

Technical Specifications

System type		Heat pump	Heat pump	Heat pump	Heat pump	
System model		MSD1T-42HRS	MSD1T-42HRT	MSD1T-48HRT	MSD1T-60HRT	
Indoor unit model		MSDT-42HRS	MSDT-42HRT	MSDT-48HRT	MSDT-60HRT	
Outdoor unit model		MODT-42HRS	MODT-42HRT	MODT-48HRT	MODT-60HRT	
Power supply	V/ph/Hz	220-240/1/50	380-420/3/50	380-420/3/50	380-420/3/50	
System Cooling Specifications						
Cooling capacity	(@ 0 Pascal)	Btu/hr	40000	43000	44500	53000
		kW	11.72	12.60	13.04	15.53
	(@ 50 Pascal)	Btu/hr	37830	40670	42645	50600
		kW	11.09	11.92	12.50	14.83
Input power - Cooling	(@ 0 Pascal)	W	4555	4424	4200	5073
		W	4485	4355	4120	4976
Input current - Cooling	(@ 0 Pascal)	A	22.5	7.6	7.5	8.7
		A	22.1	7.5	7.4	8.5
E.E.R. - Cooling	(@ 0 Pascal)	Btu/wh	8.78	9.72	10.59	10.45
		W/W	2.57	2.85	3.10	3.06
	(@ 50 Pascal)	Btu/wh	8.43	9.34	10.35	10.17
		W/W	2.47	2.74	3.03	2.98
System Heating Specifications						
Heating capacity	(@ 0 Pascal)	Btu/hr	37500	41000	47500	55300
		kW	10.99	12.02	13.92	16.21
	(@ 50 Pascal)	Btu/hr	35080	38345	44500	51800
		kW	10.28	11.24	13.04	15.18
Input power - Heating	(@ 0 Pascal)	W	3200	3092	3795	4094
		W	3120	3015	3695	4045
Input current - Heating	(@ 0 Pascal)	A	16.9	5.7	6.7	7.4
		A	16.5	5.6	6.5	7.3
C.O.P - Heating	(@ 0 Pascal)	W/W	3.43	3.89	3.67	3.94
		W/W	3.29	3.73	3.53	3.75
Indoor unit model		MSDT-42HRS	MSDT-42HRT	MSDT-48HRT	MSDT-60HRT	
Nominal air flow (high / med / low)	(@ 0 Pascal)	cfm	1370 / 1260 / 715	1370 / 1260 / 715	1370 / 1260 / 715	1470 / 1375 / 860
		m3/hr	2322/2136/1212	2322/2136/1212	2322/2136/1212	2492 / 2331 / 1458
	(@ 50 Pascal)	cfm	1187 / 1077 / 491	1187 / 1077 / 491	1187 / 1077 / 491	1314 / 1219 / 703
		m3/hr	2012 / 1825 / 832	2012 / 1825 / 832	2012 / 1825 / 832	2227 / 2066 / 1192
Indoor maximum external static pressure		in.wg	0.40	0.40	0.40	0.40
		Pa	100	100	100	100
Sound Pressure (high / med / low)	dB(A)	48.2 / 44.1 / 38.4	48.2 / 44.1 / 38.4	48.2 / 44.1 / 38.4	50.4 / 47.1 / 41.5	
Net Dimensions (W x H x D)	mm	1200 x 300 x 865	1200 x 300 x 865	1200 x 300 x 865	1200 x 300 x 865	
Net Weight	kg	47	47	47	47	
Outdoor unit model		MODT-42HRS	MODT-42HRT	MODT-48HRT	MODT-60HRT	
Tropical compressor type		Reciprocating	Scroll	Scroll	Scroll	
Refrigerant type / Coupler type		R22 / Flare	R22 / Flare	R22 / Flare	R22 / Flare	
Sound pressure	dB(A)	65	66	68	69	
Net Dimensions (WxHxD)	mm	860 x 720 x 350	860 x 720 x 350	860 x 1150 x 350	860 x 1150 x 350	
Net Weight	kg	81	81	90	92	
Pipe connection sizes (Gas x Liquid)	inch	3/4" x 3/8"	3/4" x 3/8"	3/4" x 3/8"	3/4" x 3/8"	
Maximum pipe length	m	25	25	30	30	
Maximum height difference	m	10	10	15	15	
Condensate drain hose diameter	mm	25	25	25	25	

* **Cooling Capacity, Dehumidification and Energy Efficiency Ratio (EER) based on ISO 5151 / ISO 13253 Standards at conditions :** 35°C Outdoor Temperature. 27/19°C db/wb Indoor Temperature. High Air Flow

* **Systems work in cooling at high ambient temperature up to 52°C**

* **Heating Capacity and Coefficient Of Performance (COP) are based on ISO 5151 / ISO 13253 Standards at conditions :** 20°C db Indoor Temperature 7/6°C db/wb Outdoor Temperature. High Air Flow

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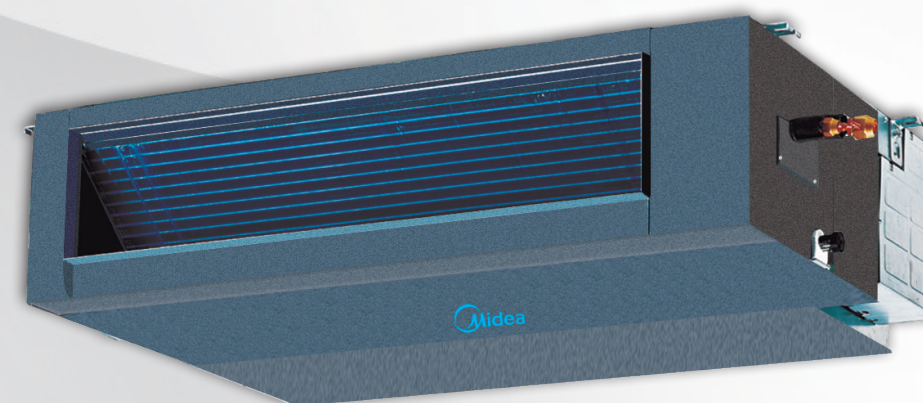


Tropical 220-240V ~ 50Hz 1Ph
380-420V ~ 50Hz 3Ph

MINI CENTRAL

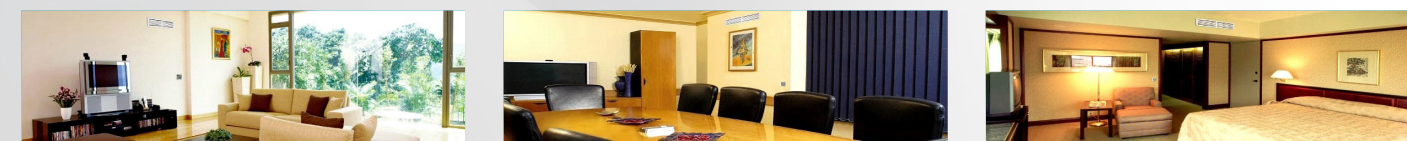
Medium Static Pressure

Slim Line
Ceiling Concealed Ducted Split Systems

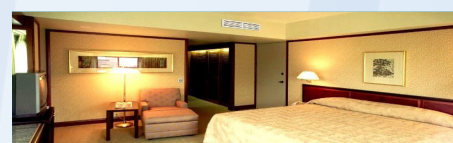
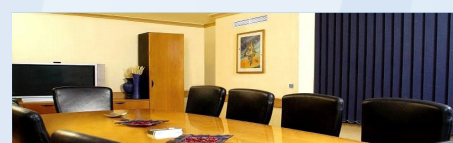


