DAIKIN

WORLD'S LEADING AIR CONDITIONING COMPANY FROM JAPAN

Packaged AC Catalogue

Versatility is the mark of Perfection





HIGH STATIC SERIES



ROOFTOP SERIES



WATER SOURCE HEAT PUMP SERIES

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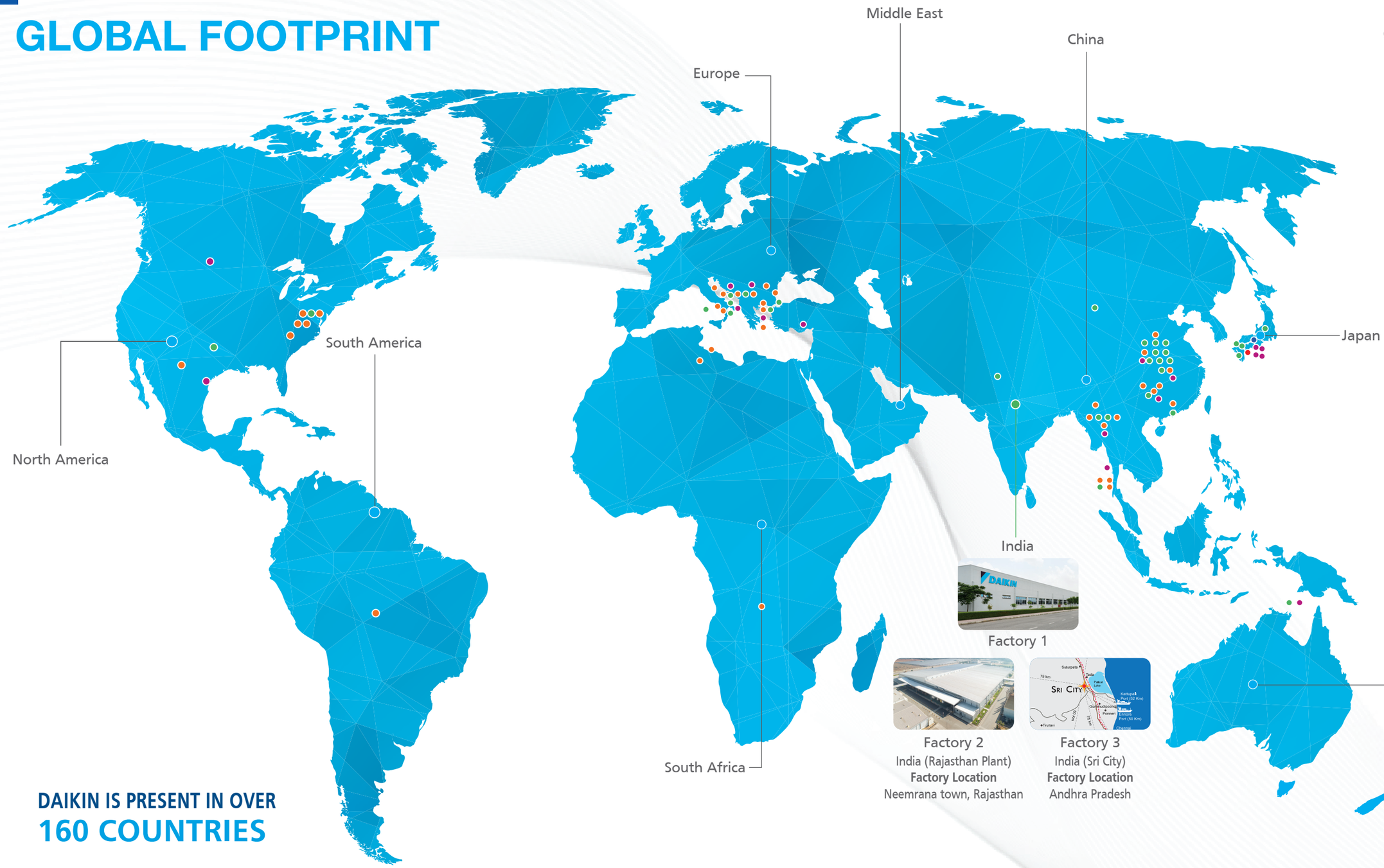
24 Specifications

Daikin customizes packaged line-up of airconditioning products for Indian market.

Daikin believes in being close to its customers. As a result we have developed a new range of packaged products tailor-made for Indian conditions. This new line-up of products produced in Daikin India's manufacturing facility at Neemrana, Rajasthan ensures reduced lead time and greater array of features for Indian consumers. Advanced features include cooling at high-ambient temperature, under voltage & over voltage protection as well as phase imbalance voltage & phase reversal protection. We have also introduced aesthetically appealing new wired LCD remote controller with glossy finish, for ease of usage of our packaged air-conditioner. The new line-up of packaged air conditioners gives you cutting-edge technology in air conditioners with industry-leading energy efficiency for lower power bills. These locally produced high-static pressure duct type are available up to 20 HP (16.7 TR).



GLOBAL FOOTPRINT



- Osaka Head Office
- Tokyo Office
- Production Site
- Overseas Affiliate
- R&D Site

Note: Map not to scale

DAIKIN IS PRESENT IN OVER
160 COUNTRIES

EUROPE, AFRICA & MIDDLE EAST
12,128
Employees
91
Subsidiaries

JAPAN
13,318
Employees
31
Subsidiaries

THE AMERICAS
22,697
Employees
107
Subsidiaries

CHINA
19,360
Employees
33
Subsidiaries

ASIA AND OCEANIA
17,367
Employees
54
Subsidiaries

DAIKIN GROUP
84,870
Employees
316
Subsidiaries

OUR TIMELINE 1924-2022

1924
Akira Yamada San establishes the Osaka Kinzoku Kogyosho Limited Partnership.

2000
Daikin enters the Indian market in a JV with Usha Shriram Group at 80:20 stakes respectively as Daikin Shriram Airconditioning.

2002
Daikin introduces VRV technology in India.

2004
Daikin India becomes a wholly owned subsidiary of Daikin Industries Ltd., Japan.

2007
Daikin India relocates HQ to Gurgaon and commences business of McQuay Chillers in India.

2008
Groundbreaking ceremony of Daikin India's manufacturing base at Neemrana, Rajasthan.

2009
Production commences at manufacturing plant in Neemrana, Rajasthan.

2010
Fresh round of ₹ 250 crore investment. Thus, taking it to a total of ₹ 743 crore.

2012
Production of High Wall Split air-conditioners with R-32 refrigerant commences.

2013
Fresh round of ₹ 330 crore investment.

2015
MoU signed with Rajasthan government for ₹ 600 crore investment ₹ 60 crore investment for Research and Development Centre to be opened next year.

2016
Research and development centre opens at Neemrana, Rajasthan.

2017
Second production facility opens at Neemrana, Rajasthan.

2021
1. Daikin India acquires Citizen Industries.
2. Setup of 3rd manufacturing plant in Sri City (AP) - in progress.

2022
Winners of
- Global Cooling Prize*
- Good Design Award for Single way cassette
- NECA AWARD



DAIKIN INDIA AT A GLANCE

Daikin is a leading innovator and provider of advanced, high-quality air-conditioning solutions for residential, commercial and industrial applications. As World's Leading Air-Conditioning Company, Daikin is committed to delivering air-conditioning solutions that enhance the quality of life all around the world.

