	11,8	83	34.4 34.4	53 53	97 97
	Med.	200	136	297					16,2	115			
	High	200	142	303					22, 1	153			
154	Low	250	144	291	50.1 50.1	210 210	4.8+4.8 4.8+4.8	20+20 20+20	11,8	83	41 41	61 61	102 102
	Med.	250	148	296					16,2	115			
	High	250	154	301					22, 1	153			
155	Low	250	144	289	50.1 50.1	210 210	3.9+3.9 3.9+3.9	13+13 13+13	11,8	83	41 41	61 61	106 106
	Med.	250	148	294					16,2	115			
	High	250	154	300					22,1	153			
176	Low	250	169	377	50.1 63.5	210 287	4.8+4.8 6.8+6.8	20+20 32+32	16,2	115	45 45	61 61	112 112
	Med.	250	175	382					22,1	153			
	High	250	184	392					31,4	235			
179	Low	250	169	376	50.1 63.5	210 287	6.8+6.8 4.7+4.7	32+32 20+20	16,2	115	45 45	69 69	118 118
	Med.	250	175	382					22,1	153			
	High	320	184	391					31,4	253			
204	Low	320	169	386	63.5 63.5	287 287	4.7+4.7 4.7+4.7	20+20 20+20	16,2	115	53 53	77 77	123 123
	Med.	320	175	391					22,1	153			
	High	320	184	401					31,4	235			
244	Low	320	169	368	37.2+31.2 37.2+37.2	211+211 211+211	3.9+3.9+3.9 3.9+3.9+3.9	13+13+13 13+ 13+ 13	22,1	153	61 61	88 88	166 166
	Med.	320	175	377					31,4	235			
	High	320	184	383					37,4	270			
276	Low	320	169	381	37.2+50.1 37.2+50.1	211+210 211+210	3.9+3.9+3.9 3.9+3.9+3.9	13+13+13 13+13+13	22,1	153	66 66	97 97	186 186
	Med.	400	175	390					31,4	235			
	High	400	184	396					37,4	270			

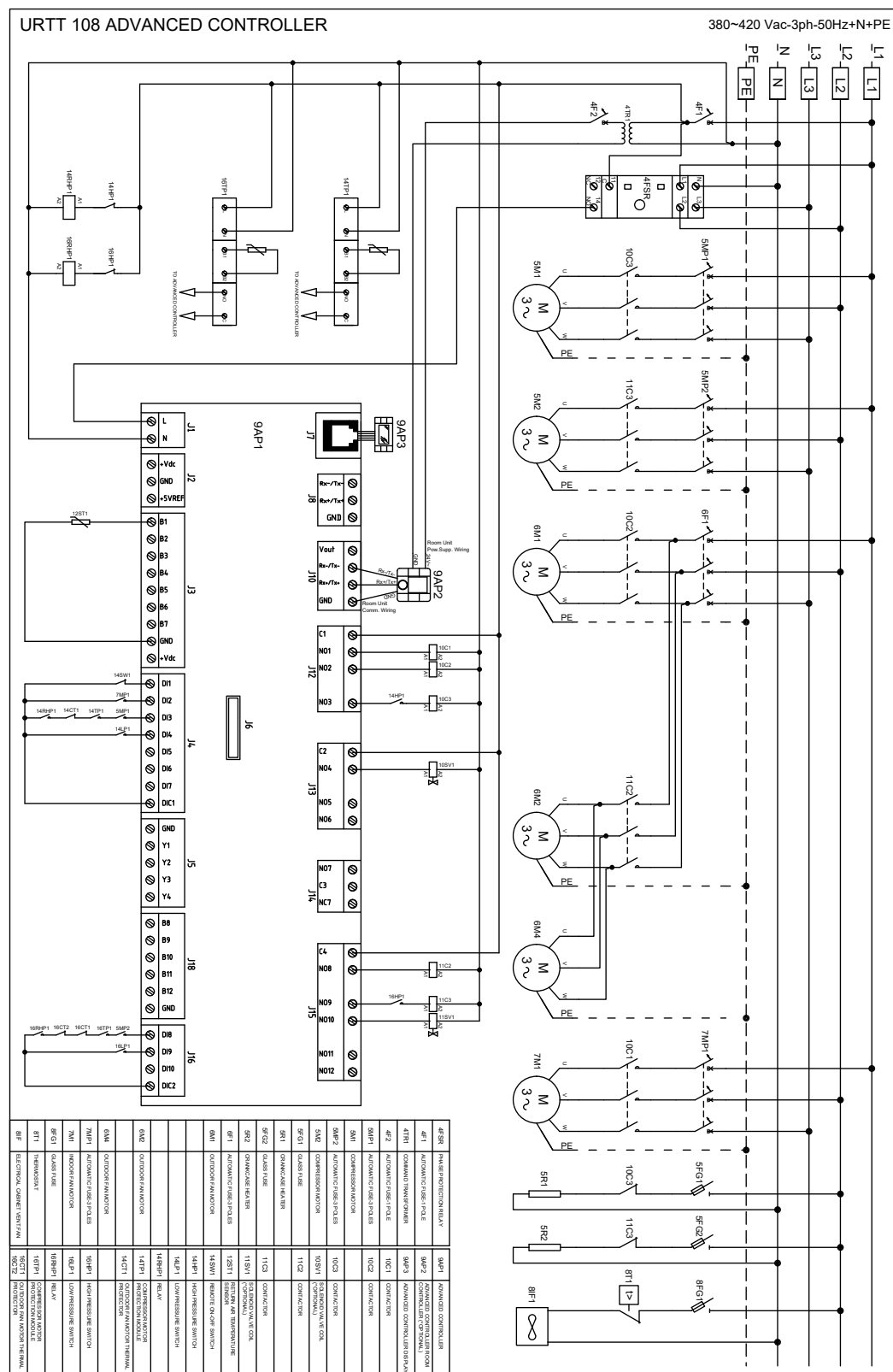
MOP Maximum Overcurrent Protection (circuit breaker sizing) as per NEC article 440-22 & 430-52.
MCA Maximum Circuit Amps. (wiri sizing) as per NEC article 440-33.
ICF Maximum Instantaneous Current Flow
RLA Rated Load Amps. (at worst operation conditions)
FLA Full Load Amps.
LRA Locked Rotor Amps.

