

# Submittal Data: s-MEXT-G02-M1 DX (O/U)\* 013 S F1

# **42,000** BTU/H Indoor Evaporating Unit for IT Cooling Application

\*O = Over (Upflow); U = Under (Downflow)

S-MEXT-0130-3310 (Upflow)	I features + Smoke d features + Smoke			
Submitted To:  Engineer:  Date:  S-MEXT + PUY Split-DX CRAC System  For small-mid size data room Applications  Applications  Applications:  S-MEXT-0130-3000 (Upflow) Applications temperature and Humidification and Humidification features for precision Temperature and Humidity Control Available in Upflow (Over version) or Downflow (Under Version)  Total front Service accessibility EAN connection of up to 10 units Designed for operation with PUY outdoor condensing units Designed for operation with PUY outdoor condensing units Wide Variety of Options & Accessories  For: Reference Approval Construct Application:  S-MEXT-0130-3000 (Upflow) S-MEXT-G02-M1 DX O/U 013S; Includes all standard Detector, Fire Detector and Electric Reheat Function  S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat Detector, Fire Detector and Steam Humidifier Function  S-MEXT-013U-3210 (Downflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard Detector, Fire Detector and Steam Humidifier Function  S-MEXT-013U-3310 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard Detector, Fire Detector and Electric Reheat + Steam	I features + Smoke d features + Smoke			
Engineer:    Date:   Application:	I features + Smoke d features + Smoke			
s-MEXT + PUY Split-DX CRAC System For small-mid size data room Applications Available with Dehumidification and Humidification features for precision Temperature and Humidity Control Available in Upflow (Over version) or Downflow (Under Version) Total front Service accessibility LAN connection of up to 10 units Designed for operation with PUY outdoor condensing units Wide Variety of Options & Accessories  Standard Configurations: MESCA Part No.  S-MEXT-0130-3000 (Upflow) S-MEXT-030-3000 (Upflow) S-MEXT-G02-M1 DX O/U 013S; Includes all standard Detector, Fire Detector and Electric Reheat Function  S-MEXT-013U-3110 (Downflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Downflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Upflow) S-MEXT-013U-3210 (Upflow) S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat S-MEXT-013U-3310 (Upflow) S-MEXT-013U-3310 (Upflow)	d features + Smoke			
For small-mid size data room Applications     Available with Dehumidification and Humidification features for precision Temperature and Humidity Control     Available in Upflow (Over version) or Downflow (Under Version)     Total front Service accessibility     AN connection of up to 10 units     Designed for operation with PUY outdoor condensing units     Wide Variety of Options & Accessories      S-MEXT-0130-3000 (Upflow)     S-MEXT-0130-3000 (Downflow)     S-MEXT-0130-3110 (Upflow)     S-MEXT-G02-M1 DX O/U 013S; Includes all standard Detector, Fire Detector and Electric Reheat Function     S-MEXT-0130-3210 (Upflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3210 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3210 (Upflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3210 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3210 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3210 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3210 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3310 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3310 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3310 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3310 (Downflow)     S-MEXT-G03-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3310 (Downflow)     S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     S-MEXT-013U-3310 (Downflow)	d features + Smoke			
Applications  • Available with Dehumidification and Humidification features for precision Temperature and Humidity Control  • Available in Upflow (Over version) or Downflow (Under Version)  • Total front Service accessibility  • LAN connection of up to 10 units  • Designed for operation with PUY outdoor condensing units  • Wide Variety of Options & Accessories  * APPlications  * S-MEXT-0130-3000 (Upflow) S-MEXT-G02-M1 DX O/U 013S; Includes all standard some semicon of up to 10 units shows a condensing units  • Wide Variety of Options & Accessories  * APPlications  * S-MEXT-013U-3000 (Downflow) Detector, Fire Detector and Electric Reheat Function Detector, Fire Detector and Steam Humidifier Function S-MEXT-013U-3210 (Downflow) Detector, Fire Detector and Steam Humidifier Function S-MEXT-013U-3310 (Upflow) S-MEXT-G02-M1 DX O/U 013S; Includes all Standard feat S-MEXT-013U-3210 (Downflow) Detector, Fire Detector and Electric Reheat + Steam Detector And Detector, Fire Detector and Electric Reheat + Steam Detector And Detector, Fire Detector And Detector, Fire Detector And	d features + Smoke			