A diverse multinational company, Daikin Industries Ltd., active in air-conditioning, chemicals and oil hydraulics, was established in 1924. With headquarters at Osaka, Japan, the Daikin family has more than 84,870 members, working across 100+ production base units and 316 consolidated subsidiaries worldwide. As the world's sole manufacturer that develops a long line of products, from refrigerants to air-conditioners, Daikin advocates comfortable living on the strength of advanced technologies.

Daikin is present in the USA, Canada, Europe, Russia, Middle East, Africa, Central Asia, Southeast Asia, Oceania and Latin America. We aim to serve our customers in each of these markets by providing optimal air-conditioning products.

ENGINE OF GROWTH

MANUFACTURING PLANT

Daikin's manufacturing plant at Neemrana, Rajasthan, aims to create products that will add comfort to the lives of people. It is supported by a network of production bases throughout the world and showcases the application of advanced technology and equipment. Our comprehensive quality control system features centrally computerised management of quality and production data to facilitate high-quality production within scheduled time.

Area* **4,65,537** sq. mtrs.

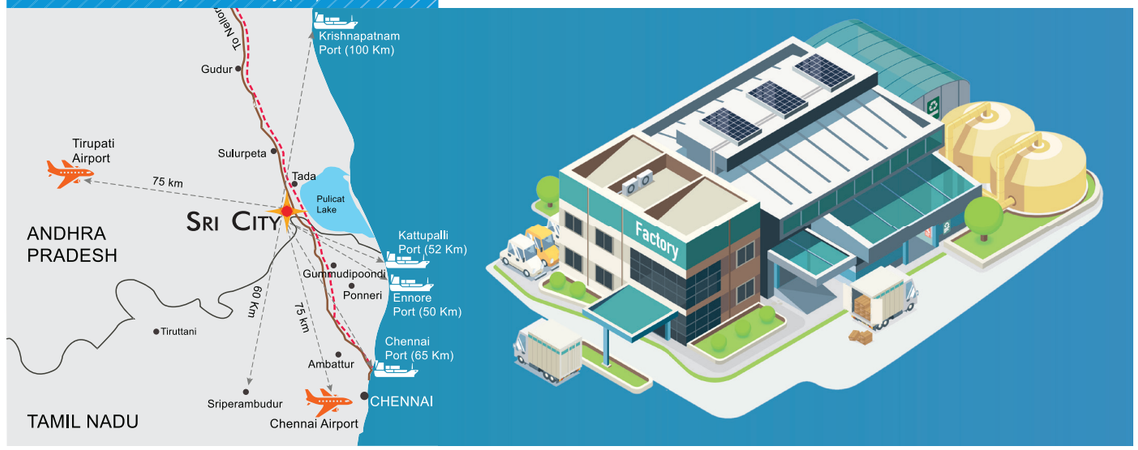
Factory 1 - Neemrana, Rajasthan



Factory 2 - Neemrana, Rajasthan



Factory 3 - Sri City (AP)



ACDC Centre





*Area includes Factory 1, Factory 2, Factory 3, ACDC Centre and Research & Development Centre

Disclaimer - Due to continuous expansion, numbers may differ. Visuals used are for representation purpose only.

Mechanical R&D Centre 1 - Neemrana, Rajasthan



Area 30,523 sq. m.

Mechanical R&D Centre 2 - Neemrana, Rajasthan



RESEARCH & DEVELOPMENT FACILITY

27+ Lab facilities

- Psychometric lab
- Multi-chamber lab
- Full Anechoic chamber for running sound test
- Product Reliability test lab, CFM test lab and Psychrometric lab

9 Test facilities

- Cyclic Corrosion test
- Salt Spray test
- Thermal Shock test
- Vibration test
- Environmental test
- Drop test

IoT Centre, Hyderabad



- Concept room
- Mock-up area
- Device test room (electronic parts test room)

Disclaimer - Due to continuous expansion, numbers may differ.
Visuals used are for representation purpose only.

Assembly line at Daikin factory







PRODUCT LINE-UP

HIGH STATIC PRESSURE DUCT TYPE (Cooling only)

R-410A

CAPACITY	Btu/h	66,000	1,02,000	1,32,000	1,29,600	1,98,000
	TR	5.5	8.5	11	10.8	16.5
INDOOR UNIT		 FDR65FRV16	 FDR100FRV16	 FDR130FRV16	 FDR130FRV162	 FDR200FRY16
OUTDOOR UNIT		 RR65FRY16	 RR100FRY16	 RR130FRY16	 RR65FRY16(Nos.2)	 RR100FRY16(Nos.2)

HIGH STATIC PRESSURE DUCT TYPE (Cooling only)

R-22

CAPACITY	Btu/h	66,000	1,02,000	1,32,000	2,00,000
	TR	5.5	8.5	11	16.7
INDOOR UNIT		 FD65DSV16	 FD100DSV16	 FD130DSV16	 FD200DSY16
OUTDOOR UNIT		 R65DSY16	 R100DSY16	 R130DSY16	 R100DSY16 (Nos. 2)

HIGH STATIC PRESSURE DUCT TYPE (Cooling Only)

R-22

CAPACITY	Btu/h	2,50,000	3,50,000	5,00,000
	TR	20.8	29.2	41.7
INDOOR UNIT		 FD250B2Y1M	 FD350B3Y1M	 FD500B4Y1M
OUTDOOR UNIT		 R130DSY16x2 Nos	 R100DSY16x1 Nos / R130DSY16x2 Nos	 R130DSY16x4 Nos

PRODUCT LINE-UP

AIR-COOLED ROOFTOP UNITS (Cooling only)

R-410A

CAPACITY	Btu/h	62,500	93,400	1,24,500	1,54,400	1,89,000	2,48,600
	TR	5.0	8.0	10.0	13	16.0	21.0
ROOFTOP SERIESUATQ-C		 UATQ60CGXY1	 UATQ90CGXY1	 UATQ120CGXY1	 UATQ150CGXY1	 UATQ180CGXY1	 UATQ240CGXY1

AIR-COOLED ROOFTOP UNITS (Heat Pump)

R-410A

CAPACITY	Btu/h	93,300	1,21,400	1,52,600	1,90,000	2,28,000	2,47,700
	TR	7.8	10.1	12.7	15.8	19.0	20.6
ROOFTOP SERIESUATYQ-C		 UATYQ250MCY19	 UATYQ350MCY1	 UATYQ450MCY1	 UATYQ550MCY1	 UATYQ600MCY1	 UATYQ700MCY1

HORIZONTAL WATER SOURCE HEAT PUMP

R-410A

CAPACITY	Btu/h (Cooling)	9380	17907	22682	29913	34791	42636
	Btu/h (Heating)	11153	20806	24217	30868	34961	44341
	TR (Cooling)	0.78	1.49	1.89	2.49	2.90	3.55
	TR (Heating)	0.93	1.73	2.02	2.57	2.91	3.70
UNIT		MWH010DRP	MWH020DRP	MWH025DRP	MWH030DRP	MWH040DRP	MWH050DRP



CAPACITY	Btu/h (Cooling)	54574	64806	83736	100620	113922	127907
	Btu/h (Heating)	56757	67398	87086	104645	118479	133023
	TR (Cooling)	4.55	5.40	6.98	8.39	9.49	10.66
	TR (Heating)	4.73	5.62	7.26	8.72	9.87	11.09
UNIT		MWH060DRP	MWH070DRP	MWH080DRP	MWH100DRP	MWH125DRP	MWH150DRP



Daikin's Packaged Air-conditioners are engineered to meet high static and large airflow for wider coverage requirements.



