

WIDEST RANGE OF GREEN AIR CONDITIONING SYSTEMS

MULTI V IV (VRF)	MULTI V S (VRF)	MULTI V WATER (VRF)	HYDROKIT
			
INVERTER CASSETTE	INVERTER FLOOR STANDING	INVERTER ROOF TOP	DX ECO V (TFA UNIT)
			
AIR COOLED SCREW CHILLER	WATER COOLED SCREW CHILLER	AIR COOLED INVERTER SCROLL CHILLER	
			
CENTRIFUGAL CHILLER	AIR BEARING CENTRIFUGAL CHILLER	MAGNETIC BEARING CENTRIFUGAL CHILLER	CONTROL SOLUTION
			

THE MOST ADVANCED DUCTED SYSTEM



INVERTER DUCTED UNITS

⚡ ENERGY SAVING ♻️ COMFORT ✅ RELIABILITY

About LG

LG has remained at the forefront of air conditioning Innovation and has been the world's top selling manufacturer of air conditioning solutions.

LG has evolved into the total HVAC and energy solution provider, investing in new technologies and adding chillers, VRF systems, ducted splits, rooftop units, cassette units, floor standing units and building management systems (BMS) into its comprehensive product portfolio. Along with a wide range of innovative solutions, LG delivers unrivalled customer service.

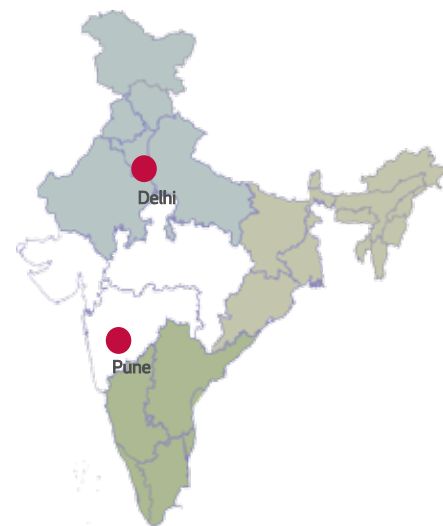
The company produces top-notch air conditioning professionals at its academies, of which there are nearly 80 worldwide. These centers of excellence provide workshops and training programs that offer invaluable hands-on experience. LG also provides useful tools for HVAC system engineers and installers including its time saving LG Air Conditioner Technical Solution (LATS) software. Additionally, LG operates several state-of-the-art R&D facilities all across the planet.

World-class Manufacturing Facilities

Gr. Noida Factory



Pune Factory



Delhi Academy



Pune Academy



NABL Certified Test Bed

India's one and only fully automatic psychrometric lab in compliance with AHRI / IS standards Accredited by NABL & Intertek of USA

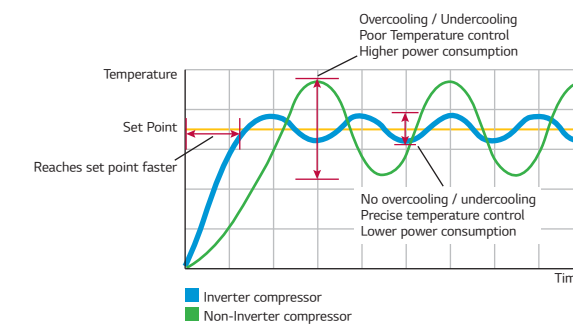


THE NEW INVERTER DUCTED UNITS

LG is proud to introduce **India's most advanced** Inverter Ducted units that offer high energy efficiency, high comfort and high reliability.

These units are suitable for varied applications including offices, banks, showrooms, schools/colleges, restaurants, factories, warehouses and banquets/ marriage halls.

Advantages of Inverter Scroll Compressors



- **Lower power consumption**

The inverter compressor matches its speed and hence, power consumption, with the load requirement. This reduces the overall energy consumption.

- **Longer life and higher reliability**

Due to frequent on/off cycles, the fixed speed compressor motor has a shorter life and lower reliability. The inverter compressor overcomes these problems since on/off cycles are very less.

- **Better humidity control**

Since the inverter compressor matches its speed with the load requirement, control on the evaporating temperature and hence, humidity control, is better than fixed speed compressor units.