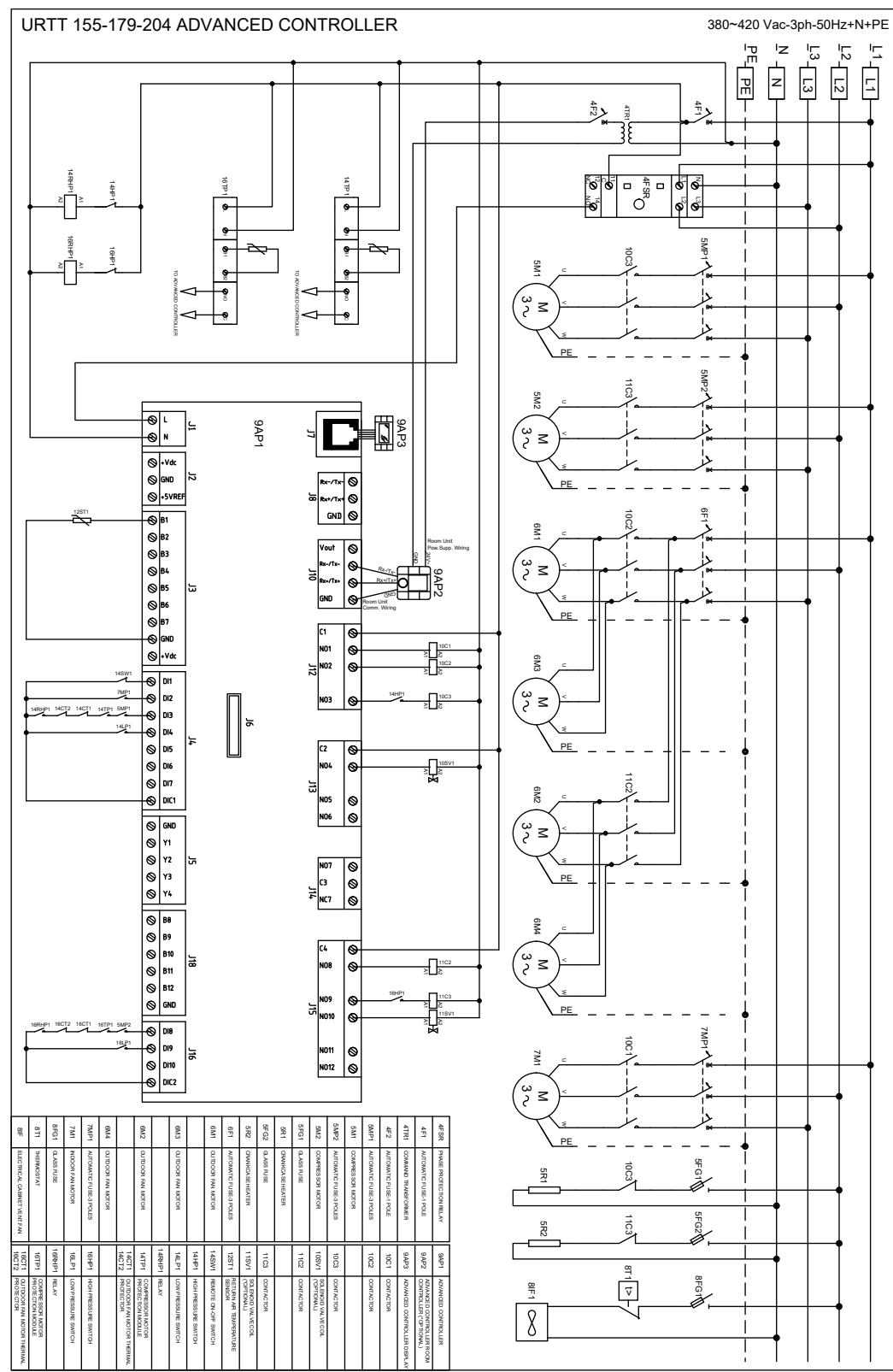
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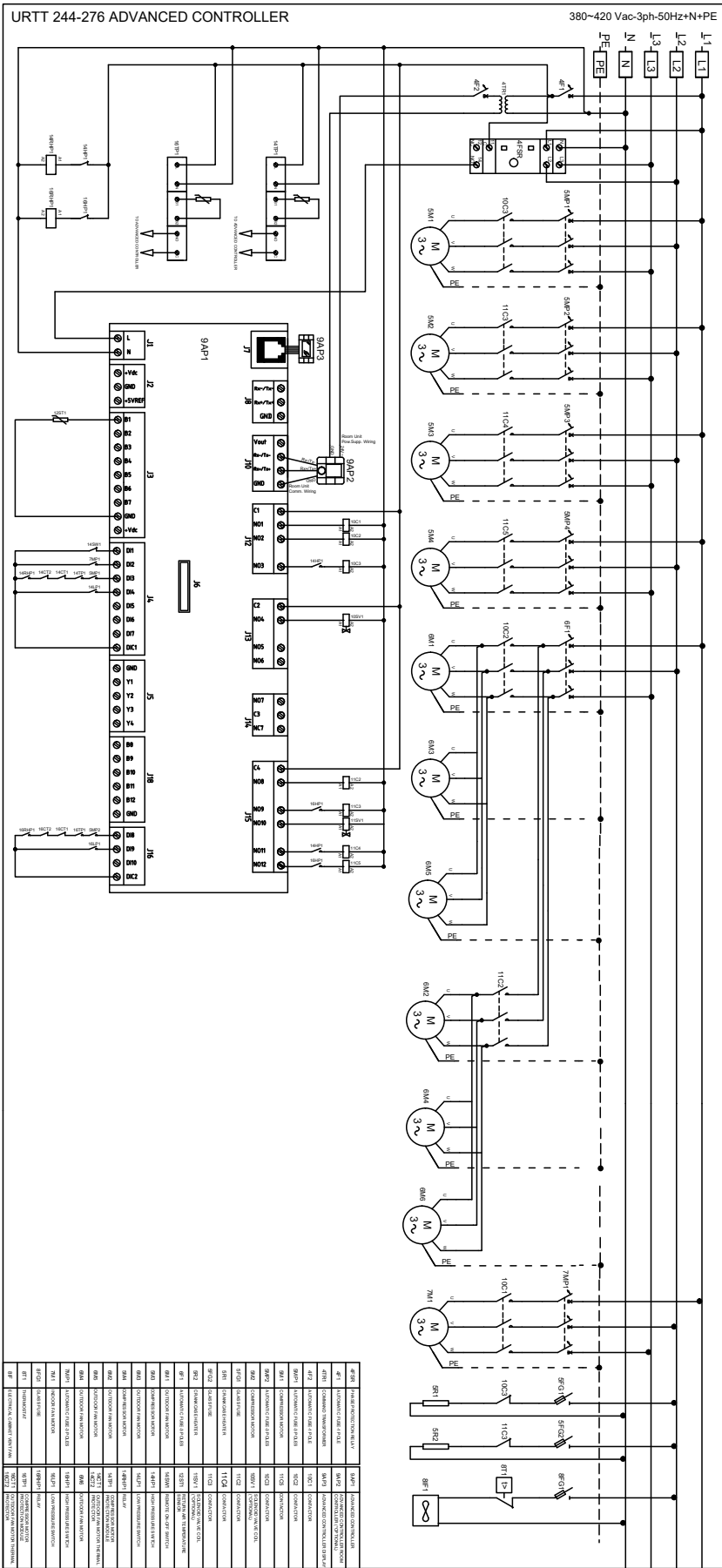










