



Carrier Ducted

Superior Climate Control with
Ducted Air Conditioning Systems



About Us



We are the leading provider of heating, ventilating, air conditioning and refrigeration systems, building controls and automation, and fire and security systems



We operate 51 factories and 39 research & design centers worldwide with more than 53,000 employees serving customers in more than 180 countries



We actively share expertise to promote environmental stewardship



We were a founding company number one of the U.S. Green Building Council in 1993



Our sample landmark installations include The Sistine Chapel – Vatican, Galleria degli Uffizi – Italy, and The Great Library of Alexandria – Egypt



Carrier

R-410A Refrigerant



What is R-410A?



Chlorine-free refrigerant meeting stringent environmental guidelines.



Zero-ODP hydrofluorocarbon, does not deplete the ozone layer.



Qualified by IGBC for green buildings.



Note:

- CFC - chlorofluorocarbons, HCFC - hydrochlorofluorocarbons
- The Indian Green Building Council (IGBC), part of the Confederation of Indian Industry (CII). Their aim is to enable a sustainable built environment for all and facilitate India to be one of the global leaders in the sustainable built environment by 2025.

R-410A Refrigerant



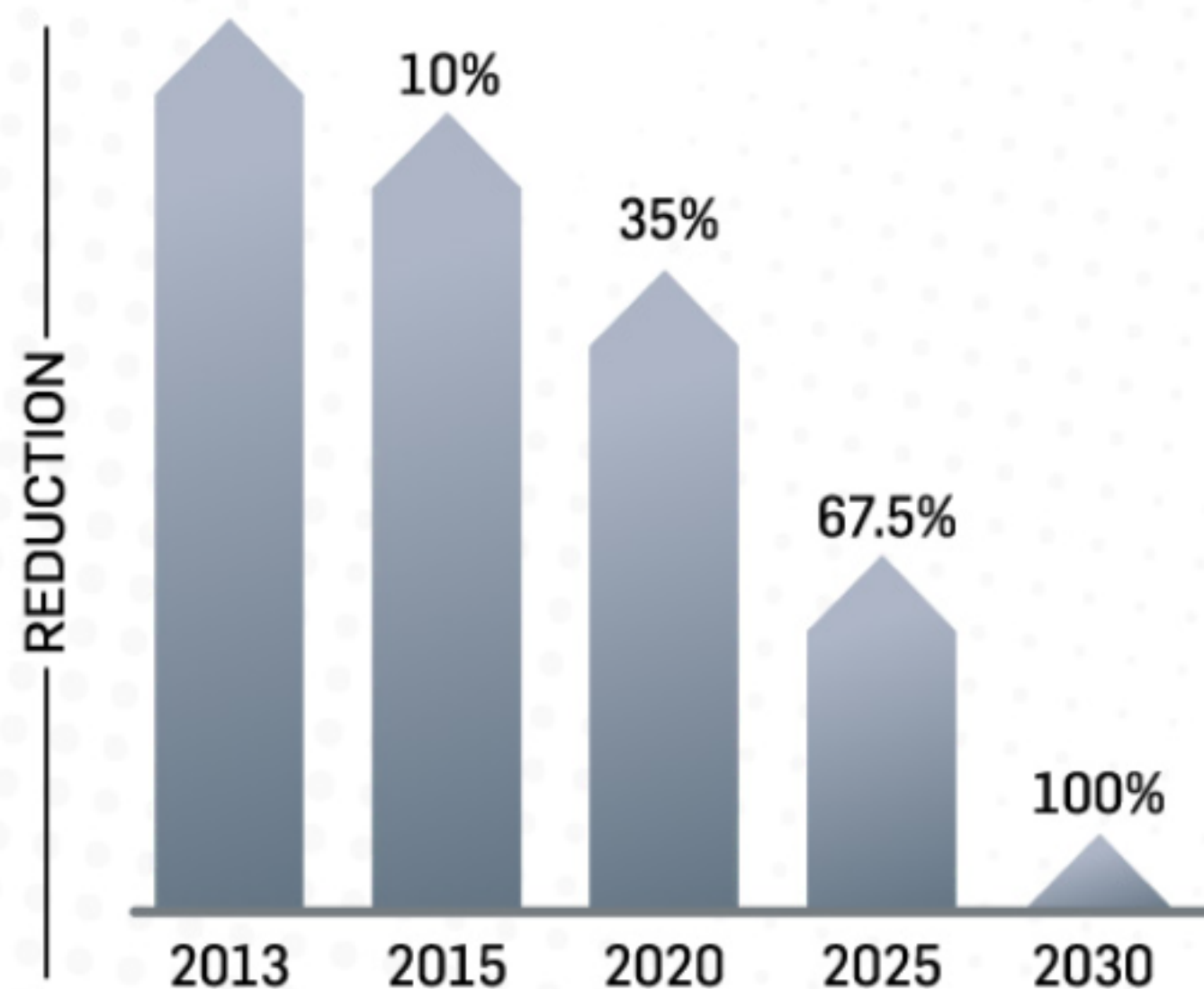
Protecting Our Environment's Protector



Ozone layer is at risk from CFCs, HCFCs, and halons in air conditioning.

UV exposure due to ozone depletion

- can cause a lot of health & skin issues, R-410A refrigerant reduces these risks significantly.



The Phase-out schedule

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Ducted Air Conditioning

What is Ducted Air Conditioning?



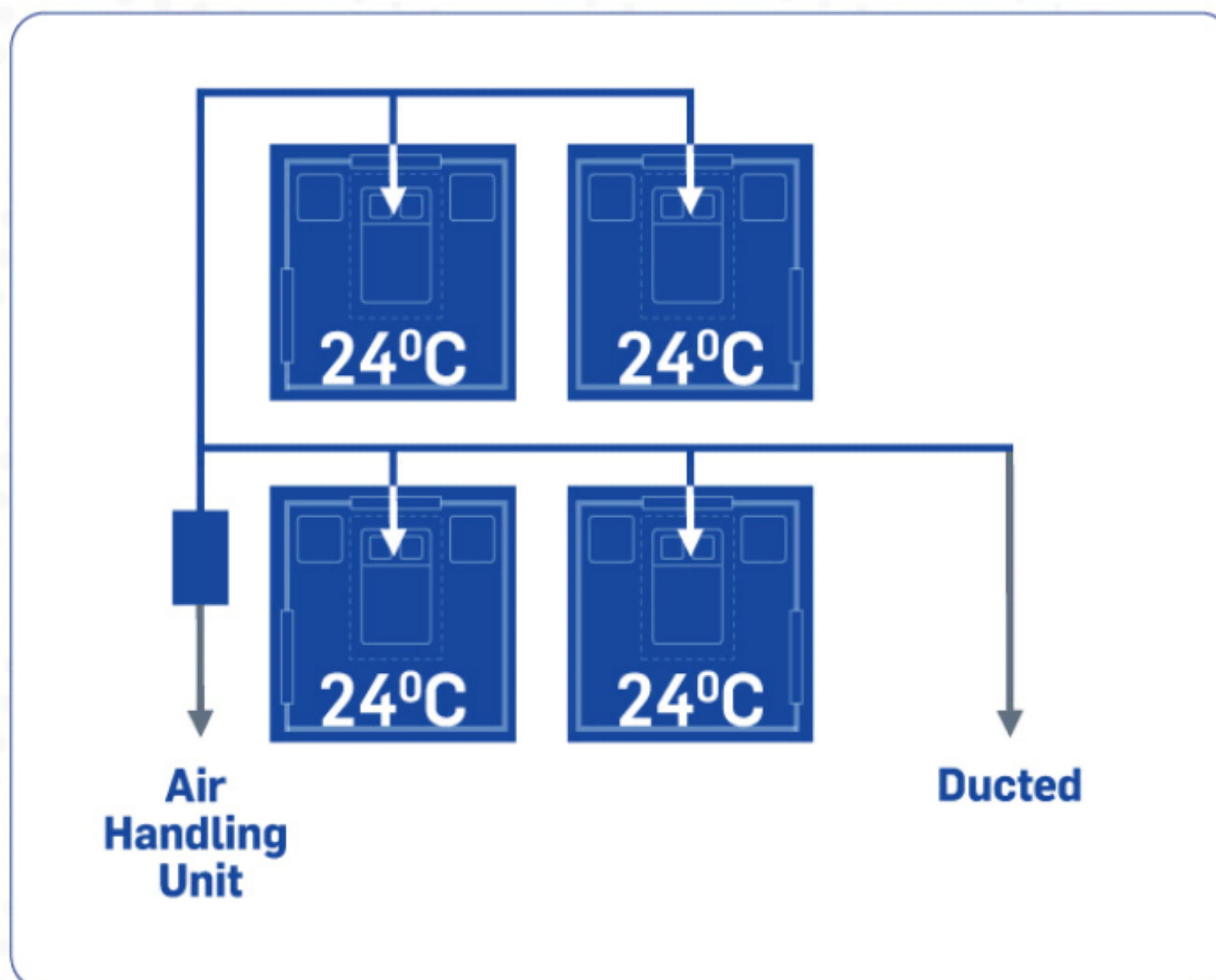
Ensures uniform air conditioning in all rooms at the same temperature.