- **Quieter operation**

The inverter compressor results in lower noise levels at part loads, as compared to a fixed speed compressor.

- **Higher comfort**

Since the inverter compressor matches its capacity output with the load requirement, the temperature indoors is accurately controlled as compared to a fixed speed compressor. A better temperature and humidity control gives higher comfort to the occupants.

- **Lower starting current**

The inverter compressor needs a lower starting current resulting in benefits like lower wear & tear, lower stress on compressor components, reduction in main and power back up loads and a reduced fixed power cost based on peak loads.

- **Quicker initial cooling**

The inverter compressor increases its speed to match the higher load requirement during start-up, thereby providing quicker initial cooling.

Features of LG Inverter Ducted Units

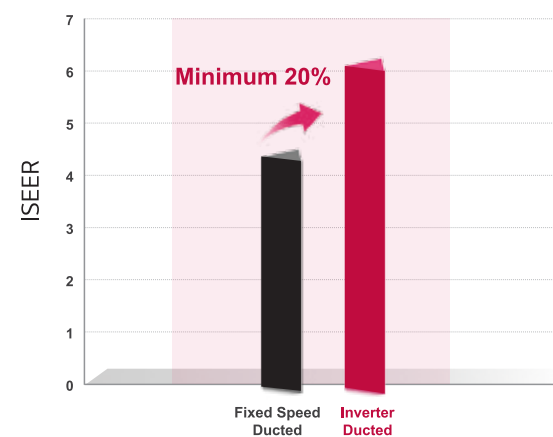
Product Range



High Energy Efficiency

The new Inverter ducted units perform at much higher energy efficiency than conventional ducted splits, since they comprise of Inverter drives, BLDC motors, Electronic expansion valves and other efficiency components and measures explained hereafter.

A comparison of the 2 systems is given below:



* ISEER value is simulated data as per BEE RAC ISEER Regulation

High Energy Efficiency At Part Loads

Low load operation efficiency is improved by concentration coil and motor and 6 by-pass valves

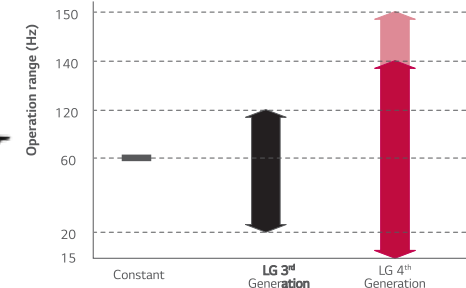
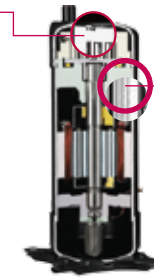
6 By-pass Valves

Compressor reliability is maximized with 6 By-pass valves
 - Prevents compressor damage due to excessively compressed refrigerant, more efficiently than 4 by-pass valves



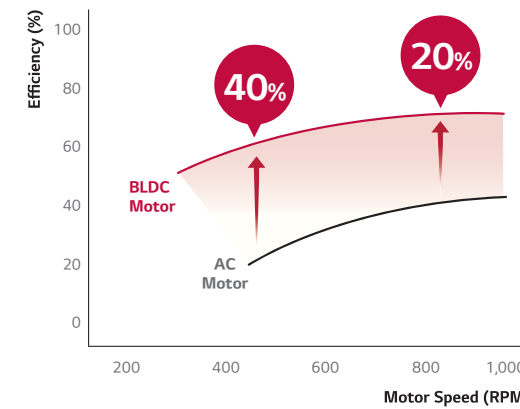
Extended Compressor Speed 150Hz

- Rapid operation response
 - Capable of reaching required temperature quickly
 - Increases part load efficiency



Higher Efficiency With Brushless DC (BLDC) Motors

BLDC motors are more efficient than conventional AC motors used by others. BLDC motors are about 40% more efficient at lower speeds and about 20% more efficient at higher speeds.



Power Saving With Electronic Expansion Valves (EEV)

EEV's save power as compared to Thermostatic expansion valves (TXV) used by others. This is possible due to precise evaporation control with EEV's.