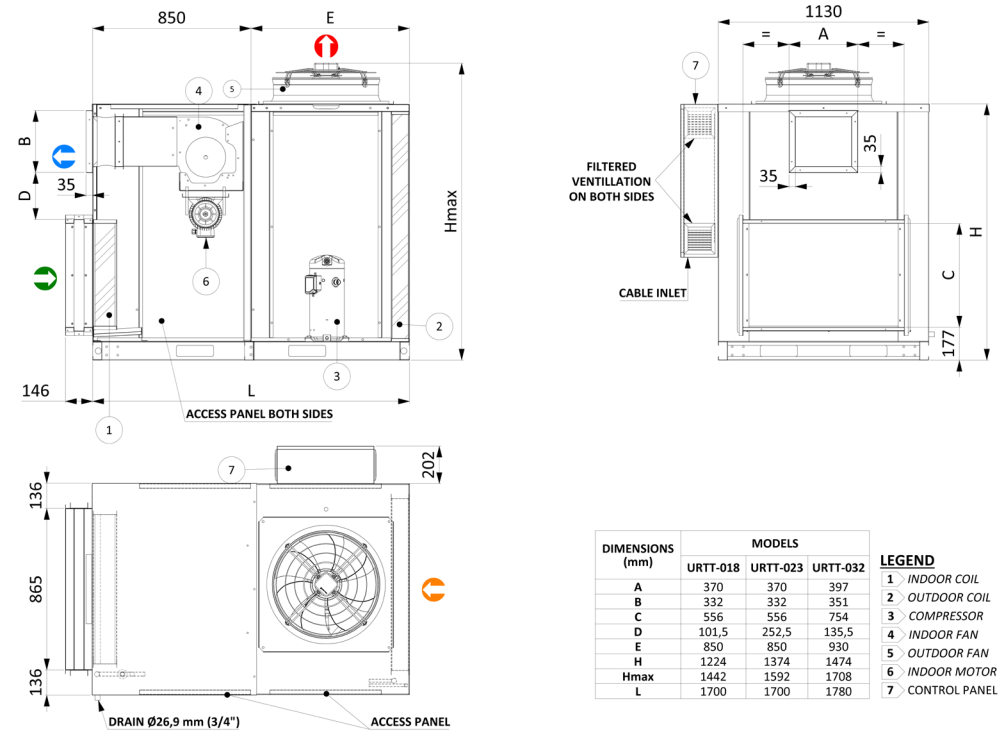


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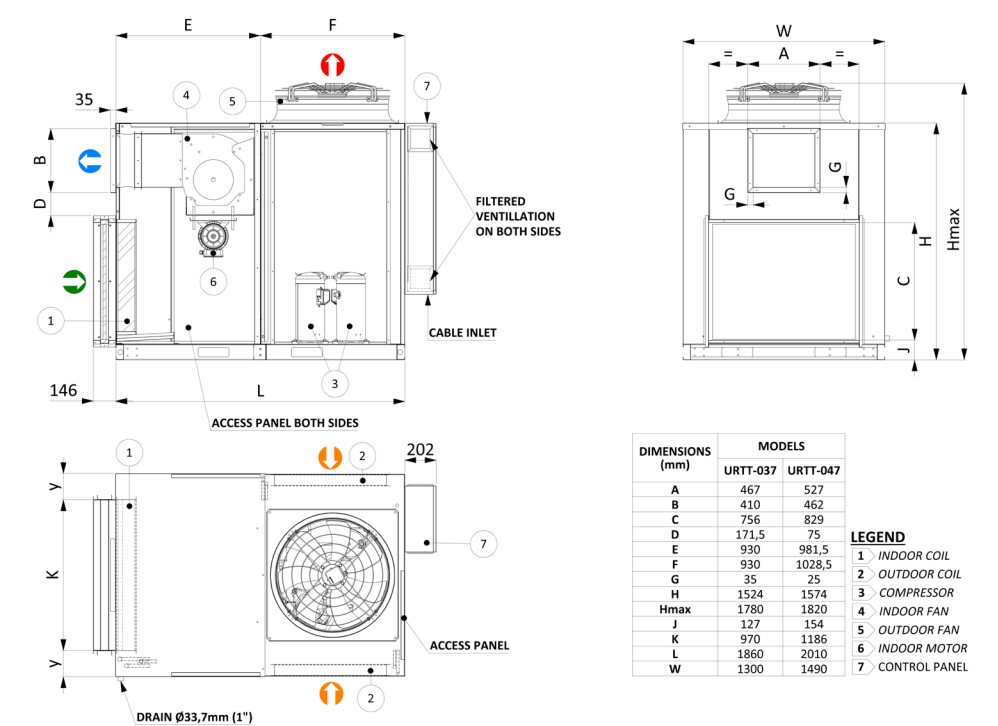
12