Heat Pump
MSD1T Series

12K - 18K - 24K - 30K - 36K - 42K - 48K - 60K



- Efficient Anti-dust Aluminum Filters
- Tropical Compressor
- Hydrophilic Aluminum Fins
- Auto Mode
- 3 Minutes Time Delay
- Self diagnostic function
- Fresh Air
- Medium Static Pressures
- Super Quiet
- Independent Dehumidification
- Anti-Freezing Protection
- Refrigerant Leak Detection
- Slim Design
- Efficient Fans
- Wired Control
- ECO Sleep Function
- High Temp. Protection
- Durability
- Display Panel
- Efficient Coils
- Wireless Control
- Timer Functions
- Cold Draft Protection
- Optional Drain Pump
- Efficient Operation
- Inner Groove Copper Tubing
- Auto Fan Speed
- Auto Restart Function
- Defrost Protection
- Easy Installation & Maintenance



MINI CENTRAL medium static pressure, slim line, ceiling concealed ducted split is the optimum air conditioning solution for places which require ceiling installation above false ceiling and minimum sound levels. Its slim profile and flexible installation make this system the best choice for residential and light commercial applications where the units are practically hidden from view.

KEY FEATURES

Healthy & Clean Indoor Air Quality (IAQ)

Efficient anti dust washable aluminum air filters for clean and healthy air.



The indoor unit is fitted with a fresh air knock out panel that can be utilized to introduce fresh air into the room. This helps prevent the build of stale air and enhances air quality in working environments and enclosed applications without natural fresh air supply.



Modern Slim Design

Compact invisible indoor unit with ultra slim profile and low height is just 21 cm for sizes 12K-18K, 27 cm for sizes 30K-36K and 30 cm for sizes 42K-48K-60K suitable for low false ceiling applications.



Smart LED display panel shows control functions and also shows error code in case of a malfunction.



Efficient Tropical Operation with Minimum Electrical Consumption

Patented heat transfer and aerodynamics technologies to ensure perfect operation up to 52°C outdoor ambient temperature for energy saving and low operating cost.



Efficient Super tropical compressor works in high ambient temperature up to 52°C with high efficiency and low electrical consumption leading to true powerful system cooling.



Superior air distribution performance : Three fan speeds with external static pressure up to 40 ~ 100 Pa as per the model to satisfy air flow and static pressure requirements to suit various applications.



Efficient Air Management System (AMS) of blow through design leading to maximum air flow with minimum turbulence for minimum air resistance, smooth airflow and efficient operation.



Midea innovative outdoor axial fan technology for efficient operation with minimum air resistance and maximum air flow.



Midea innovative double inlet, double width forward curved centrifugal blower technology driven by 3 speeds high efficiency motor permanent split capacitor type and of low power consumption .



Efficient indoor and outdoor coils with large heat transfer surfaces for minimum electrical consumption.



Efficient trapeziform Inner groove copper tubing compared with traditional copper tubing, it allows more refrigerant flow, improves heat exchange efficiency and lowers power consumption while keeping the same capacity output level.



Precoated Hydrophilic Aluminum Fins of indoor coil to protect the coil against corrosion and to allow easy and quick removal of unrestricted condensate water between the coil fins to increase airflow, improve heat exchange efficiency and accelerate cooling process.



SMART CONTROLS



Wired room controller Wireless Remote control

EFFICIENT, TROPICAL & QUIET



OUTDOOR UNIT



12K 18K 24K - 30K



36K - 42K 48K - 60K



System type		Heat pump	Heat pump	Heat pump
System model		MSD1T-30HRS	MSD1T-36HRS	MSD1T-36HRT
Indoor unit model		MSDT-30HRS	MSDT-36HRS	MSDT-36HRT
Outdoor unit model		MODT-30HRS	MODT-36HRS	MODT-36HRT
Power supply	V/ph/Hz	220-240/1/50	220-240/1/50	380-420/3/50
System Cooling Specifications				
Cooling capacity	(@ 0 Pascal)	Btu/hr	30000	37300
		kW	8.79	10.92
	(@ 37 Pascal)	Btu/hr	28000	35920
		kW	8.21	10.53
Input power - Cooling	(@ 0 Pascal)	W	3515	4240
	(@ 37 Pascal)	W	3381	4045
Input current - Cooling	(@ 0 Pascal)	A	16.3	21.2
	(@ 37 Pascal)	A	15.7	20.2
E.E.R. - Cooling	(@ 0 Pascal)	Btu/wh	8.53	8.80
		W/W	2.50	2.57
	(@ 37 Pascal)	Btu/wh	8.28	10.52
		W/W	2.43	2.60
System Heating Specifications				
Heating capacity	(@ 0 Pascal)	Btu/hr	31000	38000
		kW	9.09	11.14
	(@ 37 Pascal)	Btu/hr	30300	35680
		kW	8.88	10.46
Input power - Heating	(@ 0 Pascal)	W	2755	3360
	(@ 37 Pascal)	W	2694	3075
Input current - Heating	(@ 0 Pascal)	A	12.3	17.7
	(@ 37 Pascal)	A	12.0	16.2
C.O.P - Heating	(@ 0 Pascal)	W/W	3.30	3.31
	(@ 37 Pascal)	W/W	3.30	3.40
Indoor unit model		MSDT-30HRS	MSDT-36HRS	MSDT-36HRT
Nominal air flow (high / med / low)	(@ 0 Pascal)	cfm	1080 / 910 / 645	1080 / 910 / 645
		m3/hr	1831 / 1542 / 1093	1831 / 1542 / 1093
	(@ 37 Pascal)	cfm	954 / 797 / 502	954 / 797 / 502
		m3/hr	1617 / 1351 / 851	1617 / 1351 / 851
Indoor maximum external static pressure		in.wg	0.32	0.32
		Pa	80	80
Sound Pressure (high / med / low)		dB(A)	48.6 / 45.3 / 40.8	48.6 / 45.3 / 40.8
Net Dimensions (W x H x D)		mm	1140 x 270 x 775	1140 x 270 x 775
Net Weight		kg	41	41
Outdoor unit model		MODT-30HRS	MODT-36HRS	MODT-36HRT
Tropical compressor type		Rotary	Reciprocating	Scroll
Refrigerant type / Coupler type		R22 / Flare	R22 / Flare	R22 / Flare
Sound pressure	dB(A)	62	65	66
Net Dimensions (WxHxD)	mm	860 x 570 x 350	860 x 720 x 350	860 x 720 x 350
Net Weight	kg	62.4	81	81
Pipe connection sizes (Gas x Liquid)	inch	3/4" x 3/8"	3/4" x 3/8"	3/4" x 3/8"
Maximum pipe length	m	25	25	25
Maximum height difference	m	10	10	10
Condensate drain hose diameter	mm	25	25	25