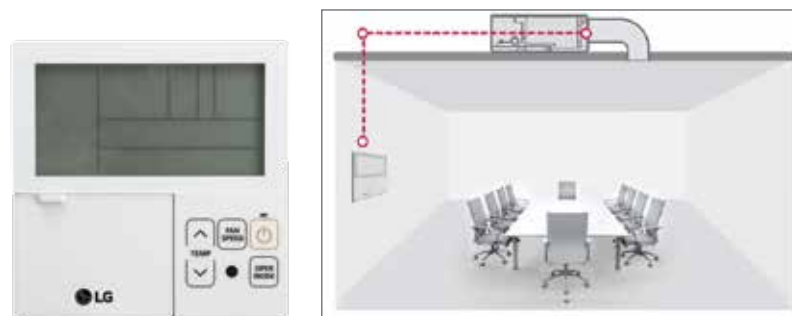
Corrosion Resistant Heat Exchanger

The gold-coloured special coating on the fin of the heat exchanger prevents corrosion, extending the life of the unit.



Static Pressure Setting From The Remote Controller

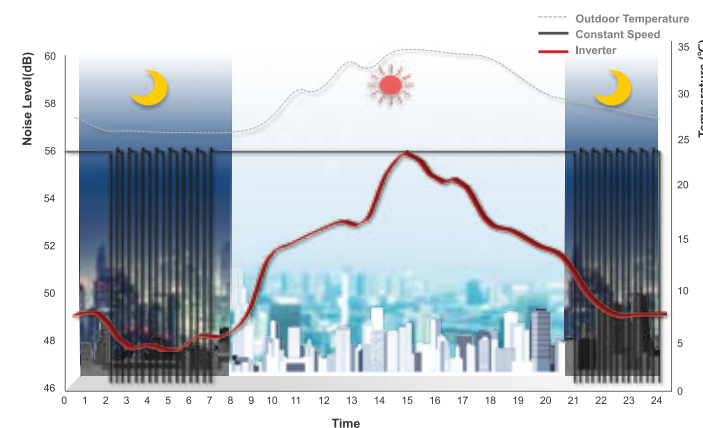
- ESP can be set from the remote controller
- This changes the BLDCs motor's speed to match the airflow requirement
- Noise level remains low



Lower Noise Levels

Inverter compressor makes lower noise than a constant speed compressor due to adjustment of frequency based on the load.

Also, the EEV is placed in the outdoor unit, reducing the noise level indoors.



Wide Operation Range

The new Inverter ducted units can operate between -5 deg. C to 53 deg. C.



High & Low Voltage Protection

The Inverter ducted units are provided with additional protection from over and under voltage, missing phase & phase reversal, in addition to pressure switches. This ensures higher reliability and longer life of the compressor motor.

COMPRESSOR PROTECTION



HIGH RISK OF COMPRESSOR FAILURE



	CONSTANT	LG INVERTER
Pressure switch	●	●
Over voltage detection	-	●
Low voltage detection	-	●
CT (Current transformer current limit)	On/off only	inverter control without stopping
DC peak detection	Not necessary	●
N phase reverse wiring (3phase only)	-	●
Missing phase detection (3phase only)	-	●

Long Distance Piping

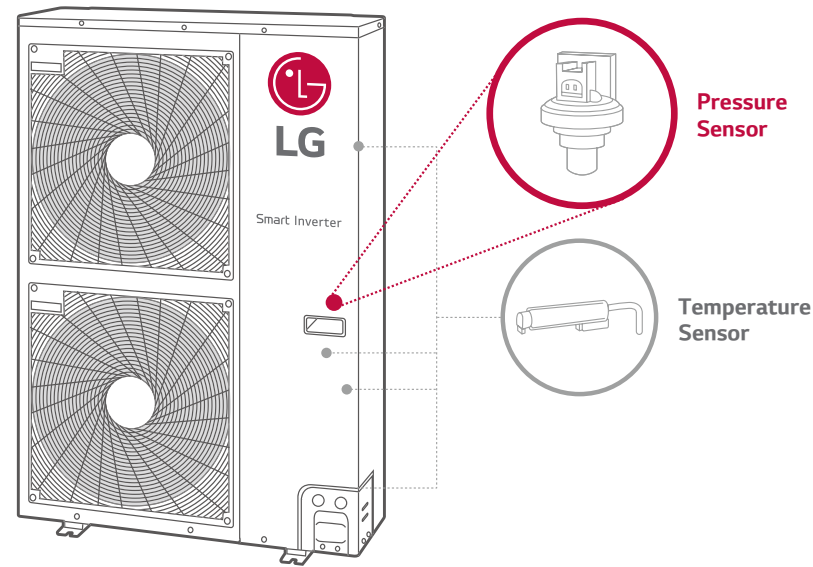
The Inverter ducted units are designed for a 30 m vertical height and a total refrigerant piping distance of 50 m between the indoor and outdoor units.