Outdoor condensing unit with a scroll compressor* ideal for Indian conditions: wide operating voltage, silent operations, economical running, and unmatched reliability.



Perfect for homes, open-plan offices, shops, schools, restaurants, and other large spaces needing balanced air distribution.



*Applicable to 5.5 TR and above



Highly Reliable



Ensures higher efficiency through scroll compressor technology with built-in compressor protection.



Operates with minimal noise, enhancing overall user comfort.



Provides enhanced reliability and fault tolerance for dependable performance.



Offers a longer service life, ensuring value and durability.

Efficient Performance



Adjusts the refrigerant flow to cater to variations in heat load through the thermostatic expansion valve

- This adjustment makes the system more efficient over a broader temperature range.

Energy Efficient



Ensures optimal energy use through high power-saving compressor configurations.



Enhances the system's efficiency with dual sine wave fin pattern.



Delivers high performance and effective heat transfer via internally grooved copper tube.

Efficient Design



Operates silently to provide powerful air throw for uniform distribution over large areas through the direct-driven DIDW fan.



Ensures durability to air conditioners with its powder-coated units.

Easy Servicing & Installation



Ensures easy servicing of the compressor through the outdoor unit design.



Allows convenient adjustment or replacement of the motor or housing with a removable bottom panel of the indoor unit.



Ensures quick and easy installation with quick-lock fittings.

Flexible Air Discharge*



Allows you to switch discharge from horizontal to vertical and vice-versa depending on where the indoor unit is placed.



*Applicable to 8.5 TR IDUs only



Inbuilt Electrical Safety

Protects the system from electrical surges, ensuring stable operation.



Prevents damage from incorrect electrical phase connections.

Guards against low voltage conditions that could harm the system.



Detects and protects against loss of electrical phase, maintaining system integrity.

Shields the system from excessive voltage, preventing potential damage.