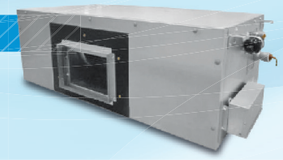
AIR-COOLED (Ductable)

AIR CONDITIONERS

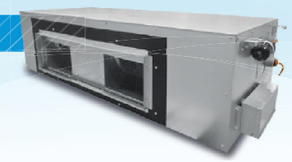
High static pressure duct type**

R-410A FDR-FRV/FRY Series
R-22 FD-DSV/DSY Series

FDR65FRV16



FDR100FRV16



FDR130FRV162*



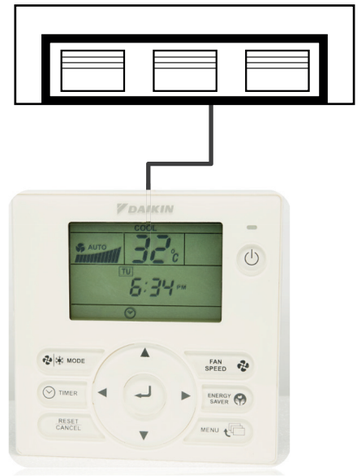
FDR200FRY16

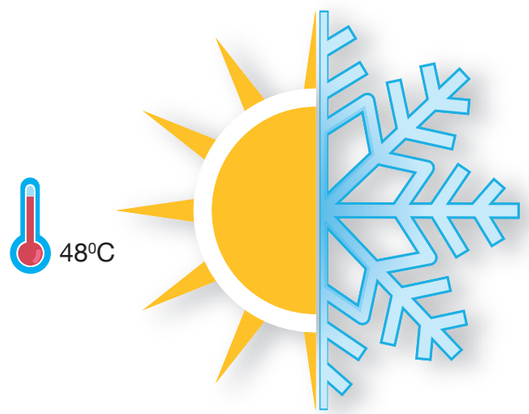


Improved Features

New wired LCD remote controller

New LCD based wired type remote handset with alphabetic error display like HP, LP, SPPR, indoor fan current sensor etc. In-built energy saver dedicated button and glossy finish.





High performance even at high ambient temperature

Always keeping your comfort in mind, Daikin ducted air conditioners work at high ambient temperature (48°C) without tripping. Get the best out of Daikin ducted air conditioners even in hot weather conditions.

Note: *Available in twin circuit also. **Models available in R-22 also (5.5 ~16.7 TR).

Best in class
Air Conditioning Components

Best in Class high grade Components of Daikin Ducted Air Conditioners ensures high energy efficiency, high cooling, high comfort and high reliability.



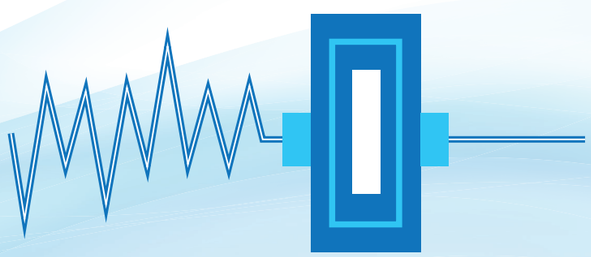


Under Voltage & Over Voltage Protection

Given the erratic electricity supply it becomes important that your air conditioners are guarded against under voltage and over voltage. Daikin ducted air conditioners offer protection against voltage fluctuation thus enhancing the operating life of your air conditioners.

Phase Imbalance Voltage

It is vital that your air conditioner is protected against imbalance and Daikin duct air conditioners offer this protection to ensure reliable operation of the air conditioner. Electrical equipment especially motors and their controllers will not operate reliably on unbalanced voltages. Greater imbalances may cause overheating of components and damage the air conditioners.



Phase Loss Protection

In case of any phase loss Daikin machine will display error on its controller.





Phase Reverse Protection

Phase reversal could cause serious problems therefore much care is required to protect the motor from such type of fault. Daikin duct air conditioners offer protection from phase reversal thus enhancing the life of the air conditioners.

Pre-charged Refrigerant

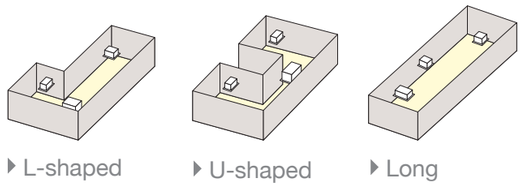
Daikin India's FDR65, FDR100, FDR130 and FDR200 models are available with pre-charged refrigerant for 7.5 meter piping length. No need for additional refrigerant charge on-site if piping length is upto 7.5 meters.



Comfortable

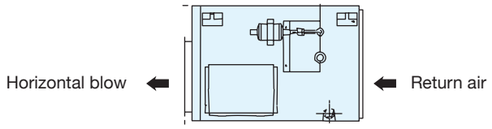
Superior air distribution for comfortable living

The conditioned air can be effectively distributed to every corner of the room through the ducting and this ensures a pleasant environment for comfortable living.



Air discharge orientation

FDR65-200 models come with standard horizontal air discharge.



Flexibility of air supply

Air flow can be adjusted by using fan speed button on LCD Remote controller.

Versatility

Multiple rooms can be cooled together at the same time by using just one unit of fan coil unit.

Fresh air intake for healthy living

Fresh air can be introduced into the building through the design of fresh air intakes. This will help to improve the indoor air quality.

Compact

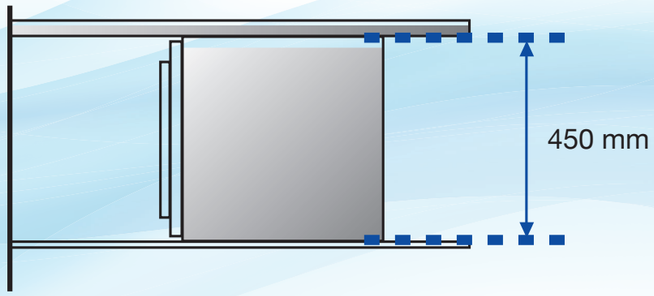
Compact design of built-in type helps blend with interior decor

Indoor models are compact in size and designed with twin coil structure. This design effectively saves space during installation.



Compact size

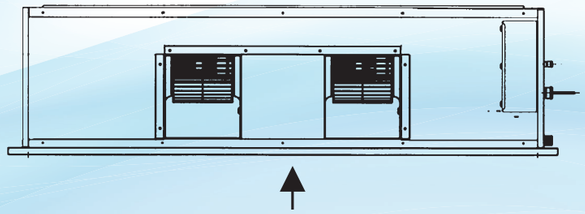
To fit in tight ceiling spaces, few models are available with 450 mm height only



Work & Servicing

Easy maintenance

The simple design concept has provided the ease of maintenance and servicing. Access to the internal part of the unit can be from the service panel or other side of the unit by loosening a few screws.



Remote Controller

Wireless & Wired Remote Controllers





NEW

Wired Remote Model Number
4P408280-1(FDR/FD 65/100/130),
4P416386-1(FDR/FD200)

Wireless Remote Model Number
BRC4N151

Others

Air Filter as standard

Washable Air Filter is equipped as standard.