DIMENSIONS AND AIRFLOW DIRECTIONS

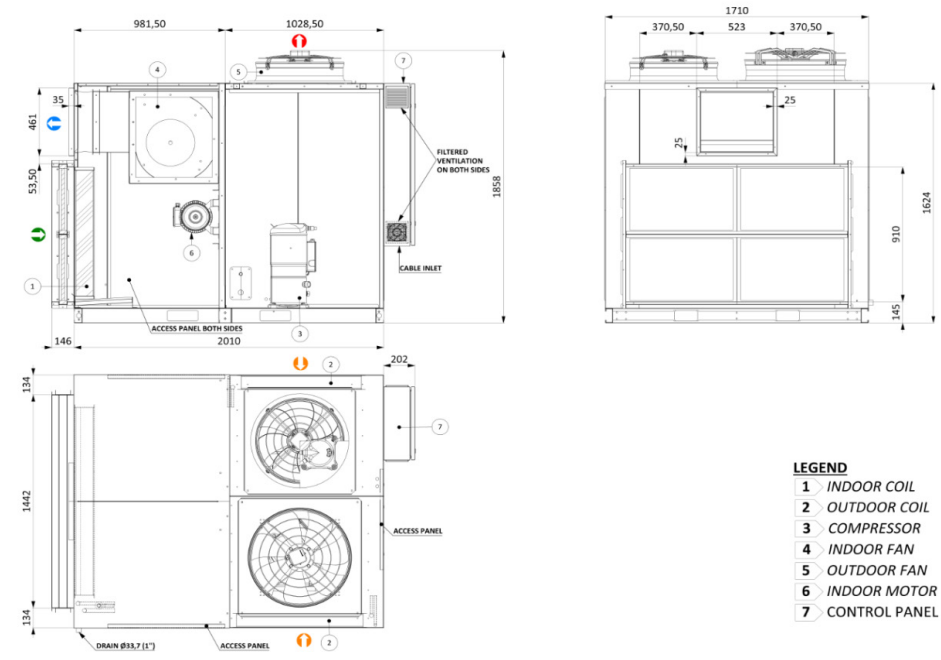
12.1. UNIT DIMENSION DATA MODELS [018~032]



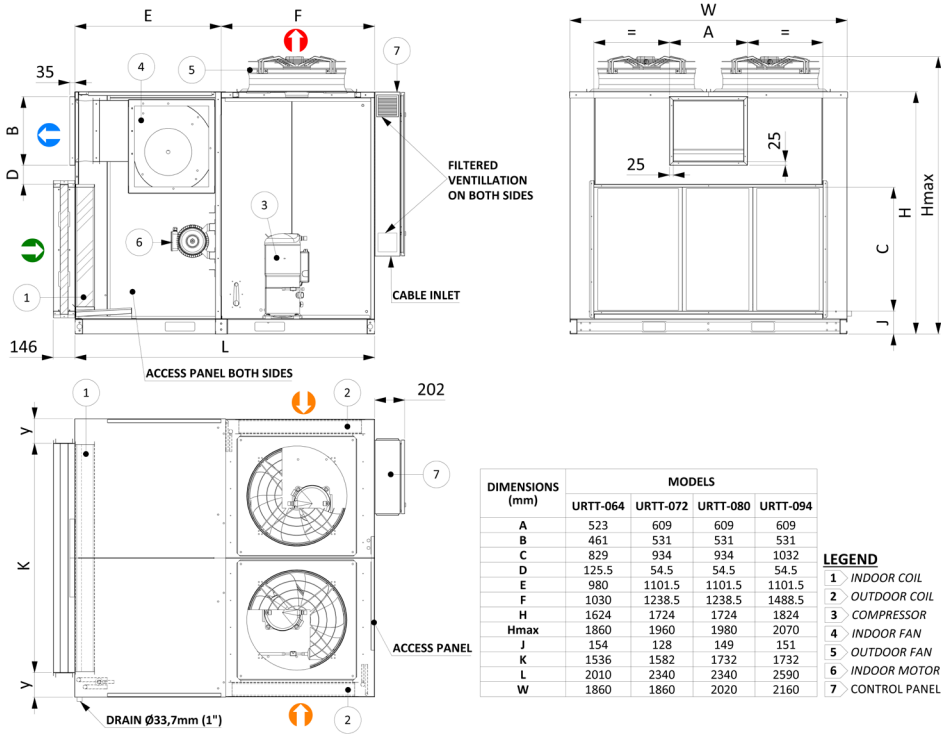
12.2. UNIT DIMENSION DATA MODELS [037~047]