The units are, thus, suitable for tall and glass facade buildings.



Better Compressor Protection

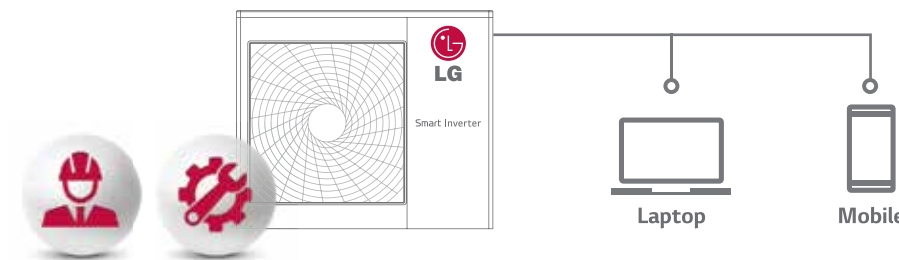
LG Inverter ducted splits are provided with both pressure and temperature sensors unlike others who use temperature sensors only, increasing the reliability of the system.



The sensing resolution of a pressure sensor is more linear than a temperature sensor. At low operating pressures (e.g. cold weather), the temperature sensor resolution becomes worse whereas the pressure sensor can read accurately at all temperatures.

LG MV-Easy Monitoring and Service

LG MV (Monitoring View) helps engineers to inspect and monitor air conditioning unit easily.



LG MV provides cycle information with diagrams and the user can check accumulated data on a graph. A technician can easily check the error status by looking at the indicator information (Troubleshooting guide)

Countrywide After Sales Service

Our sales and service offices are located in 23 cities and our sales & service dealers cover over 300 cities/towns in India, assuring you of quick, reliable service.

Technical Specifications

Inverter Ducted (High Static)



Nominal Capacity*	Cooling	TR	5.5	8.5	11
Indoor Unit			JBNQ60LRA0	JBNQ96L8A0	JBNQ120L8A0
Power Supply		V, Ø, Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50
Dimensions	W x H x D	mm	1,230×380×590	1,562×460×688	1,562×460×688
Net Weight	Body	kg	52	90	96
Fan	Type	-	DIDW Fan	DIDW Fan	DIDW Fan
	Nominal Air flow	CMH	3740	5780	7480
Fan Motor	Type	-	BLDC	BLDC	BLDC
	Output	W x No.	185 x 2	375 x 2	375 x 2
Piping	Liquid	mm	Ø 9.52	Ø 9.52	Ø 12.7
Connections	Gas	mm	Ø 19.05	Ø 22.2	Ø 22.2
	Drain (O.D. / I.D.)	mm	Ø 32.0 / 25.0	Ø 32.0 / 25.0	Ø 32.0 / 25.0
Outdoor unit			JBUQ60LRA0	JBUQ96L8A0	JBUQ120L8A0
Power Supply		V, Ø, Hz	415 / 3 / 50	415 / 3 / 50	415 / 3 / 50
Dimensions	W x H x D	mm	950 × 834 × 330	950×1,380×330	1,090 × 1,625 × 380
Net Weight		kg	70	110	150
Compressor	Type	-	Twin Rotary	Scroll	Scroll
	Motor type	-	BLDC	BLDC	BLDC
Refrigerant	Type	-	R410A	R410A	R410A
	Chargeless - Pipe Length	m	15	15	15
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Fan	Type	-	Propeller	Propeller	Propeller
Fan Motor	Type		BLDC	BLDC	BLDC
	Output	W x No.	124 x 1	124 x 2	250 x 2
Operation range	Cooling (min.-max.)	°C (DB)	-5-53°C	-5-53°C	-5-53°C
Piping Connections	Liquid (Outer Dia.)	mm	Ø 9.52	Ø 9.52	Ø 12.7
	Gas (Outer Dia.)	mm	Ø 19.05	Ø 22.2	Ø 22.2
Piping Length	Max.	m	50	50	50
Maximum Height Difference	Outdoor Unit - Indoor Unit(Max.)	m	30	30	30

