

### FURRED-IN R410A : TECHNICAL SPECIFICATION

Parameter	Unit	INDOOR UNITS		OUTDOOR UNITS	
		42CM-006GA	42CM-008GA	51MSG-018GRB	51MSG-024GRB
Nominal Cooling capacity	KW	5.07	6.30	5.07	6.30
	Btu/h	17300	21500	17300	21500
Nominal Air Quantity	m <sup>3</sup> /s	0.28	0.38	—	—
	CFM	600	800	—	—
Power Supply	V-Hz-Ph	230 ± 10% / 50 / 1		230 ± 10% / 50 / 1	
Fan	Type	Direct driven DIDW forward curved centrifugal blower			
	Quantity	2		1	
Fan Motor	Discharge	Horizontal			
	Type	Permanent Split Capacitor Type			
Compressor	Quantity	1		1	
	Type	Rotary			
Net Weight	Quantity	—		—	
	Kg	20		42	
Refrigerant		R410A			
	Height	28 (0.28)	28 (0.28)	69.2 (0.69)	82 (0.82)
Overall Dimensions	Width	100 (1.00)	129 (1.29)	90.4 (0.90)	90.4 (0.90)
	Depth	59.4 (0.59)	59.4 (0.59)	32.5 (0.33)	32.5 (0.33)

\*\* Cooling capacities under IS test conditions



For more details, please contact our sales office:

**Corporate & Registered Office:** Carrier Airconditioning & Refrigeration Ltd. Kherki Daula Post, Narsingpur, Gurgaon 122004, Tel: 0124-4825500; Fax: 0124-2372230  
**Sales Offices:** - **Delhi/NCR:** 0124-4873200 **Ghaziabad:** 0120-4183260 **Lucknow:** 0522-4158703 **Chandigarh:** 0172-5076756 **Jaipur:** 0141-6612022 **Indore:** 0731-2445200 **Mumbai:** 022-61700700  
**Ahmedabad:** 079-44820431 **Pune:** 020-67045200 **Kolkata:** 033-40524301/343 **Chennai:** 044-66448845 **Hyderabad:** 040-41100222 **Cochin:** 0484-4029000/1 **Bhubaneswar:** 0413-2225853/ 2226676 **Patna:** 9693234520

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CIN: U74999HR1992FLC036104/ Website: www.carrierindia.com/ E-mail: customersupport.india@carrier.utc.com



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# A product that suits all your needs



**DUCTED**

## Carrier India



Carrier is a part of UTC Climate, Controls & Security a unit of United Technologies Corp. (UTC), a leading provider to the aerospace and building systems industries worldwide. UTC was ranked at 151<sup>st</sup> position in Fortune 500 list of global corporations in 2014.

Built on Dr. Willis Carrier's invention of modern air conditioning in 1902, Carrier's research, expertise and innovation have resulted in market leading solutions. We recognize the vital importance of maintaining a responsible balance between the comfort we create today and the world we live in tomorrow. Millions of people trust Carrier's leadership in delivering efficient solutions. To know more, please visit <http://www.carrier.com>.

Over the years, Carrier India has significantly contributed in promoting sustainability. Carrier is the only company in the world to be a founding member of the Green Building Councils of the U.S., Argentina, China, India, Singapore and France. In fact, Carrier was instrumental in launching the U.S. Green Building Council® (USGBC) in 1993 and was the first company in the world to join the organization.



It invests in R&D resources to advance energy efficiency, ozone layer protection and low global warming technologies in its products. Carrier's AdvanTEC Solutions Center is a natural evolution of Carrier's approach to sustainability and supports customers around the world in developing strategic, energy-efficient and custom-engineered building solutions.

Carrier's efforts in promoting sustainability can be quantifiably measured by means of the Carrier CO2NSERVATION Meter, which meticulously calculates the avoided greenhouse emissions with the help of Carrier products, globally since 2000. To know more about the Carrier CO2NSERVATION Meter, please visit <http://www.naturalleader.com>.



ACE (Achieving Competitive Excellence) is our proprietary operating system to ensure world-class quality in our products and processes. With its relentless focus on increasing efficiency and reducing waste, ACE is integral to the company's performance model. The company's facilities worldwide are using the operating system to improve quality and customer satisfaction while lowering cost.