12.3. UNIT DIMENSION DATA MODELS [054]

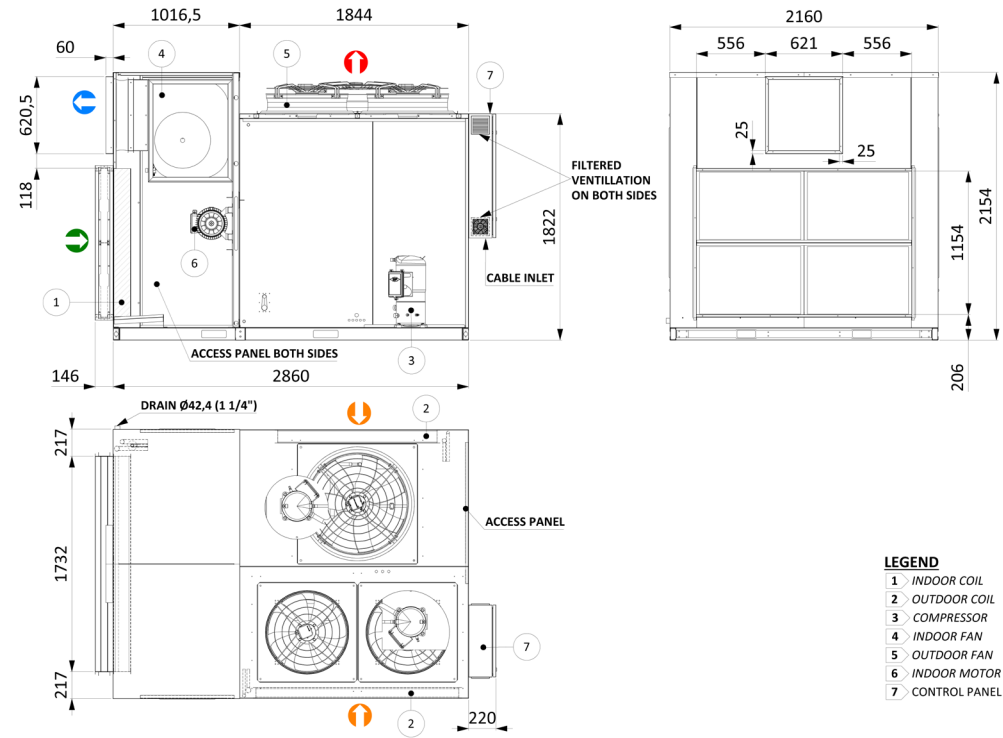


12.4. UNIT DIMENSION DATA MODELS [064-072-080-094]

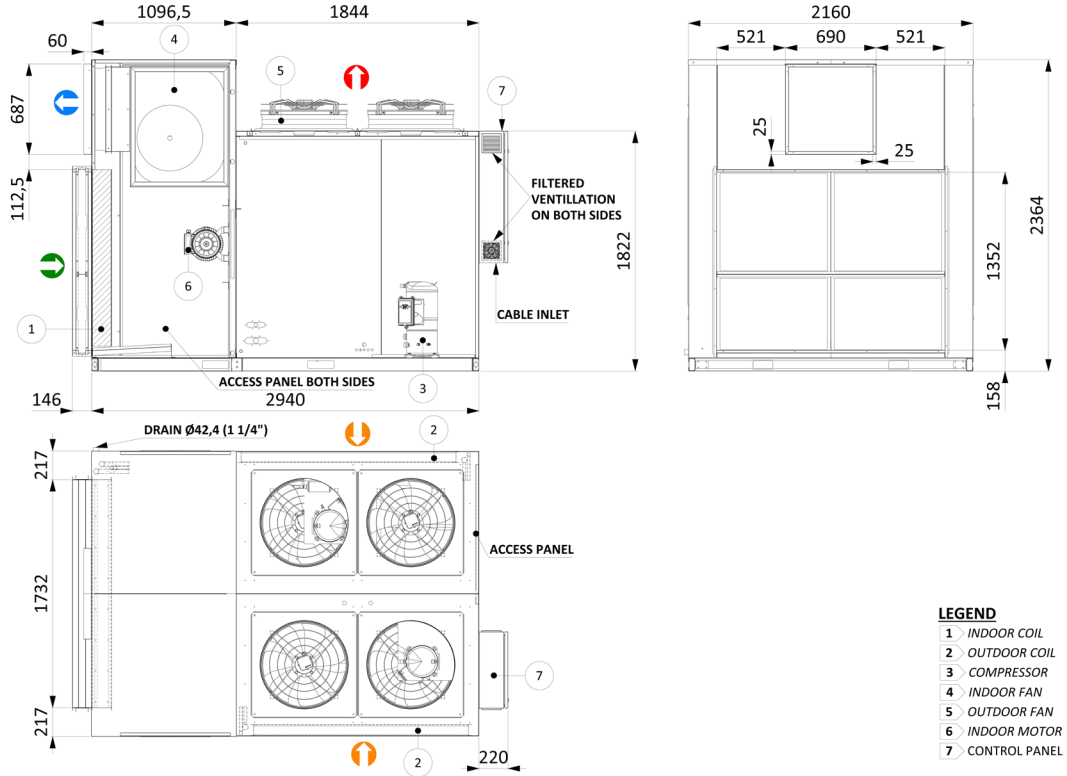


DIMENSIONS (mm)	MODELS			
	URTT-064	URTT-072	URTT-080	URTT-094
A	523	609	609	609
B	461	531	531	531
C	829	934	934	1032
D	125.5	54.5	54.5	54.5
E	980	1101.5	1101.5	1101.5
F	1030	1238.5	1238.5	1488.5
H	1624	1724	1724	1824
Hmax	1860	1960	1980	2070
J	154	128	149	151
K	1536	1582	1732	1732
L	2010	2340	2340	2590
W	1860	1860	2020	2160