* **Cooling Capacity, Dehumidification and Energy Efficiency Ratio (EER) based on ISO 5151 / ISO 13253 Standards at conditions :** 35°C Outdoor Temperature. 27/19°C db/wb Indoor Temperature. High Air Flow

* **Systems work in cooling at high ambient temperature up to 52°C**

* **Heating Capacity and Coefficient Of Performance (COP) are based on ISO 5151 / ISO 13253 Standards at conditions :** 20°C db Indoor Temperature 7/6°C db/wb Outdoor Temperature. High Air Flow

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System type		Heat pump	Heat pump	Heat pump	
System model		MSD1T-12HRS	MSD1T-18HRS	MSD1T-24HRS	
Indoor unit model		MSDT-12HRS	MSDT-18HRS	MSDT-24HRS	
Outdoor unit model		MODT-12HRS	MODT-18HRS	MODT-24HRS	
Power supply	V/ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	
System Cooling Specifications					
Cooling capacity	(@ 0 Pascal)	Btu/hr	13000	20500	25700
		kW	3.81	6.01	7.53
	(@ 25 Pascal)	Btu/hr	12675	19425	24670
		kW	3.71	5.69	7.23
Input power - Cooling	(@ 0 Pascal)	W	1265	1985	2415
		W	1245	1960	2405
Input current - Cooling	(@ 0 Pascal)	A	5.9	9.2	11.2
		A	5.8	9.1	11.1
E.E.R. - Cooling	(@ 0 Pascal)	Btu/wh	10.28	10.33	10.64
		W/W	3.01	3.03	3.12
	(@ 25 Pascal)	Btu/wh	10.18	9.91	10.26
		W/W	2.98	2.90	3.01
System Heating Specifications					
Heating capacity	(@ 0 Pascal)	Btu/hr	12700	19000	23500
		kW	3.72	5.57	6.89
	(@ 25 Pascal)	Btu/hr	12570	18875	21680
		kW	3.68	5.53	6.35
Input power - Heating	(@ 0 Pascal)	W	1045	1695	2125
		W	1031	1672	2095
Input current - Heating	(@ 0 Pascal)	A	5.1	7.8	10.2
		A	5.3	8.0	10.1
C.O.P - Heating	(@ 0 Pascal)	W/W	3.56	3.28	3.24
		W/W	3.57	3.31	3.03
Indoor unit model					
Nominal air flow (high / med / low)	(@ 0 Pascal)	cfm	400 / 345 / 250	530 / 460 / 295	755 / 675 / 430
		m3/hr	678 / 585 / 424	898 / 780 / 500	1280 / 1144 / 729
	(@ 25 Pascal)	cfm	328 / 273 / 191	476 / 406 / 246	667 / 587 / 311
		m3/hr	556 / 463 / 324	807 / 688 / 417	1131 / 995 / 527
Indoor maximum external static pressure		in.wg	0.16	0.24	0.24
		Pa	40	60	60
Sound Pressure (high / med / low)		dB(A)	38.1 / 33.8 / 25.6	42.4 / 38.1 / 29.2	44.9 / 41.9 / 38
Net Dimensions (W x H x D)		mm	700 x 210 x 635	920 x 210 x 635	920 x 270 x 635
Net Weight		kg	20	24	28
Outdoor unit model					
Tropical compressor type			Rotary	Rotary	Rotary
Refrigerant type / Coupler type			R22 / Flare	R22 / Flare	R22 / Flare
Sound pressure		dB(A)	56	57	62
Net Dimensions (WxHxD)		mm	780 x 540 x 250	760 x 590 x 285	860 x 570 x 350
Net Weight		kg	34	42	57.8
Pipe connection sizes (Gas x Liquid)		inch	1/2" x 1/4"	1/2" x 1/4"	5/8" x 3/8"
Maximum pipe length		m	10	20	20
Maximum height difference		m	4	10	10
Condensate drain hose diameter		mm	25	25	25

* **Cooling Capacity, Dehumidification and Energy Efficiency Ratio (EER) based on ISO 5151 / ISO 13253 Standards at conditions :**
35°C Outdoor Temperature. 27/19°C db/wb Indoor Temperature. High Air Flow 220 volts power supply

* **Systems work in cooling at high ambient temperature up to 52°C**

* **Heating Capacity and Coefficient Of Performance (COP) are based on ISO 5151 / ISO 13253 Standards at conditions :**

20°C db Indoor Temperature 7/6°C db/wb Outdoor Temperature. High Air Flow 220 volts power supply

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Quiet with Minimum Sound Level

- Patented centrifugal blower, elephant ear propeller, new heat exchangers, improved Air Management System (AMS), and quiet compressor.
- Statically and dynamically balanced fans for quiet operation.
- Minimum vibrations with strengthened sheet metal parts by finite element analysis.



Complete Control Functions For Comfort

Standard Smart Wired Controller with complete control functions built in the control system. Wired Controller can be fixed on the wall and avoid mislaying. It's mainly used to make the control more convenient.



Standard Smart LCD infrared wireless remote control with complete control functions built in the control system to ensure efficiency at all operating conditions.



Optional Smart Link central Control to monitor from a center point, the operation of number of ducted indoor units in the same project site. This feature is particularly helpful in large office applications and hotels.



Auto fan speed which changes automatically the fan speed to high or medium or low fan speed by sensing the temperature difference between the room temperature and the setting temperature.



Auto mode which changes automatically the operation mode and capacity output according to temperature difference between the room temperature and the setting temperature.



Independent Dehumidification mode which dehumidifies the room efficiently, but not lower the temperature so obviously as cooling operation.



ECO function for energy saving and comfortable healthy sleep which automatically changes fan speed to low speed and controls both setting and room temperatures.



Programmable timer for easy on and off selection with energy savings including off timer, on timer, off/on timer and on/off timer functions.



Follow Me function for smart wired control of comfortable temperature. With this technology, an efficient temperature sensor is built in the wired control just like the air conditioner is following wired control.



Durability

Anti-rust, weather proof and long life indoor unit sheet metal parts made of chemically treated and zinc coated (galvanized) sheet metal.



Drain pan is designed to protect against rust, to minimize wet surface and residual water during off cycles and to inhibit bacteria growth that may cause smells.



Anti-rust, weather proof and long life outdoor unit sheet metal parts made of chemically treated and zinc coated (galvanized) sheet metal.