Carrier's presence in India dates back to 1986, when Carrier India was established. In the year 1988, the first manufacturing facility was commissioned in Gurgaon, Haryana. Spread in an area of 19 acres, this state-of-the-art facility consists of highly automated manufacturing unit, an excellent R&D Center and an advanced Quality Clinic. Currently, products manufactured in this facility include Cassettes, Ducted Splits, Package Units, Air Cooled & Water Cooled Screw Chillers, Air Cooled & Water Cooled Reciprocating Chillers, Fan Coil Units, Air Handling Units, Refrigeration products and Fire & Security products.



Our comprehensive Environment, Health & Safety (EH&S) program establishes a framework and provides tools for implementing our EH&S practices into our business & culture. The Carrier Gurgaon facility holds a distinctive record of delivering over 17 million man hours without a lost work day incident, clearly citing the measures of safety followed here.

Carrier India has 16 sales and service offices, more than 800 sales and service channel partners - throughout the country, ensuring efficient solutions and quality services at customer's doorstep. To know more visit <http://www.carrierindia.com>.

## CARRIER VERSATECH SERIES

True to its name, the Versatech multi-split air conditioners are extremely versatile. The Versatech compact unit saves valuable floor space and requires no plant room space. It is available in 1.5, 2.0, 3.0, 4.0, 5.0 & 7.5 TR capacities. All models in this series offer unmatched flexibility within a range of ductable & fan coil indoor units that blend beautifully with any interior.



### FEATURES & BENEFITS

**Saves Space:** Sleek, aesthetic indoor unit that matches to the beam. As a result, it fits unobtrusively above false ceiling. Ideal for architects, interior decorators and consultants.

**Energy Efficient:** High power saving because of unique two or three compressor configurations, which shut off separately. Its dual sine wave fin pattern gives high performance

**Easy Servicing:** The outdoor unit design ensures easy servicing of compressor by making it easily accessible. Both side panels and bottom panel of indoor unit are easily removable for convenient adjustment or replacement of motor or housing.

**Efficient Design:** Direct driven DIDW fan provides powerful air throw for uniform distribution over large area and operates silently.

Powder coated units give durability to air conditioners.

**Flexible Air-discharge Option:** Its unique, multiplex configuration helps you switch discharge from horizontal to vertical & vice-versa depending on where you wish to place the outdoor unit.

**Installation Ease:** Quick lock fittings ensure quick & easy installation.

**Electronic Remote Control:** The system has microprocessor based remote control for precise temperature setting.



### CARRIER DUCTED

With sustained market leadership & strong legacy, Carrier presents a wide range of highly reliable ducted products to suit your needs. It caters to a wide variety of applications such as small offices, big workstation, hotels etc.

The outdoor condensing unit housing the scroll compressor gives a wide range of comfort features, especially suited to Indian conditions such as wide operating voltage, silent operation, economical running and unmatched reliability. Its compact size indoor units with the best-in-class height of 345mm in 3TR, 4TR, and 5.5TR and these models occupy less space and give sleek aesthetics.



#### FEATURES & BENEFITS



**Highly Reliable:** Scroll compressor technology with built-in compressor protection offers higher efficiency, minimal noise, enhanced reliability/ fault tolerance, easy installation and longer service life compared to conventional reciprocating & rotary compressors.

Phase sequence protection safeguards the compressor against reverse phase sequencing.



**Efficient Performance:** Thermostatic expansion valve adjusts refrigerant flow to cater to variations in heat load and make the system more efficient over a broader temperature range. It increases the flow of refrigerant to provide better cooling at higher temperatures. It also prevents liquid slugging, which can damage compressors.

Its high efficiency Double Inlet Double Width (DIDW) fans help realize high savings in the consumption of electricity. The aerodynamic profile of its inlet cone and static & dynamic balancing of the impeller helps reduce noise considerably.

Highly efficient metallic fans, with higher airflow rate, draws more heat across the condensing unit leading to greater cooling capacity.



**Filter Drier for liquid line** protects refrigeration and air-conditioning system from moisture, acids, and solid particles. With these contaminants eliminated, systems are safer from harmful chemical reactions.