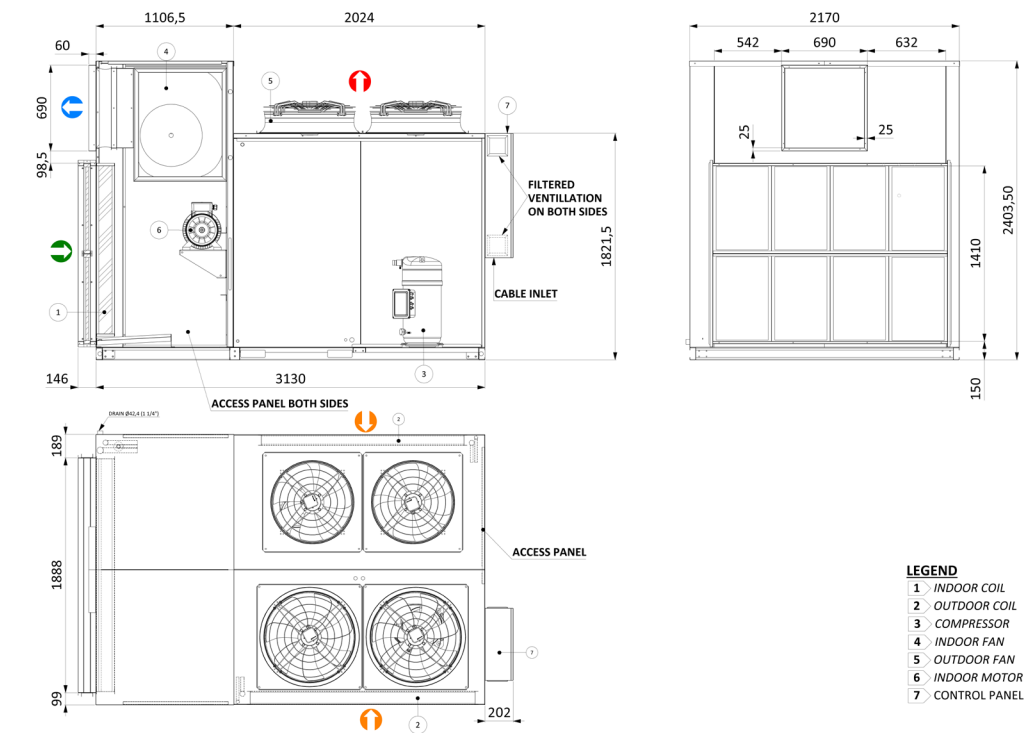
12.5. UNIT DIMENSION DATA MODELS [108]



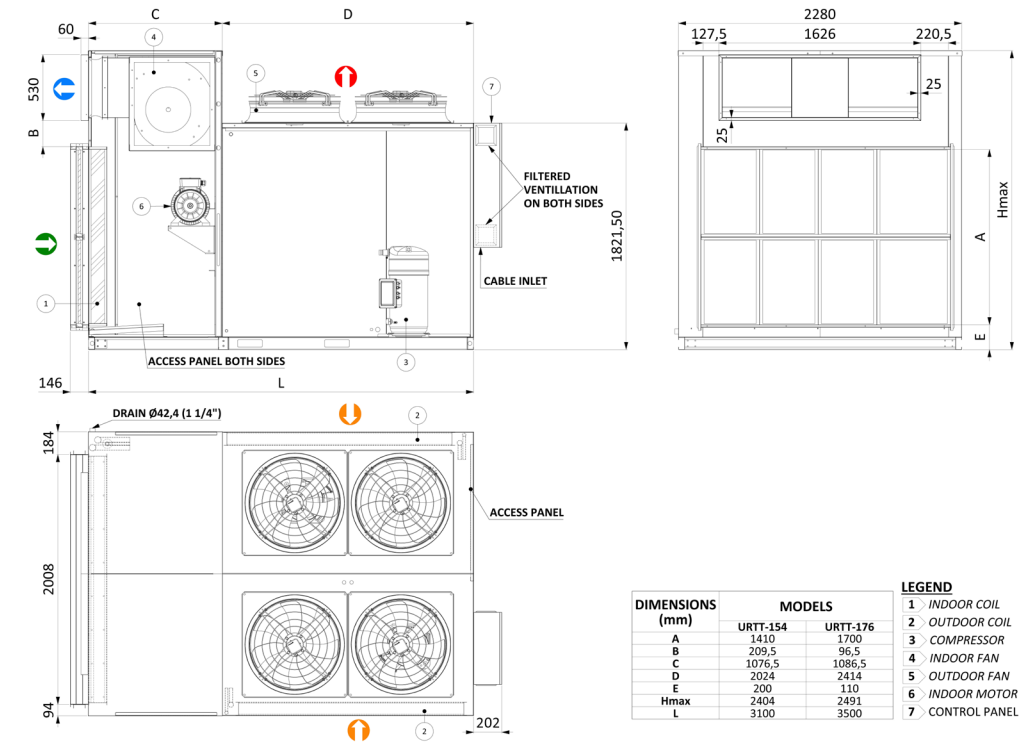
12.6. UNIT DIMENSION DATA MODELS [122]