Powder painted casing of outdoor unit with perfect adhesion of highly resistant polyester paint 60-80 microns thick, which is electro-statically applied and baked at a temperature of 220°C.



Optional coated aluminum fins of outdoor coil for coastal applications to protect against corrosion.



Complete Protection Functions for Safety & Reliability

Auto restart function with backup memory. When the power failure happens during the operation of air conditioner, the microprocessor of the Printed Circuit Board will memorize the operation setting. After the power is recovered, the air conditioner operates automatically (without remote control but after elapse of compressor safety time delay), according to the previous operation settings.



3 (three) minutes safety time delay between compressor turning off and turning on for compressor protection against cycling.



Anti-freezing protection of indoor coil when the air conditioner is operating in cool mode with excessive dirt on the indoor coil and / or clogged air filters and / or low ambient temperature operation of cool mode.



High temperature protection of outdoor coil when the air conditioner is operating in cool mode. This protection is only available for heat pump system.



Cold draft protection when the air conditioner is operating in heat mode to prevent cold air blowing out at the beginning of heat mode which avoids the discomfort to the user.



High temperature protection of indoor coil when the air conditioner is operating in heat mode.



Defrost protection of outdoor coil when the air conditioner is operating in heat mode at very low ambient temperature.



Smart self-diagnostic function for malfunctions detection for easy fast service and maintenance.



Smart Refrigerant leak detection by sensitive sensors mounted on both indoor and outdoor coils for easy fast service and maintenance.



Auto reset - internal thermal protector of indoor and outdoor fan motors to protect motor windings against excessive current.



Auto reset - internal overload protector of the compressor to protect compressor motor windings against excessive temperature and / or excessive current drawn by compressor motor.



External overload protector of compressor (For size 36K - 42K - 48K - 60K 3 Phase) to protect compressor windings against excessive current.



Internal pressure relief valve of compressor (For sizes 36K - 42K - 48K - 60K) to protect compressor against high discharge pressures.

Suction accumulator (For sizes 36K - 42K - 48K - 60K) to protect the compressor against liquid refrigerant from entering the compressor and regulate oil return to the compressor.



The components of both indoor and outdoor units comply with international standards of performance and safety.



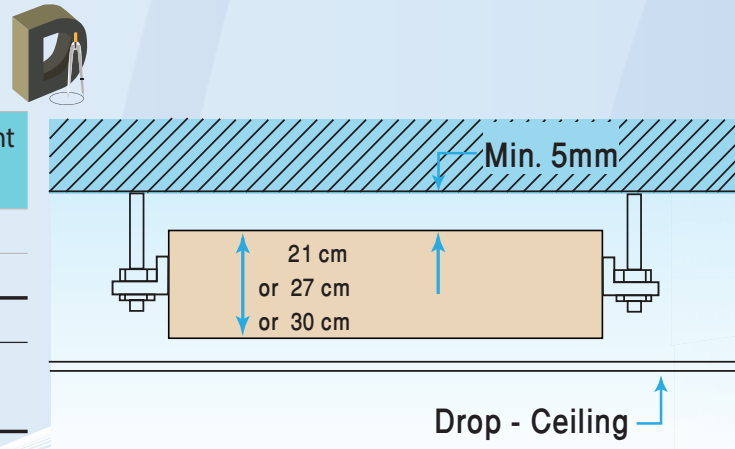
Easy Installation, Service and Maintenance

Due to compact dimensions, low height and low weight, the installation of ducted indoor unit on the ceiling is faster and extremely easy.



Slim Low Height Compact Dimensions & Light Weight

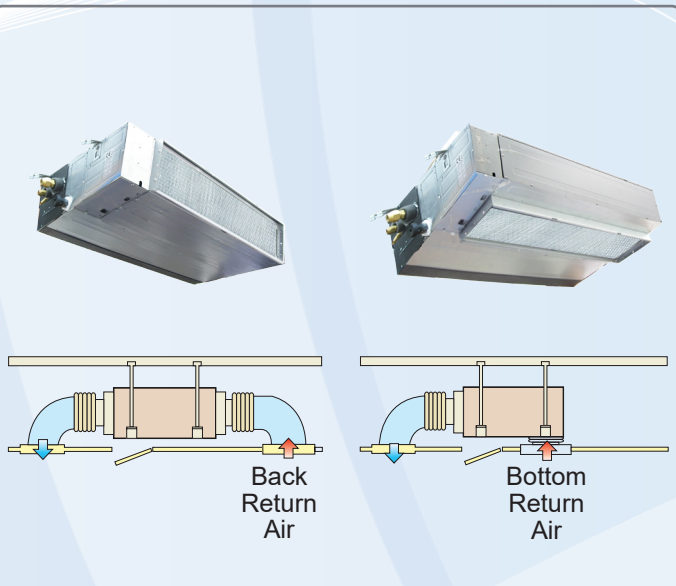
Size	Dimensions (cm)			Net Weight Kg
	W	H	D	
12K	70	21	63.5	22
18K	92			24
24K	92			28
30K	114	27	77.5	41
36K				
42K	120	30	86.5	47
48K				
60K				



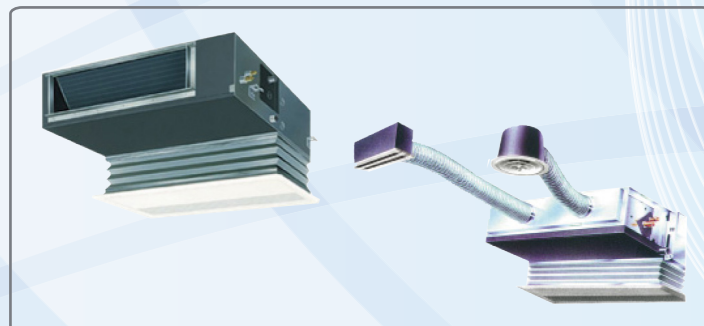
Flexible two directions of air return :
Back air return (factory standard)
Bottom air return (can be done at field).



Pre-Punched Fresh air intake built in the indoor unit from both sides to make air quality more healthy and more comfortable.



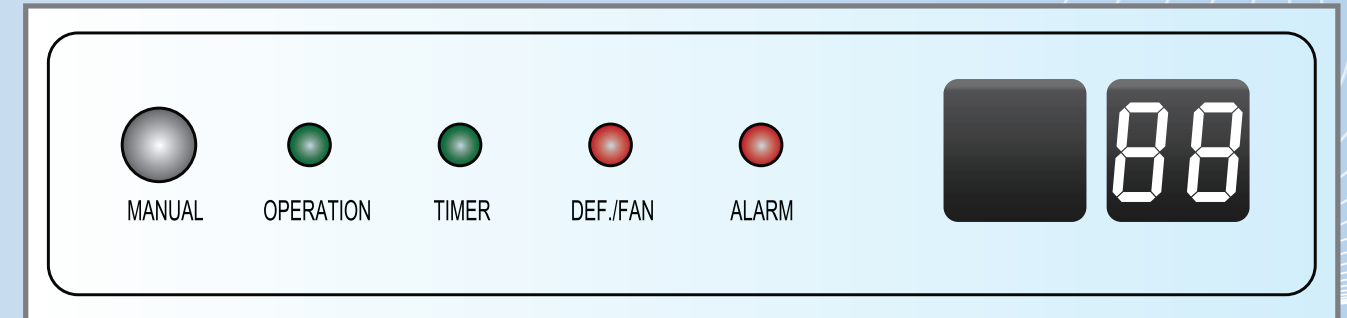
Indoor unit equipped with flange connections for both supply and return air ducts.