Temperature and Humidity Control  • Available in Upflow (Over version) or Downflow (Under Version)  • Total front Service accessibility  • LAN connection of up to 10 units  • Designed for operation with PUY outdoor condensing units  • Wide Variety of Options & Accessories  **S-MEXT-0130-3110 (Upflow) s-MEXT-G02-M1 DX O/U 013S; Includes all Standard feat s-MEXT-0130-3210 (Downflow)  **S-MEXT-0130-3210 (Upflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-0130-3210 (Upflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-0130-3210 (Upflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Upflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Upflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Upflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-013U-3210 (Downflow)  **S-MEXT-013U-3210 (Downflow) s-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat s-MEXT-				
• Total front Service accessibility     • LAN connection of up to 10 units     • Designed for operation with PUY outdoor condensing units     • Wide Variety of Options & Accessories      • Total front Service accessibility     • LAN connection of up to 10 units     • Designed for operation with PUY outdoor condensing units     • Wide Variety of Options & Accessories      • Accessories      • Total front Service accessibility     • S-MEXT-013U-3210 (Upflow)     • S-MEXT-G02-M1 DX 013S; Includes all Standard feat     • S-MEXT-G03-3310 (Upflow)     • S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     • S-MEXT-G03-3310 (Upflow)     • S-MEXT-G02-M1 DX 0/U 013S; Includes all Standard feat     • S-MEXT-G03-3310 (Upflow)     • S-MEXT-G03-M1 DX 013S; Includes all Standard feat     • S-MEXT-G03-M1 DX				
outdoor condensing units  • Wide Variety of Options & Accessories  outdoor condensing units  • Wide Variety of Options & Accessories  s-MEXT-0130-3310 (Upflow)  s-MEXT-013U-3310 (Downflow)				
to suit every application	s-MEXT-G02-M1 DX O/U 0135; Includes all Standard features + Smoke Detector, Fire Detector and Electric Reheat + Steam Humidifier Function(s)  Description			
·	s-MEXT-G02-M1 DX Custom Built-to-Order Unit (Check required size			
Images for reference purposes only s-MEXT-G02-M1 DX F01 U 013 S (Downflow) and version, in addition to required options on Page	and version, in addition to required options on Page 2-3).			
Rated Capacity: (Cooling capacity indicated at the maximum value at operation under the following conditions Note: 1)				
Cooling ¹         Btu/h         40,263           Matched Outdoor Unit 6         Model         PUY-A42NKA7				
s-MEXT Indoor Unit Specifications:				
Power Supply (Basic Unit, See below for Electrical ratings when other options/features are selected)  208/230V, 1Ph, 60Hz				
Minimum Circuit Ampacity MCA <sup>2</sup> (Basic Unit)  A 4.1 (Cooling only)				
Maximum Fuse/Breaker Size (Basic Unit)  A 15	-			
,	Backward curved centrifugal fan x 1 DC motor x 1			
Airflow Rate CFM (m <sup>3</sup> /h) 1534 (2606)				
Sensible Heat Ratio (SHR) 0.88	0.88			
External Static Pressure In. WG (Pa) [Upflow/Downflow] 1.43(355) / 1.49(371)				
	(61 / 77) FPT 3/4 (19.02)			
	Galvanized steel cabinet - Painted with epoxy powder (RAL7016)			
	Cross Fin (Aluminium Plate Fin and Copper Tube)			
	MERV8 Washable - Synthetic fibre			
· · · ·	23-5/8 (600) 19-11/16 (500)			
H: In. (mm) 77-15/16 (1980)				
Net Weight Lbs. (kg) 242.5 (110)	, <i>,</i>			
	5/8 (15.875) 3/8 (9.525)			
Standard Features Indoor Unit Electrical Ratings (Units with optional accessories/features in	istalled)			
Option No. Description Cooling + Floatic Reheat Minimum Circuit Ampacity (MCA) 2 18	.4			
A724 Basic EC Fan Cooling + Electric Reheat Maximum Fuse/Breaker Size 20	.0			
6192 Compact Keyboard Cooling + Steam Humidifier Minimum Circuit Ampacity (MCA) <sup>2</sup> 13	.9			
A501 Clogged Filter Sensor Maximum Fuse/Breaker Size 15				
A491 Water Leakage Detector Cooling + Electric Reheat + Steam Minimum Circuit Ampacity (MCA) <sup>2</sup> 28				
P662 MERV 8 Air Filter Humidifier Maximum Fuse/Breaker Size 30	.0			
PUY Outdoor Unit Specifications: s-MEXT + PUY System Specifications  Electrical Power Requirements V/Ph/Hz 208/230 V, 1-Ph, 60 Hz Rated Capacity - Total BTU/h (kW) 40,263 (11.7)				
Minimum Circuit Ampacity MCA <sup>2</sup> A 25 Rated Capacity - Sensible BTU/h (kW) 34,121 (10.3)				
Breaker Size / MOCP A 30 / 31 Sensible Heat Ratio (SHR) 0.88				
Compressor DC Inverter-driven Scroll System EER (nominal) BTU/hW (W/W) 10.87 (3.19)				
Fan Motor (ECM) FLA A 0.5 + 0.5 Indoor Cooling: 80.6°F (27°C) DB - R	.H. 47%;			
Fan Motor Power (Watts) W 74 Rating Conditions ESP = 0.08 in. w.c. (20 Pa)	, , ,			
Airflow Rate, Dry CFM (m³/h) 3880 (6592) Outdoor Conditions: 95°F (35°C) DB	Outdoor Conditions: 95°F (35°C) DB / 75°F (24°C) WE			
Sound Pressure Level dB(A) 52 Operating Range* 5 °F (-15 °C) to 115 °F (40	6 °C) DB			
External Dimensions - [HxWxD]  In. 52-11/16 x 41-5/16 x 13-63/64  PUY ODU Options				
(mm) (1,338 x 1050 x 330.25) Outdoor Unit Model Standard Model PUY-	A42NHA7			
Net Weight Lbs. (kg) 211 (96) Seacoast (BS) Model PUY-	A42NHA7-BS			
MESCA supplied and approved Snow Guard / Wind	SG-1-RE			
Refrigerant Lbs. (kg) R410A; 10 lbs, 6 oz. (4.7 kg) Deflectors / Windscreens and Accessories for proper Side Snow Guard S	SG-1-SD			
supported Snow Guard / Wind Deflectors /	NKMU (x2 Required)			
CONSTRUCTION CONST	-NKMU (x2 Required)			
Maximum Vertical Separation Ft. (m) 100 (30) *Wind Guards Are Required Below 23 °F  Page 1 of 6  Specifications are subject to char				