Outdoor Unit

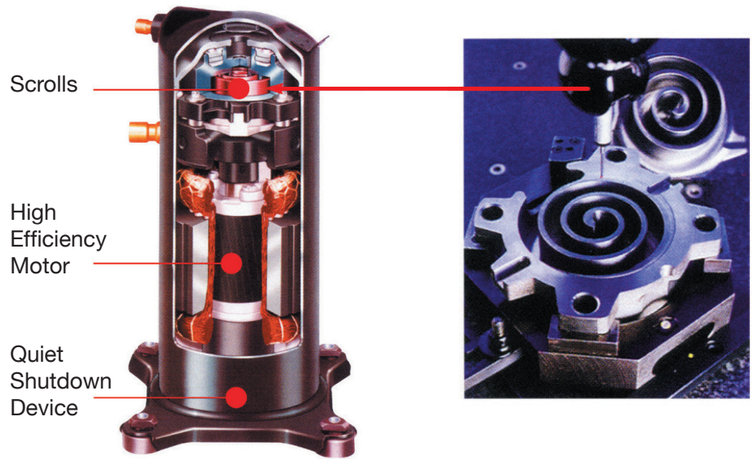
Scroll compressor

All outdoor units are using scroll compressor which has better energy efficiency and quiet in operation.

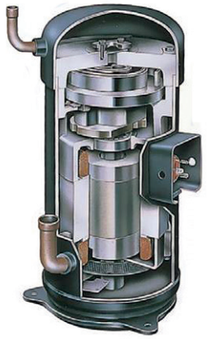
Anti-corrosion of heat exchanger fin

The heat exchanger fin of outdoor units are anti-corrosion treated.

Scroll compressor



Advantage of High Performance Components FDR-FRV Series (5.5TR~16.5TR)



Compressor

Compressor is known as heart of any Refrigeration & Air conditioning system.

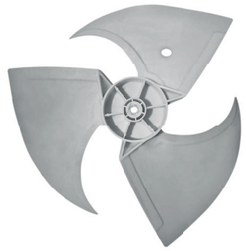
Daikin uses highly efficient Scroll compressor which ensures better volumetric efficiency, low noise, reliable operation and built in safety.

ODU Fan

Aerodynamic design High efficiency Propeller Fan for optimize Airflow distribution thus better heat transfer & lower noise level best suited for high Ambient conditions.

The Outdoor fan and fins that act as heat syncs draw the heat away so the unit doesn't overheat.

The outdoor condensing unit becomes very hot with all that overheated refrigerant running through it. The Outdoor fan and fins that act as heat syncs draw the heat away so the unit doesn't overheat.





Motor

High RPM motors to improve airflow and ensure better insulation.

Thermal Overload protector used for motor safety.



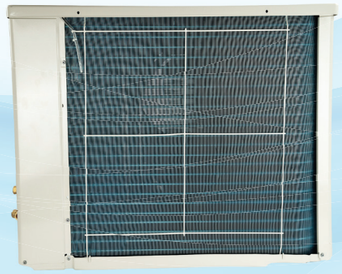
HP/LP Switch

These switches are designed for Highly Precise Setting & Repeatability

HP Switch: The high pressure switch cuts-off power supply in case of excess compressor discharge pressure thereby preventing equipment damage.

LP Switch: The low pressure switch monitors the refrigeration system for loss of refrigerant charge.

It also helps in stopping the evaporator (indoor) coil from freezing due to a clogged/dirty filter or lower airflow over the coil.



Heat Exchanger

Blue Fin Condenser and Hydrophilic special coating on the fin of the heat exchanger prevents corrosion, extending the life of the unit to enhance performance.

Optimum Area Heat exchanger of both 7mm tubes & 3/8'' Heat Exchanger increasing heat transfer area which increases cooling capacity & performance during high ambient temperature.

TEV

Thermostatic expansion valve (TEV) regulates refrigerant flow to cater to variations in heat load and make the system more efficient by controlling Superheat & matches system capacity.

Over a broader temperature range. It increases the flow of refrigerant to provide better cooling at higher temperatures. It's design protects the compressor motor by preventing liquid slugging, which can damage compressors.



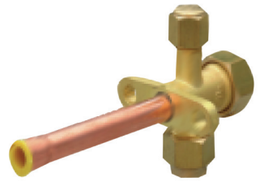


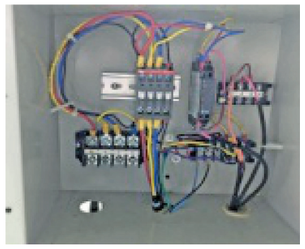
Drier

Filter Drier for liquid line protects refrigeration and air-conditioning system by removing High moisture, acids and solid particles. With these contaminants eliminated, systems are safer from harmful chemical reactions. These are shock resistant built in steel shell construction.

Stop Service Valve

Function: Stop valve is used to connect indoor and outdoor units.
Good quality of stop valve ensures high reliability.





Metallic PCB Box

Metallic PCB Box ensures safety from Fire

AIR-COOLED (Rooftop)

AIR CONDITIONERS - The Comfort with Higher Efficiency.

Rooftop

R-410A



UATQ60/90/120/150/300
180/240CGXY1 (Cooling Only)



UATYQ250/350/450/550/
600/700MCY1 (Heat Pump)



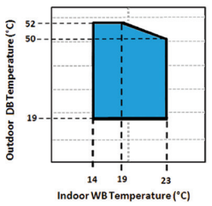
With Optional Economiser Kit*

Package Unit

Daikin's new range of rooftop packaged units has been developed specifically to suit commercial applications and are designed to be easy to install, requiring only ducting (and associated fittings), power/control wiring and drain piping. Along with the light grey colour, the flat top and compact design gives an aesthetic and neat appearance when installed in line of sight. The unit cabinet is made of powder coated sheet metal especially suitable for outdoor use. All parts of the structure are fastened with corrosion resistant screws and bolts.

High Operating Range

Designed for high ambient application. Continuous operation at an outdoor ambient temperature up to 52°C.





Flexible Air Supply utilising Variable Pitch Pulley

Utilising the Variable Pitch Pulley (VPP) driven supply fan, VPP can be adjusted on site to meet a wide range of required air flow and ESP without the need to change the pulley and belt.



Convertible Return and Supply Air*

Unit can be easily converted from horizontal to vertical (downward) supply and return air duct configuration by relocating the panels and supply air fan mounting.

Scroll Compressor

Units are equipped with high efficiency and reliable scroll compressors. Each compressor is mounted on rubber vibration isolators in order to reduce the noise level and vibration transmissions.

Powder Coated Condensate Drain Pan

The sheet metal condensate drain pan is powder coated to resist corrosion.

Slots for 2 Inch Return Air Filters

A 2 inch rail is provided as standard in instances where a field supplied filter casement needs to be installed.

Higher Energy Efficiency Rating

The UATQ-C series is designed to achieve high energy savings. Its performance is claimed to be among the best in the market.

*Selected models (Refer data book)

Standard Handset

User friendly wired remote controller for UATQ-C series with following functions:

- 7 days programmable timer (on/off)
- Compressor running display
- Real time clock
- Key lock function
- Energy saving mode
- Error code display



Rooftop Panel for UATYQ - MCY1 series comprises all starting, operating and safety controls setting.