Smart Self Diagnostic Function For Malfunction Detection



The electronic printed circuit board in the indoor unit is equipped with smart self diagnostic function which automatically stops the operation of the air conditioner in case of a malfunction.



Leds Status and Error Code on the display panel of indoor unit (all sizes) refer to malfunction reason for easy fast service and maintenance.

Malfunction Reason	LED OPERATION	LED TIMER	LED DEF.FAN	LED ALARM	Malfunction Code
Room temperature sensor checking channel is abnormal	●	⊙	●	●	E2
Pipe temperature sensor checking channel is abnormal	⊙	●	●	●	E3
Outdoor TEMP. sensor checking channel is abnormal	●	●	⊙	●	E4
Outdoor malfunction	⊙	⊙	⊙	⊙	E6
EEPROM malfunction	⊙	⊙	●	●	E7
Pump temperature sensor malfunction (option)	●	●	●	⊙	E5
Water-level alarm malfunction	●	●	●	⊙	E8
Refrigerant Leak or any malfunction lead to stopping of compressor operation	⊙	X	X	⊙	EC

● = Light

⊙ = Flashing at 5HZ

X = OFF

Leds Status on the PCB of outdoor unit for :
only sizes 36K - 42K - 48K and 60K (3 Ph) refers to malfunction reason

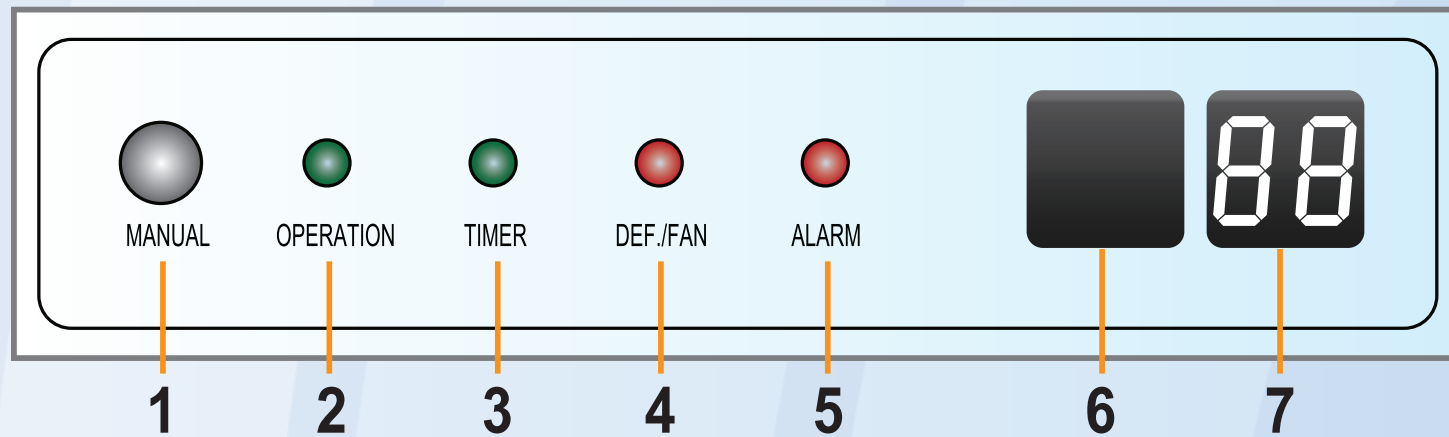
Malfunction Reason	PCB Leds of outdoor unit		
	LED 1	LED 2	LED 3
Phase reversal	ON	OFF	ON
Overload of current	OFF	ON	ON
Phase loss	ON	ON	ON



36K - 42K



48K - 60K



1 MANUAL Button

- * This button is used to operate the unit temporarily in case you misplace the remote control or its batteries are exhausted.
- * Once you push temporary button, the air conditioner will run in such order: Auto, Forced cool, off and back to Auto

AUTO

The OPERATION lamp is lit, and the air conditioner will run under AUTO mode. The remote controller operation is enabled to operate according to the received signal.

FORCED COOL

The OPERATION lamp flashes, the air conditioner will turn to AUTO after it is enforced to cool with a wind speed of HIGH for 30 minutes. The remote controller operation is disabled.

OFF

The OPERATION lamp goes off. The air conditioner is OFF while the remote controller operation is enabled.

2 OPERATION green led

- * OPERATION green led lights on when the air conditioner operates
- * OPERATION green led lights off when the air conditioner stops

3 TIMER green led

- * TIMER green led lights on when timer function operates
- * TIMER green led lights off when timer function stops

4 DEF. / FAN red led

This led lights on when defrost protection is activated and lights off when defrost protection terminates in heat mode.

5 ALARM red led

ALARM red led flashes when there is a malfunction in outdoor unit

6 Infrared Signal Receiver

(In case of using wireless remote control)

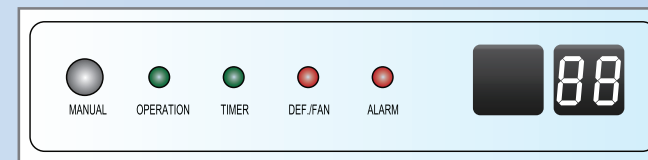
7 Display Digital Tube

- * This display shows error code in case of a malfunction.

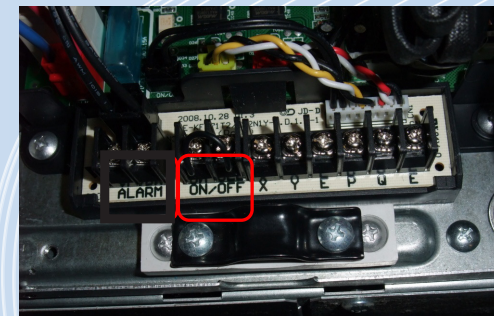


Easy Installation, Service and Maintenance (Cont.)

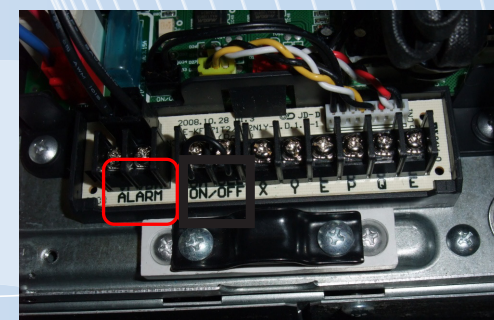
The display panel can be installed on the false ceiling to show unit operation and error code.