Note:

1. *Nominal capacities as per BIS 8148. Capacities as per LG global standard, which is more stringent, are 5.0 TR, 8.0 TR & 10.0 TR. These will be marked on the unit labels.
2. *Also available in 17.0 TR, 22.0 TR and higher capacities (in multiples of 8.5 TR & 11.0 TR) by combining 3rd party AHU's with LG outdoor units.
3. Wiring cable size must comply with the applicable local and national codes.
4. Due to our policy of innovation some specifications may be changed without notification.

Technical Specifications



Inverter Ducted (Low Static)

INDOOR UNIT

Indoor				JBNQ18GB2A0	JBNQ24GB2A0
Normal Capacity				1.5 TR	2.0 TR
Power Supply			V, Ø, Hz	220-240 / 1 / 50	220-240 / 1 / 50
Dimensions	Body	W x H x D	mm	1,100 x 190 x 575	1,100 x 190 x 575
		W x H x D	inch	43-5/16 x 7-15/32 x 22-5/8	43-5/16 x 7-15/32 x 22-5/8
Net Weight	Body		kg (lbs)	27.0 (59.5)	28.7 (63.2)
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Nominal Air Flow		CFM	495	636
Fan Motor	Type		-	BLDC	BLDC
	Output		W x No.	19.0 x 2	19.0 x 2
Piping Connections	Liquid		mm(inch)	Ø 6.35 (1/4)	Ø 9.52 (3/8)
	Gas		mm(inch)	Ø 12.7 (1/2)	Ø 15.88 (5/8)
	Drain (O.D. / I.D.)		mm(inch)	Ø 32.0(1-1/4) / 25.0(31/32)	Ø 32.0(1-1/4) / 25.0(31/32)
Safety Devices			-	Fuse	Fuse
Power and Communication Cable (including Earth)			No. x mm2 (AWG)	4C x 0.75 (18)	4C x 0.75 (18)

Inverter Ducted (Low Static)

OUTDOOR UNIT

Outdoor unit				JBUQ18GB2A0	JBUQ24GB2A0
Power Supply			V, Ø, Hz	220-240 / 1 / 50	220-240 / 1 / 50
Wiring Connections	Power Supply Cable (including Earth)		No. x mm2 (AWG)	3C x 2.5 (12)	3C x 2.5 (12)
Casing Color			-	Warm Gray	Warm Gray
Dimensions		W x H x D	mm	870 x 655 x 320	870 x 655 x 320
Net Weight			kg (lbs)	40.2 (88.6)	43.5 (95.9)
Compressor	Type		-	Twin Rotary	Twin Rotary
	Motor Type		-	BLDC	BLDC
Refrigerant	Type		-	R410A	R410A
	Precharged Amount		g (oz)	1,030 (36.3)	1,300 (45.9)
	Control		-	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Charged Volume		cc x No.	400 x 1	670 x 1
Fan	Type		-	Propeller	Propeller
Fan Motor	Type			BLDC	BLDC
Piping Connections	Liquid	Outer Dia.	mm(inch)	Ø 6.35 (1/4)	Ø 9.52 (3/8)
	Gas	Outer Dia.	mm(inch)	Ø 12.7 (1/2)	Ø 15.88 (5/8)
Piping Length		Max.	m (ft)	30 (98.4)	50 (164.0)
Maximum Height Difference	Outdoor Unit - Indoor Unit	Max.	m (ft)	15 (49.2)	30 (98.4)

Note:

1. Wiring cable size must comply with the applicable local and national codes.
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