- 7 days programmable timer with 3 set of ON/OFF, timer/day
- Dirty filter indication
- Alarm & Warning diagnostic
- Password protection for advanced setting



Component Features

1 Condenser Fan and Motor

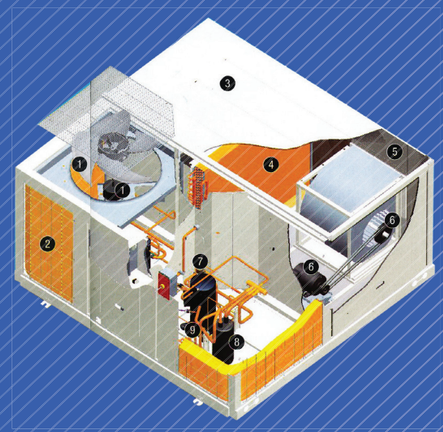
Fans are of propeller type, direct driven by weatherproof electrical induction motors. Condenser fan motor has class F insulation and splash-proof enclosure of up to IP55*.

- UATQ60/90/120/150/180/210/240/300CGXY1: IP55
- UATYQ600/700MCY1: IP55
- UATYQ250/350/450/550MCY1: IP44

2 Condenser

Condenser coils are manufactured from seamless inner grooved copper tubes mechanically bonded to Aluminium fins to ensure optimum heat transfer. All coils are tested against by Nitrogen holding at 609psig and highly precise Helium leak test at 235psig. All standard coils are up to 3 rows/14-16 FPI, 3/8" (9.52mm) O.D. tubes.

UltraGold Fin is offered as standard (1000hrs Salt Spray Tested), which has longer life span under corrosive environment.



3 Casing / Structure

The unit casing used in UATQ-C & UATYQ-MCY1 series is made of zinc coated galvanized steel sheets. It is further coated with an electrostatic powder coat and then oven-baked for a tough and lasting weather resistant finish. Zinc plated screws are used throughout to further reduce possibility of unit rusting.

4 Evaporator

Evaporator coils are manufactured from seamless inner grooved copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All coils are tested against by Nitrogen holding at 609psig and highly precise Helium leak test at 235psig. All standard coils are 3-4 rows/14-16 FPI, 3/8" (9.52mm) O.D. tubes.

UltraGold Fin is offered as standard (1000hrs Salt Spray Tested), which has longer life span under corrosive environment.

5 Insulation

All possible areas of condensation are insulated by PE, Polythelene. Panel insulation is 10mm thick while drain pan insulation is 5mm thick.

6 Evaporator Fan and Drive

Blower is DWDI centrifugal, forward curved type. It is mechanically and dynamically balanced and mounted on a rigid shaft in a self aligned bearing block. The motor is fitted with an adjustable V-belt drive as standard. It has class B insulation and dripping water proof, IP22.

7 Expansion Device

Electronic Expansion Valve is used to ensure accurate control of refrigerant flow.

8 Compressor

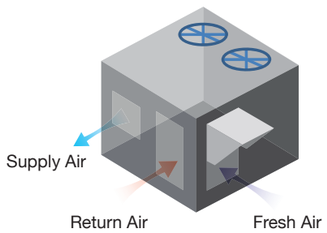
Compressor used in UATQ-C & UATYQ-MCY1 Series Packaged Units are hermetically sealed scroll type. All the compressors are provided with an internal overload protection.

9 Refrigerant Circuit

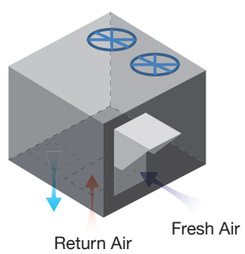
Each refrigerant circuit have independent electronic expansion devices, HP/LP switch and refrigerant line service pressure ports as standard factory HP/LP switch and refrigerant line service pressure ports as standard factory installed.

Economiser*

Economiser is available as an option to cater for horizontal or vertical air discharge/return.



Horizontal Discharge / Return



Vertical Discharge / Return

Optional Features

3rd Party Thermostat*

For application that requires uniform thermostat outlook with other electrical appliances. 3rd Party thermostat can be connected to the factory supplied module via the contact point available on the PCB board.

Basic BMS Connection

Unit's standard PCB board provides dry contact for basic BMS connection. Input signal will go to dry contact ON/OFF, COOL/HEAT and 4 to 20 mA temperature adjuster while output signal will come from ON/OFF, COOL/HEAT, ALARM and DEFROST dry contact.

CO_2 Sensor*

Field specified CO_2 sensor can be easily plugged on the control board's dry contact, which is available on the economiser extension board.

Auxiliary Heater*

Auxiliary heater connection point is available on the standard PCB for field supplied heater connection.

*Combination possible only with R-410A Heat Pump rooftop unit

HORIZONTAL WATER SOURCE HEAT PUMP





R410A ODP=0

MWH-D

Energy saving and environmental protection

Pioneer of Environmental Protection

Water source heat pump MWH-D series use environmental refrigerant R410A. R410A is higher volumetric capacity, w/o element of Cl, improving the efficiency, not destroying the ozone layer.

Refrigerant	ODP	Temperature slip	Volumetric capacity	Efficiency
R410A	0	0.5	141	100
R407C	0	4.4	95	98
R22	0.05	0	100	100

Notes:
- ODP is a relative value of R11
- Volumetric capacity and efficiency are relative value of R22

High Efficiency and Energy Saving

At present, McQuay measures ACOP instead of COP to identify water source heat pump efficiency. ACOP is Integrated cooling and heating Coefficient of Performance for the whole year. The highest ACOP is 4.94, for MWH060DRP, which is higher beyond national standard (GB) 4.55.

ACOP = 0.56*EER + 0.44*COP
EER = Cooling capacity/Cooling input power.
COP = Heating capacity/Heating input power.

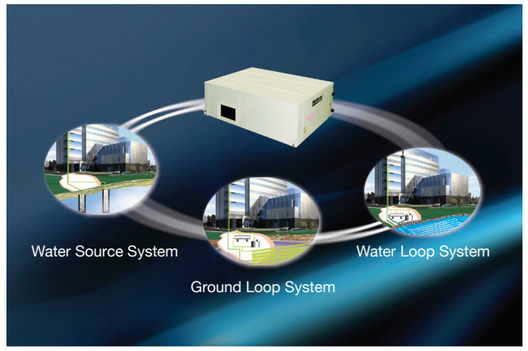


This test room is Nationally Recognized Testing Laboratory

Reproducible Energy Sources

The MWH-D series take use of ground water, surface water, ground and other resource which include low-quality energy which is renewable energy sources.

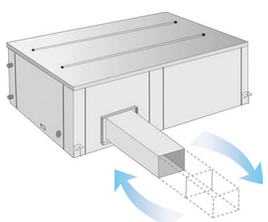
The unit can be applied to water loop system, water source system, ground water system or other water system due to wide-range working condition.



Flexible application

Flexibility in Static Pressure Selection

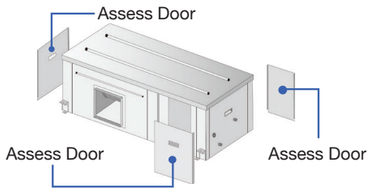
McQuay MWH-D series (1HP-7HP) take use of high-performance fan motor. For 8HP-15HP units , 4 types of ESP option is provided to meet air supply requirement.