### Safe & Reliable operations

**Motor capacitors\*:** Its fan motors equipped with P2 capacitors provide protection against fire & electrical shock hazards by opening an internal link in case of faulty condition

**Factory fitted MCB & Scanner\*:** MCB protects against short circuit & overload condition and provides ease of serviceability. Scanner monitors the health of input voltage & provides protection against reverse rotation of scroll

**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.

\*applicable to capacities of 5.5 TR and above



### CORDED REMOTE CONTROLLER WITH LED DISPLAY

#### FEATURES

- On/Off
- Auto Restart (Selectable)
- Mode Selection (Cool/Fan)
- Room Temperature Range (18°C - 32°C)
- Set Temperature Display
- Fault Indication LP, HP, Sensor Fail
- Indoor Blower Speed Selection (Low/Medium/High)
- Compressor ON/OFF Delay for Compressor Protection



LED Controller

### CORDED REMOTE CONTROL WITH LCD DISPLAY

**Display:** Graphics LCD with back light, menu driven, user-friendly screen for different function settings.

**Keys:** 8 keys for different functions and settings, 2 Multi function keys, Up and Down keys, Right and Left Shift keys, On/Off key, Reset key.



LCD Controller

VERSATECH R22: TECHNICAL SPECIFICATIONS

INDOOR UNITS

Parameter	Unit	Ductable Units					Fan Coil Units				
		3TR	4TR	5TR	7.5TR	1.5TR	2TR	5TR	2.5TR		
Model Nos.		40LC004R	40LC005R	40LC006	40LC009C	42CX-006	42CX-008	42CM010DX			
Nominal Air-Quantity	Watt	10551	14068	17585	26377	5275	7034	8792			
	m <sup>3</sup> /s	0.57	0.75	0.94	1.42	0.28	0.38	0.47			
	CFM	1200	1600	2000	3000	600	800	1000			
Power Supply	V-ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50			
Fan	Type	Direct Driven DIDW forward curved centrifugal fan									
	Quantity	1					2				
	Discharge	Horizontal					Horizontal				
Fan Motor	Type	Permanent Split Capacitor**									
	Quantity	1					2				
	Width	63.3(0.63)	66(0.66)	63.3(0.63)	70/67(0.70/0.67)	121(1.21)	121(1.21)	61.3(0.61)			
	Depth	99.1(0.99)	99.1(0.99)	116.3(1.16)	149.6(1.49)	56.6(0.57)	59(0.59)	129(1.29)			
	Height	46(0.46)	46(0.46)	46(0.46)	46/49(0.46/0.49)	24(0.24)	31(0.31)	33.2(0.33)			
Compressor	Type	—									
	Quantity	—									
Net Weight	kg	55	57	65	80	30	39	29			
Refrigerant		R-22									

OUTDOOR UNITS

Parameter	Unit	1.5TR	2TR	3TR	4TR	5TR	7.5TR
		Model Nos.	51MSG-018RH	51MSG-024RH	51MSC-036DRB	51MSC-048DK	38LH060DK
Power Supply	Watt	5275	7034	10551	14068	17585	26377
	V-ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	400-3-50	400-3-50
Fan	Type	Centrifugal fan					
	Quantity	1					
	Discharge	Horizontal					
Fan Motor	Type	Permanent Split Capacitor					
	Quantity	1					
	Width	90.4(0.90)	90.4(0.90)	43.5(0.44)	66(0.66)		
	Depth	32.5(0.33)	32.5(0.32)	103(1.03)	120(1.20)		
	Height	69.2(0.69)	69.2(0.69)	69.4(0.69)	85(0.85)		
Compressor	Type	Rotary		Rotary/Recip		Recip	
	Quantity	1	1	2	2	2	3
Net Weight	kg	42	47	70	78	160	200
Refrigerant		R-22					