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Optional Accessories						
Option Code	Description					
	FAN PRESSURE CONTROL TYPE					
A724 [STD]	Basic EC Fan					
A548	Constant Air Pressure: automatic system for the air pressure control in the underfloor (downflow) or in the (upflow)					
A547	Constant Air Flow: automatic system for the air flow control in the underfloor (downflow) or in the duct (upflow)					
	USER INTERFACE					
1441	Control of unit via KIPLINK + Compact Keyboard					
	Control of unit via KIPLINK + 7 Inch Touchscreen (Replaces Std. Compact Keyboard)					
6192 [STD]	Compact Keyboard					
6196	Control Unit via KIPLINK (Removes Std. Compact Keyboard)					
6195	Compact 7 Inch Touch Screen (Replaces Std. Compact Keyboard)					
C9261063	Additional Remote Compact Display (Supplied in field kit)					
	LOWERED DISPLAY (UNDER/DOWNFLOW VERSION ONLY)					
P151	Lowered display for under/downflow version: for units equipped with plenum under the unit					
	FREECOOLING MANAGEMENT (UNDER/DOWNFLOW VERSION ONLY)					
A812(1)	Free-cooling direct control					
	ELECTRIC HEATER & DEHUMIDIFICATION FUNCTION					
A431	Basic Electric Heater (2-Stage, 2.6 kW Total Capacity)					
P051	Dehumidification Function (Requires Opt. A431)					
	STEAM HUMIDIFIER					
4301	Steam Humidifier 3 kg/h UM03					
	TEMPERATURE/HUMIDITY SENSOR(S)					
	T/RH Sensor mounted in unit Return Air Section					
P071	Remote Sensor T/RH (1 Probe)					
P072	Remote Sensor T/RH (2 Probe)					
P073	Remote Sensor T/RH (3 Probe)					
P074	Remote Sensor T/RH (4 Probe)					
4666	External Air Temperature Sensor					
	SERIAL CARD FOR BMS					
A471	RS485 Serial Card					
	Ethernet Serial Card					
A474	LON Card					
A477	BACNET over IP Serial Card					
	FIRE/SMOKE DETECTOR & WATER LEAK DETECTOR					
	With Fire Detector (Supplied in mounting kit for field installation)					
A511	With Smoke Detector (Supplied in mounting kit for field installation)					
A492	Additional Water Leak Detector (Supplied in mounting kit for field installation)					
	INSULATION & FILTRATION					
A272	Class 0 (A1 DIN 4102) Cabinet Insulation					
P663	MERV 11 Air Filter					
	AIR TEMPERATURE CONTROL					
	Return Air Control					
A792 [STD]	Delivery Air Control					