12.7. UNIT DIMENSION DATA MODELS [138]



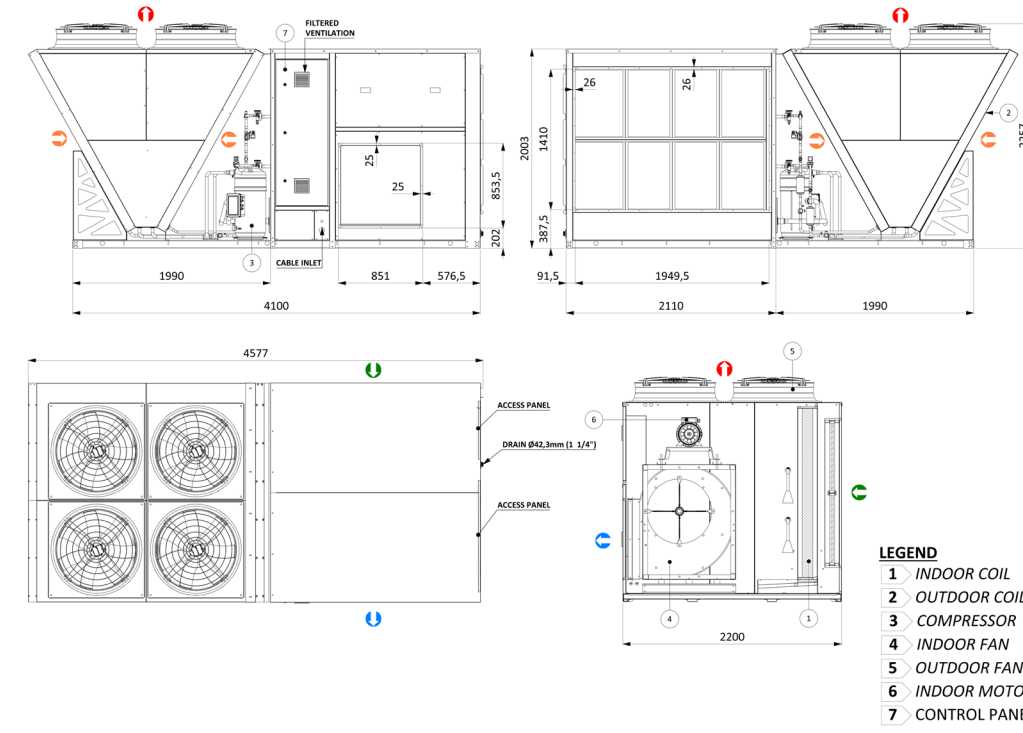
12.8. UNIT DIMENSION DATA MODELS [154-176]



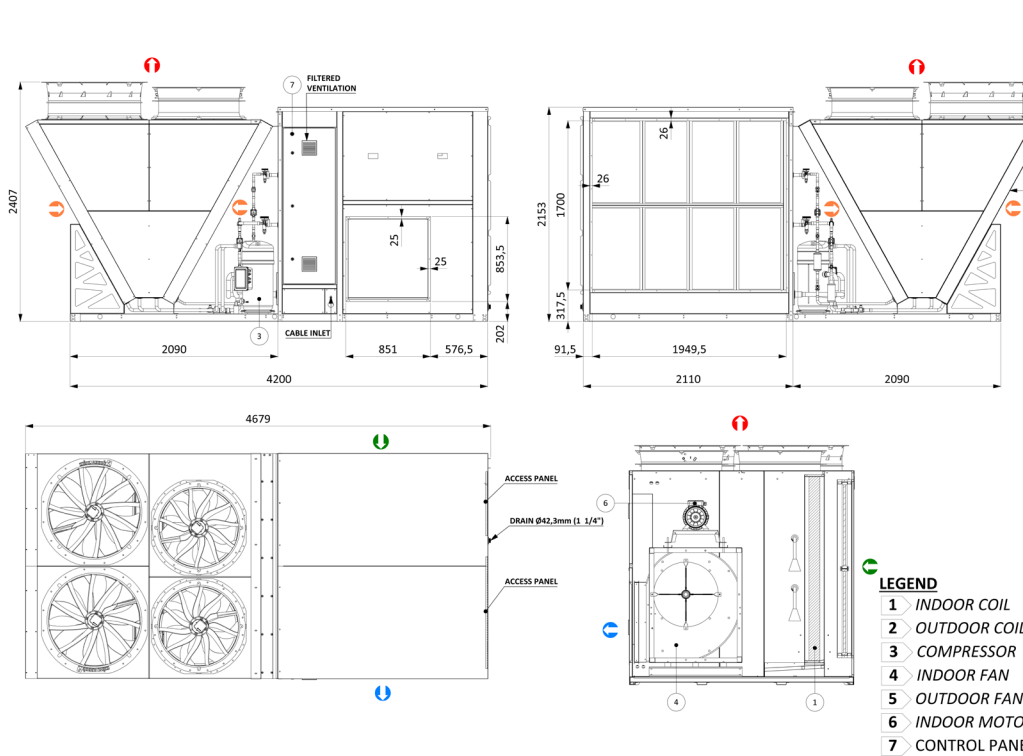
DIMENSIONS (mm)	MODELS	
	URTT-154	URTT-176
A	1410	1700
B	209,5	96,5
C	1076,5	1086,5
D	2024	2414
E	200	110
Hmax	2404	2491
L	3100	3500

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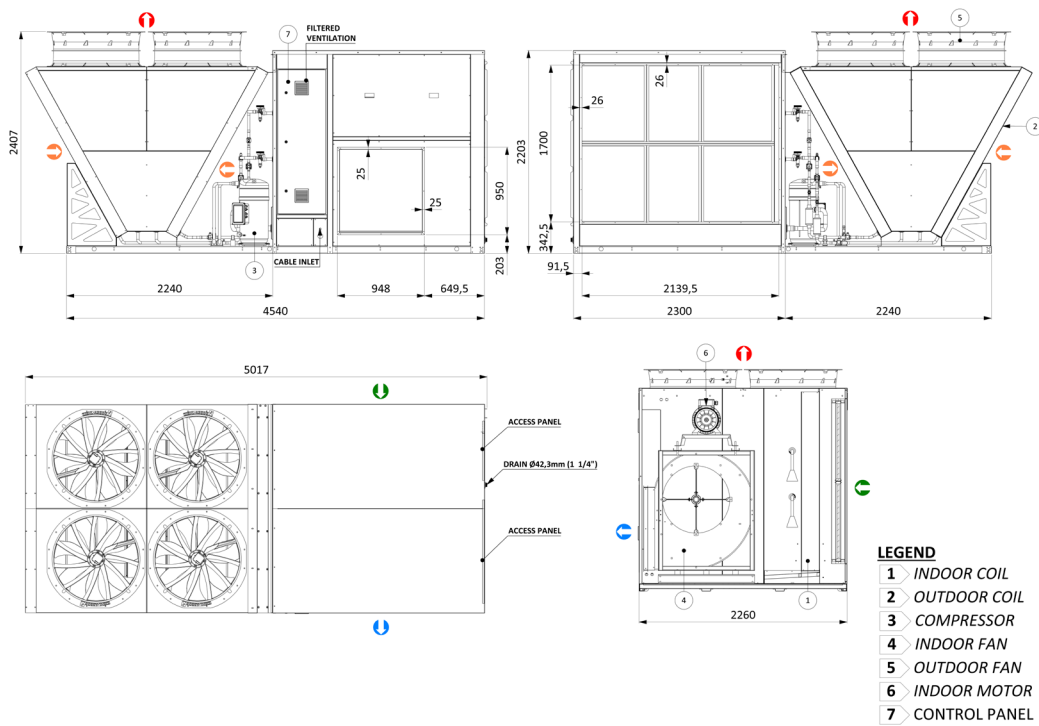
12.9. UNIT DIMENSION DATA MODELS [155]