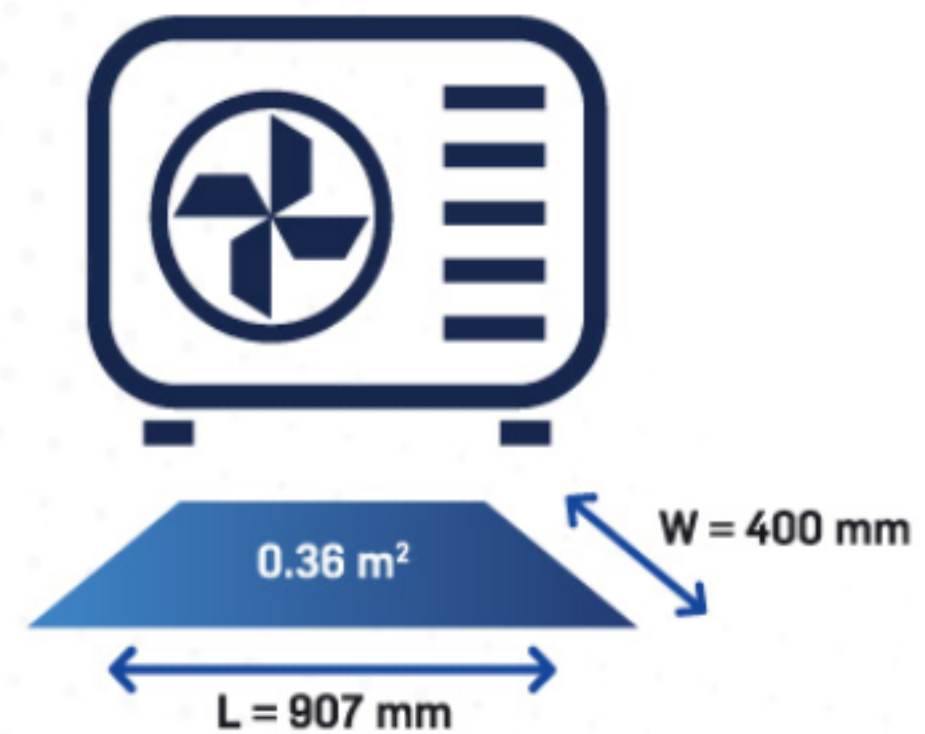
Automatically protects the compressor from overload, ensuring longevity and reliability.

Carrier

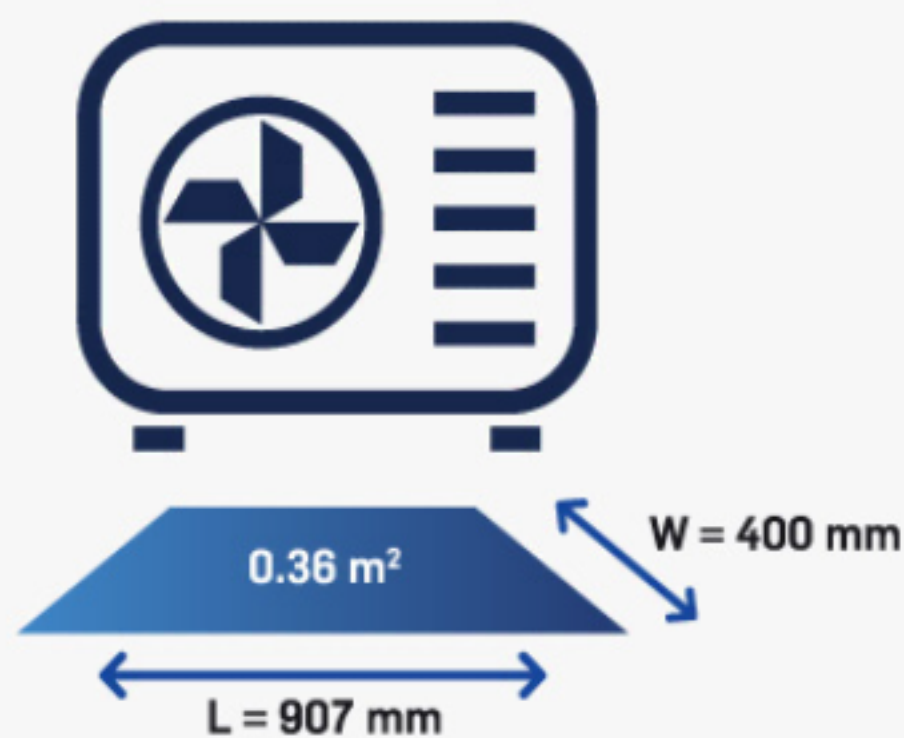
Environment Friendly

Offers a 30% lower footprint for 5.5 TR ODU compared to conventional 5.5 TR ducted systems.