1HP~7HP

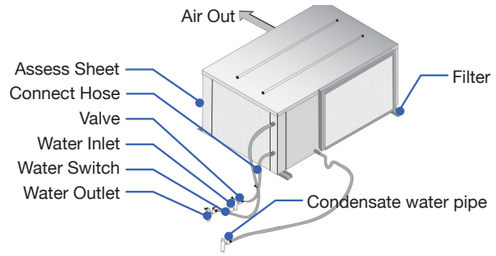
Easy Maintenance

MWH-D series are designed with assess doors and knobs in three directions, which is easier for service engineers to change parts on site.



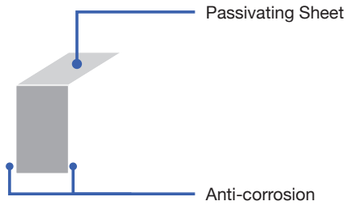
Convenient Installation

MWH-D series have charged refrigerant R410A before shipment. Customers only need to do wiring, install water pipes and air ducts on job site. So, installation cost is highly reduced.



With Full Accessories

Standard MWH-D series come along with accessories including: wired controller, 8m communication cable, moldproof air filter and waterpipe joint and rubber isolator make installation more convenient and easier.



Safety & Reliability

Multiple Protections

MWH-D series are designed with multiple protections: the high and low pressure protection, water leakage protection and circulating water temperature protection. The wired controller is installed with sound, light and code alarm, which provide feedback/fault information fast to make sure formal operation.



No Refrigerant Liquid Attack

MWH-D series are designed with liquid accumulator which can store redundant refrigerant when operation condition changes so that to prevent compressor from liquid attack.



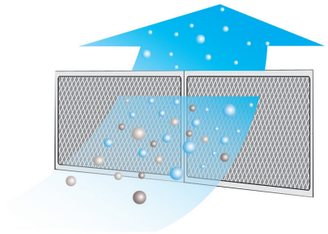
Scroll



Liquid Accumulator

Superior IAQ

MWH-D series standard filters are washable to ensure the coil clean and run efficiently, to provide clean indoor air continously.



Intelligent Control System

Intelligent Control System

MWH-D series adapt various ways of control, including standard wired controller (MC322) and other options, for example: wireless remote card controller, central controller (max to 64 units), Smart Commander and supporting BMS system under Modbus.



Wired Controller (MC322+8m wiring) (Standard)



Wireless Card Type (Optional)



Centralized Controller (Optional)



Modbus (Optional)

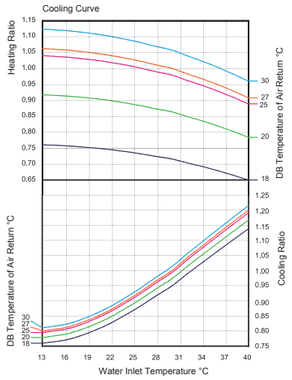


Smart Commander Software (Optional)

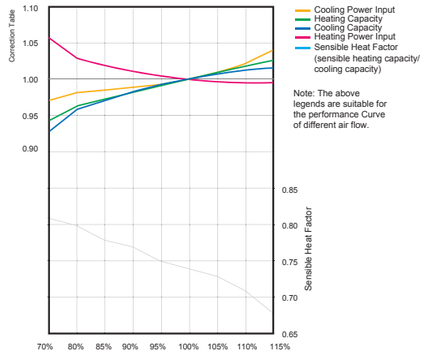
Note: For above option, please contact factory in advance

Performance Curve

Different Conditions



Different Air Flow



Note: The performance curve of different conditions is tested on norminal water flow.

Correction Table of Water Temperature Difference

Water Inlet/Outlet Temperature Difference	10	9	8	7	6	5	4
Water Flow	0.500	0.560	0.620	0.720	0.840	1.000	1.130
Cooling Capacity	0.986	0.990	0.994	0.997	0.999	1.000	1.001
Heating Capacity	0.978	0.984	0.990	0.997	1.001	1.000	0.994
Cooling Power Input	1.043	1.034	1.025	1.016	1.008	1.000	0.989
Heating Power Input	0.989	0.992	0.994	0.996	0.998	1.000	1.004

Note: specification is based on 30°C water inlet temperature, 27°C (DB) air return temperature.

Operating Range

Operating Range	Cooling	Heating
Indoor Air DB Temperature	16—35°C	10—30°C
Cooling Capacity	13—40°C	6—35°C

Note: If the units run beyond above operating limit, it may cause damage to the units.

SPECIFICATIONS

HIGH STATIC DUCT TYPE (Cooling only)

R-410A

					5.5TR	8.5TR	11.0 TR	10.8 TR	16.5 TR
Model			Indoor Unit		FDR65FRV16	FDR100FRV16	FDR130FRV16	FDR130FRV162	FDR200FRY16
			Outdoor Unit		RR65FRY16	RR100FRY16	RR130FRY16	RR65FRY16 (2Nos)	RR100FRY16 (2Nos)
Nominal Cooling Capacity				Btu/Hr	66000	102000	132000	129600	198000
				KW	19.3	29.9	38.7	38	58
Actual Capacity				%	Minimum 90% of Nominal Capacity				
Nominal Total Input Power (Cooling)				W	6400	11000	14600	13000	21600
Running Current				A	11	19	23	22	38
Power Source				V/Ph/Hz	415/3/50				
Refrigerant Type				---	R-410A				
INDOOR UNIT	Control	Operation		---	Wired Control				
	Air Flow	High		cfm	2200	3400	4400	4400	6600
		Medium		cfm	2045	3100	3850	3850	5800
		Low		cfm	1890	2800	3330	3330	5000
	Static Pressure	High		Pa	50	50	60	60	80
	Sound Pressure Level (H)			dBA	51	52	54	54	59
	Unit Dimension		Height x Width x Depth	mm	450x1170 x700	450x1660 x700	470x1700 x940	470x1700 x940	590x1885 x1145
	Packing Dimension		Height x Width x Depth	mm	465x1370 x720	585x1880 x740	620x1930 x990	620x1930 x990	755x2130 x1250
	Unit Weight			kg	60	95	125	130	175
	Condensate Drain Size			mm	40.5				
OUTDOOR	Unit Dimesion		Height x Width x Depth	mm	930x1025 x410	930x1200 x550	930x1650 x620	930x1025 x410	930x1200 x550
	Packing Dimension		Height x Width x Depth	mm	1080x1170 x470	1080x1350 x620	1088x1846 x720	1080x1170 x470	1080x1350 x620
	Unit Weight			kg	96	147	173	96	147
	Pipe Connection	Type		---	Liquid (Flared) & Gas (Brazed)				
		Size	Liquid	mm	12.7	12.7	15.9	12.7	12.7
			Gas	mm	22.2	28.6	28.6	22.2	28.6
Refrigerant Pre-Charged (At 7.5m Pipe Length)				kg	4.4	5.7	8	2X4.4	2X5.9*

Note:
- All specifications are subject to change by the manufacturer without prior notice.
- Cooling capacity is based on the conditions below:
  Cooling - 27°C DB / 19°C WB indoor and 35°C DB outdoor.
- Refrigerant (R-410) is pre-charged at factory shipment (Outdoor Unit).