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Option Code	Description					
	MISCELANEOUS ELECTRICAL OPTIONS & ACCESSORIES					
P091	Back-up module controller. The system guarantees the microprocessor power supply for a few minutes, in case of supply voltage failu during ATS switching. Not compatible with "Free-cooling plenum" and "Steam humidifier" optional accessories.					
P113	Automatic Transfer Switch (ATS) Kit for both Indoor and Outdoor Unit for Dual power supply for emergency operation					
A842	A842 Network analyser: Multifunction utility for calculating and displaying the machine electrical measurements					
	SHEET METAL OPTIONS & ACCESSORIES					
P101	Anti-seismic fixing kit; supplied in mounting kit					
A532	Damper with spring return: non-return air damper driven by electric servomotor installed on the top of units on all versions					
P011	Empty Supply Air Plenum					
P012	Empty Supply Air Plenum with Insulation					
P013 / P014	Supply Plenum + 3 grilles. Plenum with grilles on three sides with double adjustable row					
P015	Silenced Supply Air plenum					
P016	Silenced Supply Air Plenum + 1 grille. Plenum with grille with double adjustable row on front with sound absorbers					
P031	Empty intake plenum (Under/Downflow Version Only)					
P032	Empty intake plenum with insulation (Under/Downflow Version Only)					
P033	Silenced intake plenum (Under/Downflow Version Only)					
P034(4)	Intake free-cooling plenum for Under/Downflow version Only (includes Damper control). Requires the Opt. P161 (Return Air mounted T/RH Sensor) and Opt. 4666 (Ambient Air Temperature Sensor) and Opt. A812 (Free-Cooling Direct Control).					
P041	Support Frame H = 255-350 mm (10-14 inches) Adjustable					
P042	Support Frame H = 355-450 mm (14-18 inches) Adjustable					
P043	Support Frame H = 400-510 mm (16-20 inches) Adjustable					
	Please refer to Databook for sheet metal accessories, combinations and details.					

### Notes:

## MANDATORY COMBINATIONS OF ACCESSORIES

- 1) When optional accessory "A813 Free cooling direct control" is present, it requires mandatory accessories "P161 T/rH air intake sensor" and "4666 External air probe"
- 2) When optional accessories "4301 / 4303 Steam humidifier" are present, they require mandatory accessory "P161 T/rH air intake sensor"
- 3) When optional accessory "P051 Dehumidification function" is present, it requires mandatory accessory "P161 T/rH air intake sensor"
- 4) When optional accessory "P034 Intake free-cooling plenum" is present, it requires mandatory accessories "P161 t/rH air intake sensor", "4666 External air probe", "A812 Free-cooling direct control"

#### Notes & Specifications:

- 1. Cooling (Indoor// Outdoor): 80.6 °F (27 °C); 47% RH // 95 °F (35 °C); Indoor Unit ESP: 0.08 In.WC (20 Pa), Connection pipes length = 16.4 ft. (5 meters)
- 2. All electrical work shall comply with National (CEC) and local codes and regulations.
- 3. Applications should be restricted to small and medium IT room applications only; comfort heating and cooling applications are not recommended.
- 4. Mitsubishi Electric Sales Canada Inc. (MESCA) supports the use of only MESCA supplied and approved components and accessories for proper functioning of the unit(s).