30%
5.5 TR ODU



36%
4.0 TR ODU



Provides a 36% lower footprint for 4.0 TR ODU compared to conventional 4 TR ducted systems.

Carrier

Safe Operations

Motor Capacitors



Provides protection against fire and electrical shock hazards with S3 capacitors in the fan motors

- Opens an internal link in case of faulty conditions.

HP switch*



The high pressure switch cuts off power supply in case of excess compressor discharge pressure.



Prevents equipment damage.



*Applicable to 5.5 TR and above



Safe Operations

LP Switch*



Monitors the refrigeration system for loss of refrigerant charge with the low pressure switch.



Helps stop the evaporator coil from freezing due to a clogged or dirty filter or lower airflow over the coil.

Filter Drier



Protects the refrigeration and air conditioning systems from moisture, acids, and solid particles with filter driers for the liquid line.



Ensures the systems are safer from harmful chemical reactions by eliminating these contaminants.



*Applicable to 5.5 TR and above



New Wired Remote Control



Provides precise temperature setting with a microprocessor-based control.



Ensures optimal operation times to protect the system with Smart Time Guard.



Allows for seamless communication through Modbus protocol on RS485 connection*.



Features IR-enabled functionality.



Tracks and logs error codes for easy troubleshooting.



Alerts when the corded remote is disconnected with an audio alarm.



New Wired Remote Control



Allows option to enable/disable auto restart.



Monitors voltage levels to ensure stable operation with voltage scanner status.



Allows for precise calibration of sensors with probe calibration.



Displays and resets the timer for filter cleaning with Filter Clean timer view/reset.



Configures staggered start times for multiple units in the same power grid to avoid power surges.



Carrier Ducted Models

Model		3.0 TR DUCTED		4.0 TR DUCTED		5.5 TR DUCTED	
		INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT
		40LC004GB	51MSG-036GSF	40LC005GB	51MSG-048GSF	40LC-007GD	38LH-066GSF
Nominal Static Pressure	Pa	(0) (20)		(0) (20)		(0) (30)	
Nominal Cooling Capacity*	Ton	(3.0) (2.9)		(4.0) (3.9)		(5.5) (5.2)	
	BTU/hr	(38,560) (34,800)		(48,000) (46,800)		(66,000) (62,400)	
	watt	(11,301) (10,300)		(14,068) (13,700)		(19,338) (18,130)	
Number of Units		1	1	1	1	1	1
Nominal Air Quantity	CMH	(2,040) (1,870)	4,080	(2,720) (2,500)	5,440	(3,738) (3,568)	7,225
	CFM	(1,200) (1,100)	2,400	(1,600) (1,470)	3,200	(2,200) (2,100)	4,250
Power Supply (V-ph-Hz)		230 ± 10% - 1 - 50	400 ± 10% - 3-50	230 ± 10% - 1 - 50	400 ± 10% - 3-50	230 ± 10% - 1 - 50	400 ± 10% - 3-50
Fan	Type	Direct-Driven DIDW Forward-Curved Centrifugal Fan	Axial	Direct-Driven DIDW Forward-Curved Centrifugal Fan	Axial	Direct-Driven DIDW Forward-Curved Centrifugal Fan	Propeller
	Quantity / Unit	2	1	2	1	2	1
	Discharge	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Fan Motor	Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type
	Quantity	1	1	1	1	1	1
	watt	125	124	300	350	420	350
Control Type		LED Display		LED Display		LED 7 Segment Display	
Overall Dimensions	Length (mm)	1,205	904	1,205	904	1,205	904
	Width (mm)	725	325	725	325	725	325
	Height (mm)	345	692	345	820	345	820
Compressor	Type	-	Rotary Compressor	-	Rotary Compressor	-	Rotary Compressor
	Quantity	-	1	-	1	-	1
Net Weight	kilogram (kg)	45	65	46	70	46	76
Refrigerant	kilogram (kg)	-	R-410A (2.05)	-	R-410A (2.7)	-	R-410A (3.0)
Liquid Line	Inches	-	3/8"	-	3/8"	-	1/2"
Suction Line	Inches	-	3/4"	-	3/4"	-	7/8"
Expansion Device		-	Capillary	-	Capillary	Thermal Expansion Device	-