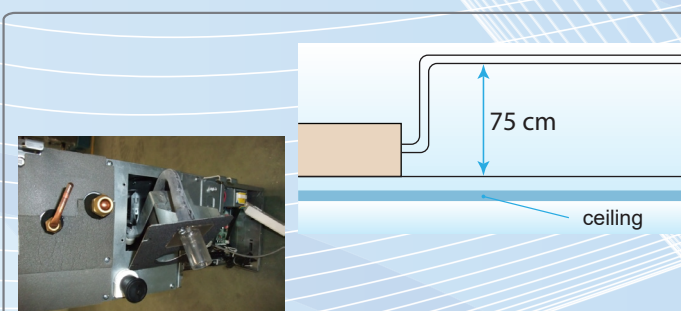
Remote ON / OFF function provides more easy central control of ducted split system.



Remote system alarm function which required for some applications such as computer rooms for fast and easy service and maintenance.



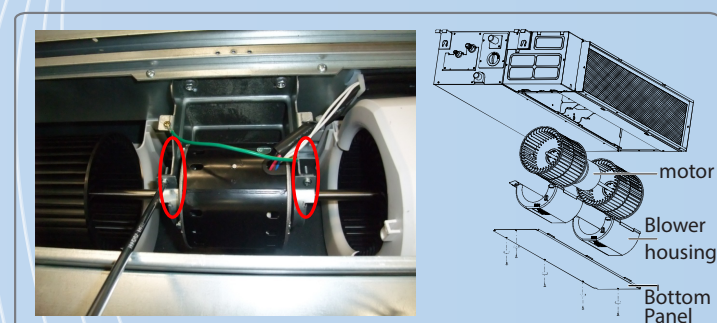
Optional drain pump which can lift the condensate water up to 75 cm upmost. Optional drain pump is factory installed.



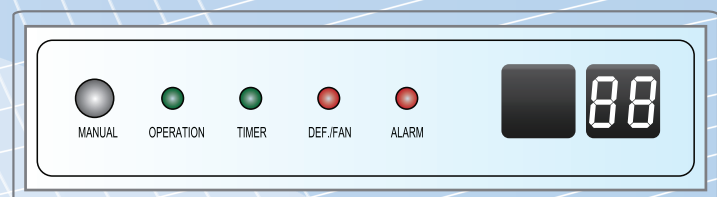
Easy removal of washable aluminum air filters for cleaning.



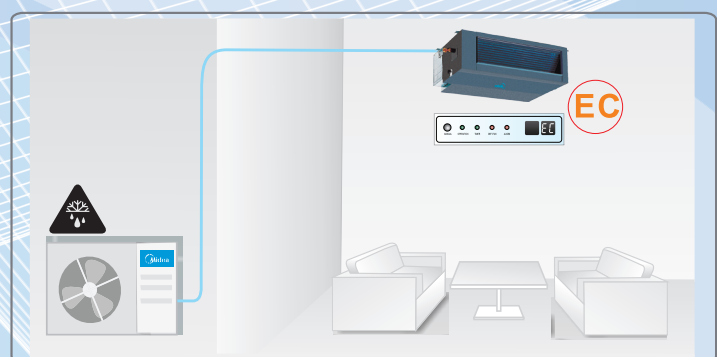
Easy accessibility to motors and fans of indoor unit for easy fast service and maintenance.



Smart self-diagnostic function for malfunctions detection through the leds of display panel for easy fast service and maintenance.

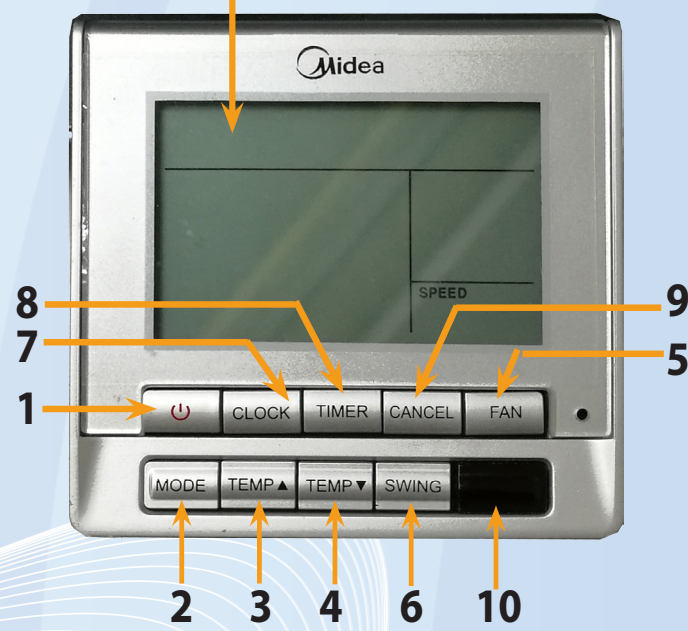


Smart Refrigerant leak detection by sensitive sensors mounted on both indoor and outdoor coils for easy fast service and maintenance.



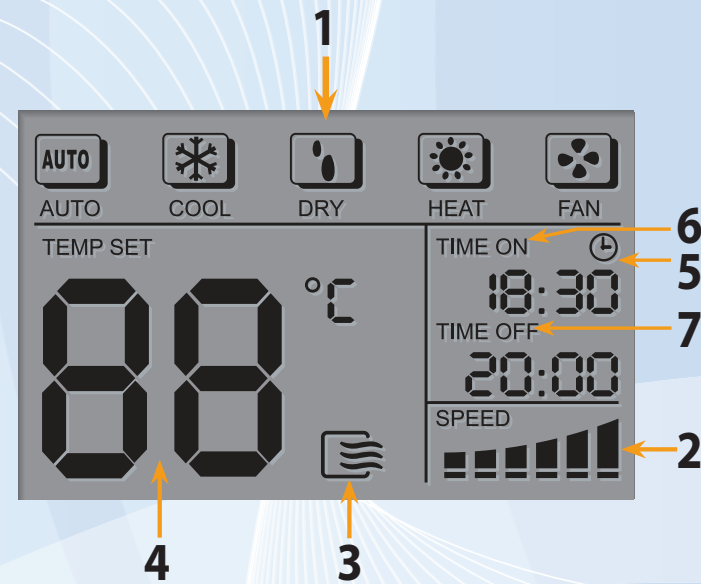
- 1 ON / OFF button
- 2 MODE selection button
- 3 Increase temperature button
- 4 Decrease temperature button
- 5 FAN SPEED selection button
- SWING function button
(This function does not work with ducted indoor unit but works with other indoor type)
- 7 CLOCK button
- 8 TIMER ON function button
TIMER OFF function button
- 9 CANCEL timer button
- 10 Infrared Signal Receiver