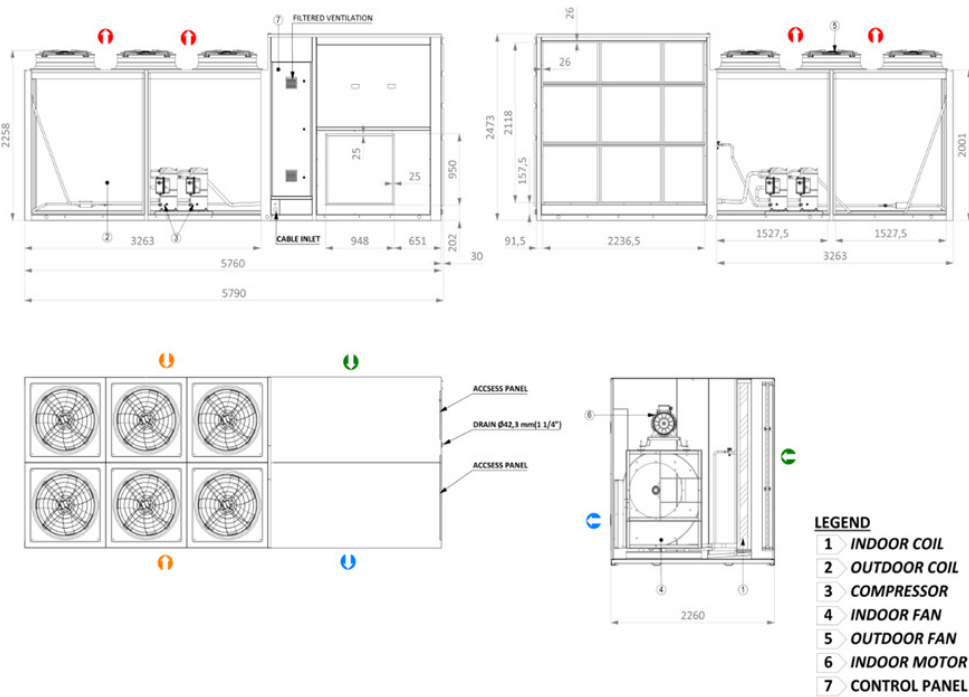
12.10. UNIT DIMENSION DATA MODELS [179]



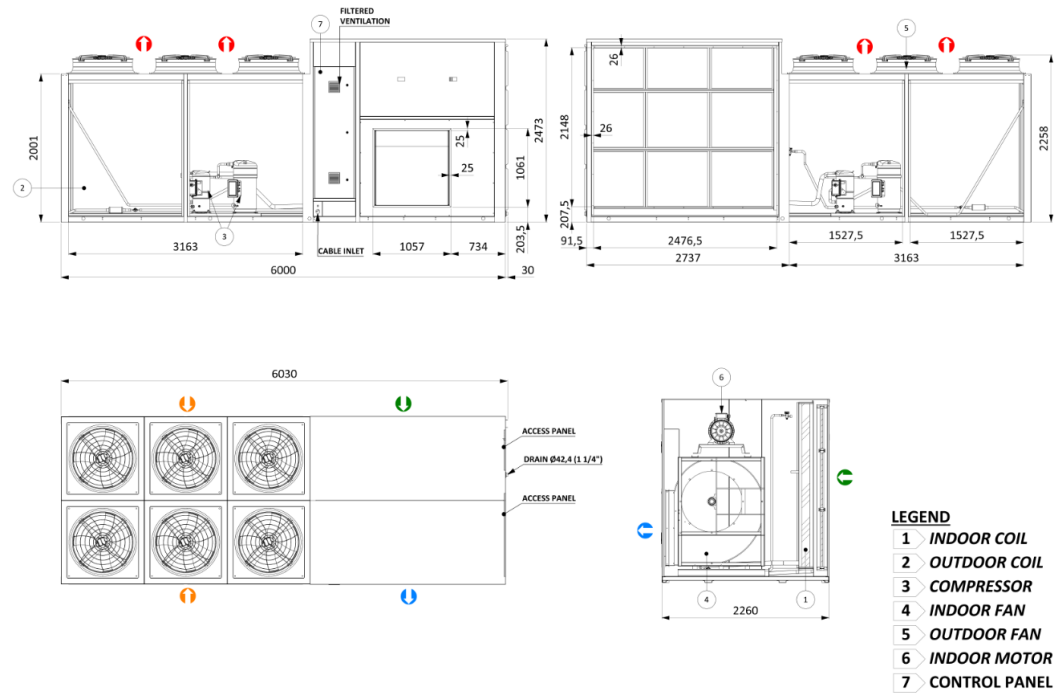
12.11. UNIT DIMENSION DATA MODELS [204]



12.12. UNIT DIMENSION DATA MODELS [244]



12.13. UNIT DIMENSION DATA MODELS [276]



➡ Indoor Return Air ➡ Indoor Supply Air ➡ Outdoor Fan Air Inlet ➡ Outdoor Fan Air Outlet

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