Note:

- The above designs and specifications are subject to change without prior notice for product improvement.
- Cooling capacity under IS-8148 test conditions.



Carrier Ducted Models

8.5 TR DUCTED		11.0 TR DUCTED		11.0 TR DUCTED (TWIN CDU)		16.5 TR DUCTED (R-410A)	
INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT	INDOOR UNIT	OUTDOOR UNIT
40LC-010GB	38LH-102GSC	40LC-012GB	38LH-132GSC	40LC-012GC	38LH-066GSM+ 38LH-066GSS	40LC-018GC	38LH-102GSCM+ 38LH-102GSCS
(0) (30)		(0) (40)		(0) (40)		(0) (40)	
(8.5) (8.2)		(11.0) (10.5)		(11.0) (10.5)		(16.5) (16.0)	
(102,000) (98,400)		(132,000) (126,000)		(132,000) (126,000)		(198,000) (192,000)	
(29,894) (28,500)		(38,687) (37,000)		(38,687) (36,900)		(58,028) (56,200)	
1	1	1	1	1	2	1	2
(5,780) (5,440)	10,625	(7,480) (7,055)	13,090	(7,480) (7,055)	7,225	(11,560) (11,044)	10,625
(3,400) (3,200)	6,250	(4,400) (4,150)	7,700	(4,400) (4,150)	4,250	(6,800) (6,500)	6,250
230 ± 10% - 1 - 50	400 ± 10% - 3-50	230 ± 10% - 1 - 50	400 ± 10% - 3-50	230 ± 10% - 1 - 50	400 ± 10% - 3-50	230 ± 10% - 1-50	400 ± 10% - 3-50
Direct-Driven DIDW Forward-Curved Centrifugal Fan	Propeller	Direct-Driven DIDW Forward-Curved Centrifugal Fan	Propeller	Direct-Driven DIDW Forward-Curved Centrifugal Fan	Propeller	Direct-Driven DIDW Forward-Curved Centrifugal Fan	Propeller
2	1	3	1	3	1	3	1
Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type	Permanent Split Capacitor Type
1	1	2	1	2	1	3	1
475	470	475 & 370	470	475 & 370	350	1,350	470
LED Display		LED Display		LED Display		LED Display	
1,646	982	1,900	1,200	1,900	904	2,090	982
700	610	925	605	925	325	990	610
460	1,100	460	1,055	460	820	825	1,100
-	Scroll Compressor	-	Scroll Compressor	-	Scroll Compressor	-	Scroll Compressor
-	1	-	1	-	1	-	1
91	135	130	175	130	65	182	135
-	R-410A (5.6)	-	R-410A (7.2)	-	R-410A (4.3)	-	R-410A (6.1)
-	5/8"	-	5/8"	-	1/2"	-	5/8"
-	1-1/8"	-	1-1/8"	-	7/8"	-	1-1/8"
Thermal Expansion Device	-	Thermal Expansion Device	-	Thermal Expansion Device	-	Thermal Expansion Device	-

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Thank You

Note:

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