Display of Wired Room Controller



Display of Wired Room Controller

- 1 **MODE indicator**
- AUTO Mode indicator**
- COOL Mode indicator**
- DRY Mode indicator**
- HEAT Mode indicator**
- FAN Mode indicator**
- 2 **FAN SPEED indicator**
- Low Fan Speed indicator**
- Medium Fan Speed indicator**
- High Fan Speed indicator**
- Auto Fan Speed indicator**
- 3 **ON / OFF indicator**
- 4 **TEMP SET indicator**
- 5 **CLOCK function indicator**
- 6 **TIMER ON function indicator**
- 7 **TIMER OFF function indicator**



MSDT-36		0	0.04	0.08	0.12	0.15	0.16	0.2	0.24	0.28	0.32
ESP	in.wg	0	0.04	0.08	0.12	0.15	0.16	0.2	0.24	0.28	0.32
	Pa	0	10	20	30	37	40	50	60	70	80
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		51.5	51.1	50.7	50.4	50.1	50.0	49.6	49.2	48.9	48.6
Medium Speed		48.5	48.1	47.7	47.3	47.0	46.9	46.5	46.1	45.7	45.3
Low Speed		44.0	43.6	43.2	42.8	42.5	42.4	42.0	41.6	41.2	40.8

MSDT-42		0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
ESP	in.wg	0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
	Pa	0	10	20	30	40	50	60	70	80	90	100
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		52.0	51.6	51.2	50.9	50.5	50.1	49.7	49.3	49.0	48.6	48.2
Medium Speed		48.1	47.7	47.3	46.9	46.5	45.7	45.7	45.3	44.9	44.5	44.1
Low Speed		42.4	42.0	41.6	41.2	40.8	40.4	40.0	39.6	39.2	38.8	38.4

MSDT-48		0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
ESP	in.wg	0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
	Pa	0	10	20	30	40	50	60	70	80	90	100
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		52.0	51.6	51.2	50.9	50.5	50.1	49.7	49.3	49.0	48.6	48.2
Medium Speed		48.1	47.7	47.3	46.9	46.5	46.1	45.7	45.3	44.9	44.5	44.1
Low Speed		42.4	42.0	41.6	41.2	40.8	40.4	40.0	39.6	39.2	38.8	38.4

MSDT-60		0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
ESP	in.wg	0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
	Pa	0	10	20	30	40	50	60	70	80	90	100
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		54.2	53.8	53.4	53.1	52.7	52.3	51.9	51.5	51.1	50.8	50.4
Medium Speed		51.1	50.7	50.3	49.9	49.5	49.1	48.7	48.3	47.9	47.5	47.1
Low Speed		44.9	44.6	44.2	43.9	43.5	43.2	42.9	42.5	42.2	41.8	41.5

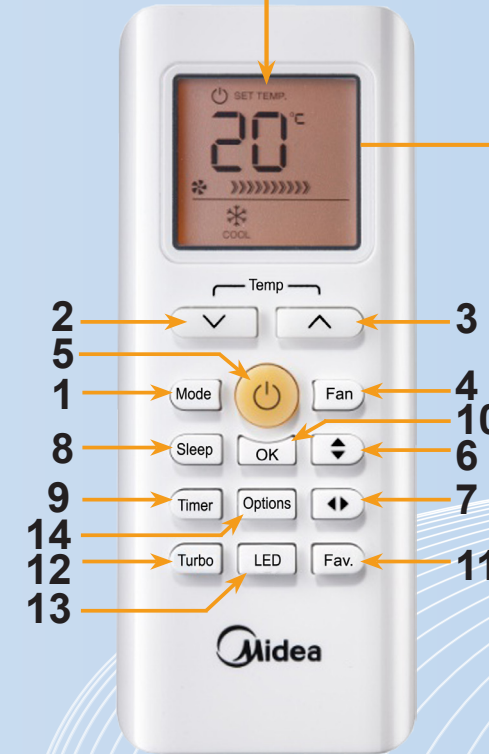
MSDT-12							
ESP	in.wg	0	0.04	0.08	0.10	0.12	0.16
	Pa	0	10	20	25	30	40
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		39.6	39.2	38.8	38.6	38.5	38.1
Medium Speed		35.4	35.0	34.6	34.4	34.2	33.8
Low Speed		27.2	26.8	26.4	26.2	26.0	25.6

MSDT-18									
ESP	in.wg	0	0.04	0.08	0.10	0.12	0.16	0.2	0.24
	Pa	0	10	20	25	30	40	50	60
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		44.7	44.3	43.9	43.7	43.6	43.2	42.8	42.4
Medium Speed		40.5	40.1	39.7	38.0	39.3	38.9	38.5	38.1
Low Speed		31.6	31.2	30.8	30.6	30.4	30.0	29.6	29.2

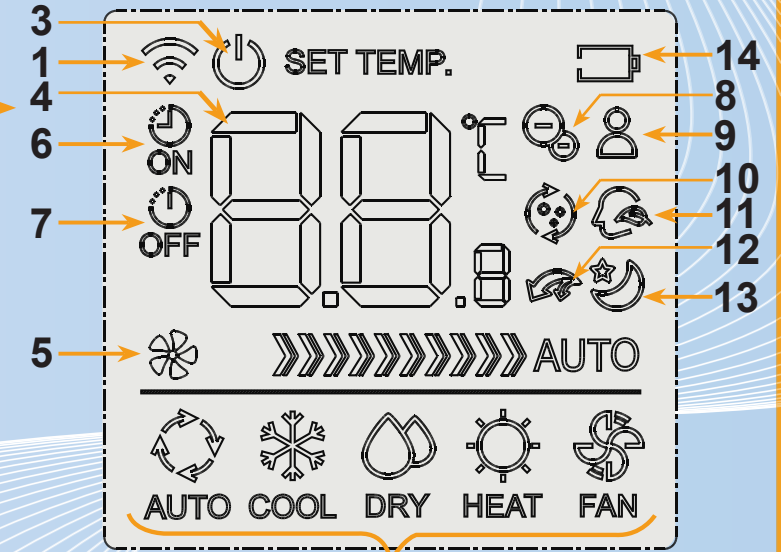
MSDT-24									
ESP	in.wg	0	0.04	0.08	0.10	0.12	0.16	0.2	0.24
	Pa	0	10	20	25	30	40	50	60
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		47.2	46.8	46.4	46.2	46.1	45.7	45.3	44.9
Medium Speed		44.3	43.9	43.5	43.3	43.1	42.7	42.3	41.9
Low Speed		40.4	40.0	39.6	39.4	39.2	38.8	38.4	38.0