SPECIFICATIONS

HIGH STATIC DUCT TYPE (Cooling only)

R-22

					5.5 TR	8.5 TR	11.0 TR	16.7 TR	20.8 TR	29.2 TR	41.7 TR
Model			Indoor unit		FD65DSV16	FD100DSV16	FD130DSV16	FD200DSY16	FD250B2Y1M	FD350B3Y1M	FD500B4Y1M
			Outdoor unit		R65DSY16	R100DSY16	R130DSY16	R100DSY16x2	R130DSY 16x2 Nos	R100DSY 16x1 Nos R130DSY 16x2 Nos	R130DSY 16x4 Nos
Capacity				Btu/h	66000	102000	132000	200000	250000	350000	500000
				kW	19.34	29.9	38.7	58.6	73.27	102.58	146.53
Total Input Power				W	6450	9500	13000	19510	25568	36783	51720
Running Current				A	11	17	22	33	44.4	62.9	89.7
Power Source				V/Ph/Hz	415 / 3 / 50						
Refrigerant Type					R-22						
INDOOR UNIT	Control	Operation			LCD Wired Controller						
	Air Flow	High		cfm	2200	3400	4400	6600	8000	10500	15000
		Medium		cfm	2045	3100	3850	5800	-	-	-
		Low		cfm	1890	2800	3330	5000	-	-	-
		High		Pa	50	50	60	80	200	343	250
	Sound Pressure Level			dBA	53	53	57	59	63	66	68
	Unit Dimension	Height		mm	450	450	470	590	1231	1486	1486
		Width		mm	1170	1560	1700	1885	1766	2022	2174
		Depth		mm	700	700	940	1145	1069	1069	1336
	Packing Dimension	Height		mm	465	585	620	755	1506	1766	1766
		Width		mm	1370	1780	1930	2130	2034	2279	2431
		Depth		mm	720	740	990	1250	1412	1422	1684
	Unit Weight			kg	60	90	128	175	343	440	606
	Condensate Drain Size			mm	40.5				25.4	25.4	25.4
INDOOR UNIT	Unit Dimension	Height		mm	930						
		Width		mm	1025	1200	1650	1200	1650	*1200/1650	1650
		Depth		mm	410	550	620	550	620	*550/620	620
	Packing Dimension	Height		mm	1080	1080	1088	1080	1088	*1080/1088	1088
		Width		mm	1170	1350	1846	1350	1846	*1350/1846	1846
		Depth		mm	470	620	720	620	720	*620/720	720
	Unit Weight			kg	95	144	160	144	160	*144/160	160
	Pipe Connection	Type			Brazed						
		Size	Liquid	mm	12.7	12.7	15.8	12.7	15.8	*12.7/15.8	15.8
			Gas	mm	22.4	28.58	34.92	28.58	34.92	*28.58/34.92	34.92
Refrigerant Pre-Charged (At 7.5m Pipe Length)				kg	4.2	6	8.7	6.0 (x2)	8.7	*6/8.7	8.7

Note:
- All specifications are subject to change by the manufacturer without prior notice.
- Cooling capacity is based on the conditions below:
  Cooling - 27°C DB / 19°C WB indoor and 35°C DB outdoor.
- Refrigerant (R-22) is pre-charged at factory shipment (Outdoor Unit).

*Given value is for 2 Nos ODU as per ODU model details mentioned above.

SPECIFICATIONS

ROOFTOP SERIES (Cooling only)

R-410A

Model		5.2 TR	7.8 TR	10.4 TR	12.9 TR	15.8	18.3	20.7	26.0
		UATQ60C	UATQ90C	UATQ1 20C	UATQ150C	UATQ1 80C	UATQ240C	UATQ240C	UATQ300C
Rated Capacity	Btu	62,500	93,400	1,24,500	1,54,400	1,89,000	2,20,000	2,48,600	3,12,200
	kW	18.32	27.37	36.49	45.25	55.39	64.48	72.86	91.5
Total Power Input	kW	4.52	7.20	9.45	12.00	14.72	16.90	19.29	24.52
Total Running Current	A	8.20	13.50	17.00	24.10	27.20	33.90	38.70	46.00
COP	W/W	4.05	3.80	3.86	3.77	3.76	3.82	3.78	3.73
Power Source	V/Ph/Hz	380-415V/3/50	380-415V/3/50	380-415V/3/50	380-415V/3/50	380-415V/3/50	380-415V/3/50	380-415V/3/50	380-415V/3/50
Control Operation		Wired Control	Wired Control	Wired Control	Wired Control	Wired Control	Wired Control	Wired Control	Wired Control
Air Flow	cfm	2000	2800	4400	5000	7000	7600	8000	9000
External Static Pressure (Factory Setting)*	Pa	50-500(100)	50-500(100)	50-500(100)	50-500(150)	50-500(150)	50-500(200)	50-500(200)	50-500(250)
Fan Drive		Belt Driven	Belt Driven	Belt Driven	Belt Driven	Belt Driven	Belt Driven	Belt Driven	Belt Driven
Air Quality(Filter)	Type	Saranet	Saranet	Saranet	Saranet	Saranet	Saranet	Saranet	Saranet
	Qty	1	1	2	2	2	2	2	2
Unit Dimension (HxWxD)	mm	1150 x 1280 x 1520	1350 x 1280 x 1520	1390 x 1965 x 1630	1390 x 1965 x 1630	1690 x 1965 x 1905	1650 x 2410 x 2030	1650 x 2410 x 2030	1950 x 2410 x 2030
Packing Dimension (HxWxD)	mm	1270 x 1320 x 1710	1410 x 1320 x 1710	1440 x 2020 x 1840	1440 x 2020 x 1840	1730 x 2120 x 2020	1740 x 2570 x 2290	1740 x 2570 x 2290	2040 x 2570 x 2290
Unit Weight	Kg	350	380	590	650	840	930	940	1090
Gross Weight	Kg	370	400	620	680	870	970	980	1130
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	Qty	1	1	2	2	2	2	2	2
Refrigerant (PreCharged)	Kg	9.5	11.5	5.2 + 5.2	8.5 + 8.5	8.5 + 8.5	12.0 + 12.0	10.8 + 10.8	14.0 + 14.0
Operating Range	CDB	up to 52°C	up to 52°C	up to 52°C	up to 52°C	up to 52°C	up to 52°C	up to 52°C	up to 52°C

Note: 1. Gross Cooling Capacity Based on 27°C DB / 19°C WB Indoor and 35°C DB outdoor
2. All Units are being tested and Comply to ISO 5151 (Non-Ducted Unit) or ISO 13253 (Ducted Unit)
3. All specifications are subjected to change by the manufacturer without prior notice

ROOFTOP SERIES (Heat Pump)