\*\* Cooling capacities under IS test conditions

DUCTED : TECHNICAL SPECIFICATIONS

Parameter	Unit	DUCTED-R22										DUCTED-R410A									
		3.0TR	4.0TR	5.5TR	8.5TR	11.0TR	11.0TR	11.0TR	17.0TR	17.0TR	17.0TR	3TR	4TR	5.5TR	8.5TR						
Nominal Cooling Capacity	TR	10551	14068	19343	29894	38687	38687	38687	59789	59789	59789	10551	14068	19343	29894						
MODEL		40LC004SDR	40LC005SDR	40LC006SDR	40LC010DR	40LC012DRM	40LC012S	40LC018DR	40LC018HC	40LC018DR	40LC004GA	40LC005GA	40LC007GA	40LC010GA							
Nominal Air Quantity	CFM	1200	1600	2200	3400	4400	4400	6800	8500	8500	1200	1600	2200	3400							
	m <sup>3</sup> /s	0.57	0.76	1.04	1.60	2.07	2.07	3.20	4.00	4.00	0.57	0.76	1.04	1.60							
Power Supply	V-ph-Hz	230 ± 10% - 1-50										400 ± 10% - 3 - 5				230 ± 10% / 50 / 1					
Fan/Propeller	Type	Direct driven DIDW Forward Curved Centrifugal Blower										Direct driven DIDW forward curved centrifugal blower									
Corded Remote Control		Microcontroller - LED display																			
Overall dimensions	Width	59.0 (0.59)	70.0 (0.70)	75.0 (0.75)	70.0 (0.70)	92.5 (0.925)	97.0 (0.970)	72.5(0.73)	72.5(0.73)	72.5(0.73)	120.5 (1.21)	120.5 (1.21)	120.5 (1.21)	172.0 (1.72)							
	Length	120.0(1.20)	164.8(1.648)	125.0(1.25)	164.8(1.648)	190.0(1.90)	194.8(1.948)	34.5(0.35)	34.5(0.35)	34.5(0.35)	34.5(0.35)	34.5(0.35)	34.5(0.35)	34.5(0.35)							
	Height	31.0(0.31)	46.0(0.46)	34.5(0.345)	46.0(0.46)	46(0.46)	68.4(0.684)	50	50	50	62	62	62	110							
Net Weight	Kg	39	43	62	91	130	130	175	182	192	50	62	62	110							
Expansion Device		Thermostatic Expansion Device										Thermal Expansion valve									
	Model	51MSD-036SDR	51MSD-048SDR	38LH066SDR	38LH066SDR	38LH102HDM	38LH102HDM	38LH066S+	38LH066SDR S+	38LH100SSDR+ 38LH100SSDR	51MSG-036G8B	51MSG-040G8B	38LH-066GSA	38LH-102GSA							
No. of units	N	1	1	1	1	1+1	1	1+1	1+1	1+1	1	1	1	1							
Nominal Air Quantity	CFM	2400	3000	4200	4200	8000	8000	4200	6250	6250	2400	3000	4250	6000							
	m <sup>3</sup> /s	1.13	1.41	1.97	1.97	3.76	3.76	1.97	2.94	2.94	1.13	1.42	2.01	2.83							
Power supply	V-ph-Hz	400±10%-3-50										400±10%/ 50 / 3									
Fan/Propeller	Type	Axial										Centrifugal Fan									
Fan/Propeller Motor	Type	Permanent Split Capacitor Type										Permanent Split Capacitor Type									
	Power	W	107	125	370	470	470	150	370	370	107	124	370	107 X 2							
	Width	cm(m)	32.5(0.325)	32.5(0.325)	41.0(0.410)	41.0(0.410)	60.2(0.602)	60.0(0.600)	61.0(0.610)	61.0(0.610)	32.5(0.33)	43.5(0.44)	41(0.41)	60.2(0.60)							
	Length	cm(m)	90.4(0.904)	90.4(0.904)	104.0(1.040)	120.0(1.20)	120.0(1.20)	120.0(1.20)	98.2(0.982)	98.2(0.982)	90.4(0.90)	103(1.03)	104(1.04)	120(1.20)							
	Height	cm(m)	69.2(0.692)	82.0(0.820)	87.5(0.875)	105.5(1.055)	105.5(1.055)	84.5(0.845)	108.2(1.082)	108.2(1.082)	82(0.82)	69.5(0.70)	87.5(0.88)	105.5(1.06)							
Compressor	Type	Scroll																			
Net Weight	Kg	68	73	112	150	175	180	150	150	150	72	82	112	225							
Expansion Device		Capillary										Capillary									

\*For long piping applications up to 50 m.

\*\* Cooling capacities under IS test conditions