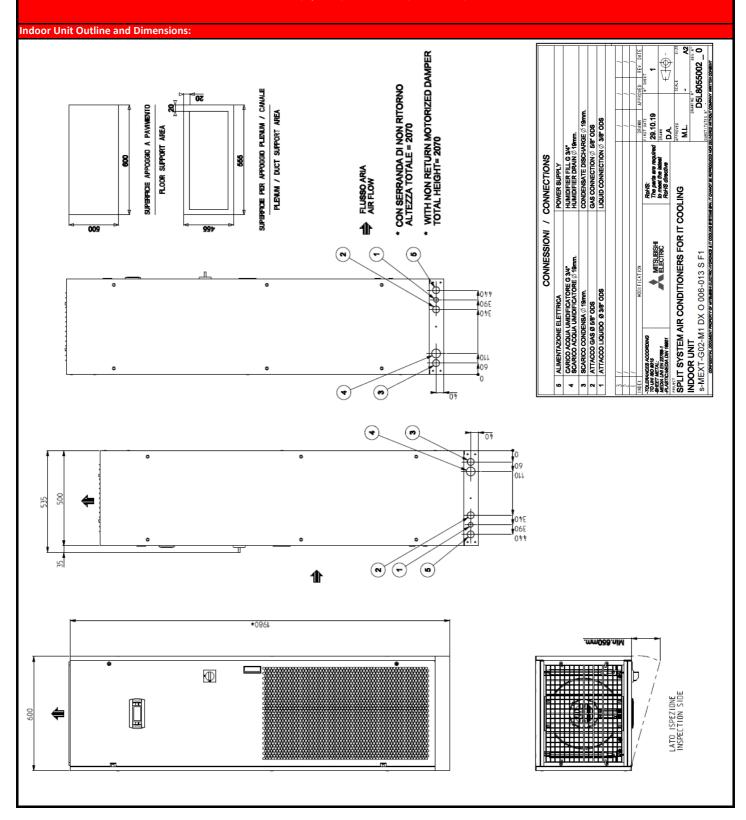
Always consult relevant technical product documentation at mitsubishitechinfo.ca, your local distributor or MESCA BC sales office as applicable. Use of non - MESCA supported components and accessories will affect warranty coverage. MESCA recommends (A) consideration of all applicable design and application parameters and requirements specific to any project; and (B) implementation of any countermeasures needed to address those parameters and requirements, including the provision of antifreeze solution in water based systems used in conjunction with ducted indoor units.

- 5. All components of the system must be compatible.
- 6. Wind Guards are <u>Mandatory</u> for the Outdoor Condenser when Outdoor Design/Operating Temperature is 23 °F (-5 °C) or below.
- 7. s-MEXT Series Indoor Units are compatible with PUY Cooling-only Outdoor Units for operation down to -15 °C Outdoor Ambient Temperature.
- 8. Should any person change this document in any manner whatsoever without MESCA's written permission, the document shall be of no force and effect and any change shall be deemed to be a representation and warranty made by that person and not MESCA. That person, and not MESCA, shall assume full responsibility for the consequences of such changes. MESCA assumes no responsibility for any consequences in such cases.



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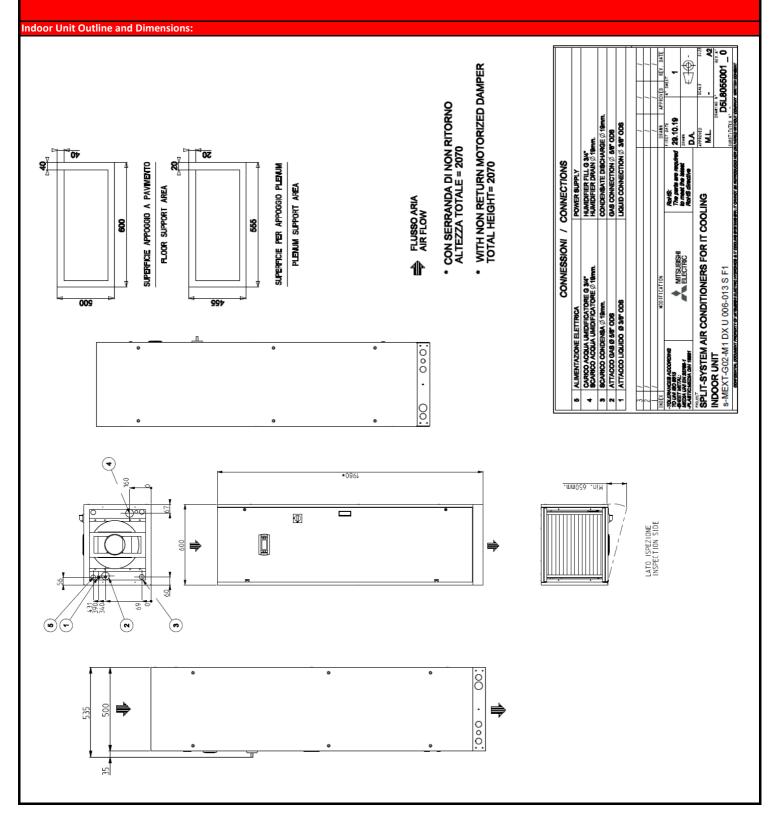
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## Outdoor Unit Outline and Dimensions:

Unit: mm (in.)