R-410A

Model				7.8 TR	10.1 TR	12.7 TR	15.8 TR	19.0 TR	20.6 TR
				UATYQ250MCY19	UATYQ350MCY1	UATYQ450MCY1	UATYQ550MCY1	UATYQ600MCY1	UATYQ700MCY1
Nominal Cooling Capacity (Gross)			Btu/h	93300	121400	152600	190000	228000	247700
			W	27340	35580	44720	55690	66820	72600
Nominal Heating Capacity (Nett)			Btu/h	85000	118700	142600	184000	210500	237500
			W	24910	34790	41790	53930	61690	69610
Power Source			V/Ph/Hz	380 -415 /3 /50		380 -415/3 /50		380 -415/3 /50	
Refrigerant Type / Control				R410A / EXV		R410A / EXV		R410A / EXV	
EER (Gross)			W/W	3.36	3.3	3.43	3.33	3.4	3.36
COP (Net)			W/W	3.4	3.21	3.25	3.47	3.32	3.25
EVAPORATOR	Sound Power Level @ 100 ESP		dBA	68	72	75	82	84	87
	Sound Power Level @ Std ESP		dBA	73	76	80	84	84	90
	Control		Air Discharge	Ducted					
			Operation	Wired					
	Air Flow		l/s/cfm	1560 / 3300	2030 / 4300	2670 / 5650	3160/ 6700	3445/7300	3917/8300
	External Static Pressure		Pa/in.wg.	147 / 0.6	147 / 0.6	147 / 0.6	206 / 0.8	196 / 0.8	206 / 0.8
	Condensate Drain Size		mm/in	25.4 / 1	25.4 / 1.0	25.4 / 1	25.4 / 1.0	25.4 / 1.0	25.4 / 1.0
CONDENSER	Air Flow		l/s/cfm	3884 / 8230	5664 / 12000	5710 / 12100	6090 / 12900	9534 / 20200	10006 / 21200
	Sound Power Level		dBA	82	83	83	87	90	90
	Unit Dimension	Height	mm/in	1150 / 45.3	1028 / 40.5	1130 / 44.5	1048 / 41.3	1302 / 51.3	1454 / 57.3
		Width	mm/in	1638 / 64.5	2209 / 87.0	2209 / 87.0	2209 / 87.0	2209 / 87.0	2209 / 87.0
		Depth	mm/in	2063 / 81.2	2113 / 83.2	2113 / 83.2	2670 / 105.1	2670 / 105.1	2670 / 105.1
	Packing Dimension	Height	mm/in	1370 / 54	1200 / 47.3	1290 / 50.8	1270 / 50.0	1520 / 59.9	1670 / 65.8
		Width	mm/in	1730 / 68.2	2280 / 89.8	2280 / 89.8	2280 / 89.8	2280 / 89.8	2280 / 89.8
		Depth	mm/in	2300 / 90.6	2350 / 92.6	2350 / 92.6	2900 / 114.2	2900 / 114.2	2900 / 114.2
	Unit Weight (Net)		kg/lb	445 / 981	580 / 1278	610 / 1344	780 / 1720	830 / 1830	970 / 2139
	Refrigerant Pre-charged			6.1 / 13.4	(2 X 5.8) / (2 X 12.8)	(2 X 7.2) / (2 X 15.9)	(2 X 8.7) / (2 X 19.2)	(2 X 10.4) / (2 X 22.9)	(2 X 11.6) / (2 X 25.6)

Note: All units are being tested and comply to ISO 5151 (Non-Ducted Unit) or ISO 13253 (Ducted Unit). Cooling indoor: 27°C dB / 19°C WB, outdoor: 35°C dB / 24°C WB; Heating-indoor: 20°C dB, outdoor: 8°C dB / 6°C WB

* Also available in R-407 C

SPECIFICATIONS

HORIZONTAL WATER SOURCE HEAT PUMP

R-410A

Model			0.78 TR	1.49 TR	1.89 TR	2.48 TR	2.90 TR	3.55 TR
			MWH010DRP	MWH020DRP	MWH025DRP	MWH030DRP	MWH040DRP	MWH050DRP
Nominal Cooling Capacity		W	2750	5250	6650	8770	10200	12500
Nominal Heating Capacity		W	3270	6100	7100	9050	10250	13000
Air Flow Rate		m³/h	580	1050	1250	1700	1900	2300
Power Supply			220V~/50Hz					
ESP		Pa	20	30	30	30	50	50
Dimension (Length×Width×Height)		mm	895×520×375	1265×655×435	1265×705×435	1390×745×435	1450×795×460	1450×795×510
Condenser	Type		Tube in Tube Heat Exchanger					
	Water Flow Rate	m³/h	0.61	1.12	1.42	1.94	2.14	2.67
	Water Pressure Drop	kPa	13	34	60	40	40	60
	Water Pipe Connection		R3/4	R3/4	R3/4	R3/4	R3/4	R3/4
Compressor			Rotary					
Rated Power	Cooling	W	700	1220	1520	2230	2250	2850
	Heating	W	740	1280	1540	2050	2300	2780
Rated Current	Cooling	A	3.38	5.93	7.46	11.03	10.57	13.76
	Heating	A	3.45	5.95	7.54	10.17	10.77	13.43
Condensate Drain Pipe		mm	Φ20					
Refrigerant	Type		R410A					
	Charge	kg	0.74	1.35	1.46	0.95×2	1.3×2	1.55×2
Sound Pressure Level		dBA	34	40	45	48	44	47
Weight		kg	56	101	103	125	155	161

R-410A

Model			4.55 TR	5.40 TR	6.98 TR	8.39 TR	9.48 TR	10.66 TR
			MWH060DRP	MWH070DRP	MWH080DRP	MWH100DRP	MWH125DRP	MWH150DRP
Nominal Cooling Capacity		W	16000	19000	25000	29500	33500	37500
Nominal Heating Capacity		W	16200	21500	25000	31500	35500	45000
Air Flow Rate		m³/h	2800	3400	5000	6000	7000	8000
Power Supply			380V/3N/50Hz					
ESP		Pa	80	80	80(50/100/150)	100(80/150/200)	100(80/150/200)	150(100/200/250)
Dimension (Length×Width×Height)		mm	1580×850×520	1670×855×520	1756×1000×660	1970×1150×708	1970×1150×708	2226×1200×736
Condenser	Type		Tube in Tube Heat Exchanger					
	Water Flow Rate	m³/h	3.3	4.22	5.23	6.12	7.11	7.78
	Water Pressure Drop	kPa	60	61	73	45	55	65
	Water Pipe Connection		R3/4	R1	R1-1/4	R1-1/4	R1-1/4	Rc1-1/4
Compressor			Scroll					
Rated Power	Cooling	W	3300	4900	5600	6300	8500	9450
	Heating	W	3200	4800	5400	6400	8100	10300
Rated Current	Cooling	A	5.91	8.63	11.45	13.68	15.89	17.78
	Heating	A	5.83	8.41	11.11	13.87	14.46	18.89
Condensate Drain Pipe		mm	Φ20		Φ34			
Refrigerant	Type		R410A					
	Charge	kg	3.5	2.8	3.5	3.2×2	3.0×2	3.7×2
Sound Pressure Level		dBA	49	54	55	59	59	60
Weight		kg	198	208	245	365	375	450

Notes:
- Specifications will be subjected to change by manufacturer without prior notice.
- Cooling capacity is based on 27°C (DB), 19°C (WB) air inlet temperature and 30°C water inlet temperature, 35°C water outlet temperature.
- Heating capacity is based on 20°C (DB), 15°C (WB) air inlet temperature and 20°C water inlet temperature.

Note

Note

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Disclaimer

As a continuing policy of product innovation at Daikin, the design and specifications are subject to change without prior notice. The visuals of the products in the brochure are representative only, actual products might differ from the ones shown.

'Products mentioned in this brochure comply with RoHS regulations as per E-waste (Management & Handling) Rules, 2011 and should not be mixed with general household waste at the end of their useful life.' For more details kindly visit our website www.daikinindia.com or contact our customer care centre at 011-40319300 / 1860 180 3900.

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