MSDT-30											
ESP	in.wg	0	0.04	0.08	0.12	0.15	0.16	0.2	0.24	0.28	0.32
	Pa	0	10	20	30	37	40	50	60	70	80
Sound Level		dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
High Speed		51.5	51.1	50.7	50.4	50.1	50.0	49.6	49.2	48.9	48.6
Medium Speed		48.5	48.1	47.7	47.3	47.0	46.9	46.5	46.1	45.7	45.3
Low Speed		44.0	43.6	43.2	42.8	42.5	42.4	42.0	41.6	41.2	40.8

Display of Selected Functions



Display Of Remote Control



Control Buttons

- 1 **MODE selection button**
AUTO - COOL - DRY - HEAT - FAN
- 2 **Decrease temperature button**
Each time you press the button, the temperature decreased by 1°C
- 3 **Increase temperature button**
Each time you press the button, the temperature increased by 1°C
- 4 **FAN selection button**
High - Medium - Low - Auto fan speed
- 5 **ON/OFF button**
- 6 **Vertical Air Flow Auto Swing ***
- 7 **Horizontal Air Flow Auto Swing ***
- 8 **Sleep function button**
- 9 **TIMER ON or TIMER OFF function button**
- 10 **Confirm function button**
- 11 **FAV. Favorite function button**
to memorize the preferred settings
- 12 **TURBO function button ***
- 13 **LED Display function button ***
Plasma Fresh Air function button *
- 14 **Follow Me function button ***
Recall FAV. function button *
Self Clean function button *

Note : * This function does not work with this product but works with other products

- 1 **Signal transmission indicator**
- 2 **MODE indicator**
- AUTO **Automatic**
- COOL **Cooling**
- DRY **Dehumidification only**
- HEAT **Heating**
- FAN **Ventilation (fan only)**
- 3 **ON / OFF indicator**
- 4 **SET TEMP. indicator**
- 5 **FAN SPEED indicator**
- »»» **FAN SPEED indicator LOW**
- »»»» **FAN SPEED indicator MED**
- »»»»» **FAN SPEED indicator HIGH**
- »»»»»» **FAN SPEED indicator AUTO**
- 6 **TIMER ON function indicator**
- 7 **TIMER OFF function indicator**
- 8 **Plasma Fresh Air function indicator ***
- 9 **FOLLOW ME function indicator ***
- 10 **Self Clean function indicator ***
- 11 **Favorite function indicator ***
- 12 **Turbo function indicator ***
- 13 **Sleep function indicator**
- 14 **Batteries exhausted indicator**

Medium Static Pressure Air Flow Versus External Static Pressure

MSDT-12							
ESP	in.wg	0	0.04	0.08	0.10	0.12	0.16
	Pa	0	10	20	25	30	40
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	400	375	344	328	312	275	
	678	636	583	556	529	466	
Medium Speed	345	320	289	273	257	220	
	585	542	490	463	436	373	
Low Speed	250	228	203	191	180	156	
	424	386	344	324	305	264	

MSDT-18									
ESP	in.wg	0	0.04	0.08	0.10	0.12	0.16	0.20	0.24
	Pa	0	10	20	25	30	40	50	60
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	530	508	487	476	465	444	423	401	
	898	861	825	807	788	753	717	680	
Medium Speed	460	438	417	406	395	374	353	331	
	780	742	707	688	669	634	598	561	
Low Speed	295	276	256	246	237	218	199	180	
	500	468	434	417	402	369	337	305	

MSDT-24									
ESP	in.wg	0	0.04	0.08	0.10	0.12	0.16	0.20	0.24
	Pa	0	10	20	25	30	40	50	60
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	755	713	683	667	651	614	580	545	
	1280	1208	1158	1131	1103	1041	983	924	
Medium Speed	675	633	603	587	571	534	500	465	
	1144	1073	1022	995	968	905	847	788	
Low Speed	430	379	335	311	288	236	188	141	
	729	642	568	527	488	400	319	239	

MSDT-30											
ESP	in.wg	0	0.04	0.08	0.12	0.15	0.16	0.20	0.24	0.28	0.32
	Pa	0	10	20	30	37	40	50	60	70	80
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	1080	1036	1005	976	954	947	915	883	851	819	
	1831	1756	1703	1654	1617	1605	1551	1497	1442	1388	
Medium Speed	910	880	850	820	797	790	760	730	700	670	
	1542	1492	1441	1390	1351	1339	1288	1237	1186	1136	
Low Speed	645	596	562	525	502	495	453	411	369	327	
	1093	1010	952	890	851	839	768	697	625	554	

Air Flow Versus External Static Pressure

MSDT-36											
ESP	in.wg	0	0.04	0.08	0.12	0.15	0.16	0.20	0.24	0.28	0.32
	Pa	0	10	20	30	37	40	50	60	70	80
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	1080	1036	1005	976	954	947	915	883	851	819	
	1831	1756	1703	1654	1617	1605	1551	1497	1442	1388	
Medium Speed	910	880	850	820	797	790	760	730	700	670	
	1542	1492	1441	1390	1351	1339	1288	1237	1186	1136	
Low Speed	645	596	562	525	502	495	453	411	369	327	
	1093	1010	952	890	851	839	768	697	625	554	

MSDT-42												
ESP	in.wg	0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
	Pa	0	10	20	30	40	50	60	70	80	90	100
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	1370	1333	1300	1255	1223	1187	1151	1115	1079	1043	1007	
	2322	2259	2203	2127	2073	2012	1951	1890	1829	1768	1707	
Medium Speed	1260	1223	1190	1145	1113	1077	1041	1005	969	933	897	
	2136	2073	2017	1941	1886	1825	1764	1703	1642	1581	1520	
Low Speed	715	668	636	594	548	491	434	377	320	263	206	
	1212	1132	1078	1007	929	832	736	639	542	446	349	

MSDT-48												
ESP	in.wg	0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
	Pa	0	10	20	30	40	50	60	70	80	90	100
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	1370	1333	1300	1255	1223	1187	1151	1115	1079	1043	1007	
	2322	2259	2203	2127	2073	2012	1951	1890	1829	1768	1707	
Medium Speed	1260	1223	1190	1145	1113	1077	1041	1005	969	933	897	
	2136	2073	2017	1941	1886	1825	1764	1703	1642	1581	1520	
Low Speed	715	668	636	594	548	491	434	377	320	263	206	
	1212	1132	1078	1007	929	832	736	639	542	446	349	

MSDT-60												
ESP	in.wg	0	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40
	Pa	0	10	20	30	40	50	60	70	80	90	100
Air Flow	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
High Speed	1470	1441	1405	1380	1345	1314	1283	1252	1221	1190	1159	
	2492	2442	2381	2339	2280	2227	2175	2122	2070	2017	1964	
Medium Speed	1375	1346	1310	1285	1250	1219	1188	1157	1126	1095	1064	
	2331	2281	2220	2178	2119	2066	2014	1961	1909	1856	1803	
Low Speed	860	828	800	762	728	703	678	653	628	603	578	
	1458	1403	1356	1292	1234	1192	1149	1107	1064	1022	980	