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ecoAzur[®] - V6 series Demand Control Kitchen
Ventilation System, Installation Manual

Content

1. Safety instructions and notes	3
2. Introduction	6
3. System Overview Drawings	7
4. System Controller & Power Supply Panel, V6SC-xxx & V6PS-xxx	9
5. Recessed Keypad, V6KP-100 & -200	18
6. Recessed Keypad (Hood Mount), V6KP-100 & -200	22
7. Wall Mount Keypad, V6KP-110 & -210	26
8. OFF Override Station, V6KP-410	30
9. Hood Controller, V6HC-100 & -2xx	32
10. Hood Controller (Rod Mount), V6HC-110	38
11. IRIS BLEU® Optic Sensor, V6IB-300 & -310	41
12. Temperature Transmitter, V6TT-100	47
13. Temperature 10K Probe, V6TT-110	50
14. Room Sensor, V6RS-xxx	53
15. Modulating Damper, V6MD-100 & -200	55
16. Hood Pressure Sensor, V6PT-100	62
17. Duct Pressure Sensor, V6PT-2xx & -3xx	65
18. Limited-Access Assembly, (Alternate Installation Method), V6LA-xxx	69
19. Wiring Channel Assembly (Alternate Installation Method), V6HM-xxx	70

1. Safety instructions and notes

Read and understand instructions provided with any other equipment related to the ECOAZUR® V6 DCKV control system. For more information, concerning your ECOAZUR® V6 DCKV control system, contact your Authorized Service Center .

Please read and save these instructions for future reference. Read carefully before attempting to install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

Follow all local electrical, construction and safety codes, as well as the National Electrical Code (NEC) and the latest edition of the National Fire Protection Agency Standard for Ventilation Control Operations (NFPA 96). Follow the Canadian Electrical Code (CEC) and NFPA 96 if installing this product in Canada. Other codes may apply in your country or territory.

The ECOAZUR® Demand Control Kitchen Ventilation control bears the UL safety certification mark, per product category numbers (CCN) YYXS and YYXS7 (Ventilation Equipment for Commercial Cooking Appliances, Hood and Duct Accessories). The following conditions must be met to maintain the ECOAZUR® UL listing:

- The hoods in which the system is installed shall be listed to UL 710 Standard or ULC-S646 in Canada). The hoods may be rated for low duty, medium duty heavy duty or extra heavy duty cooking, with or without modulating dampers, and may be produced by any hood manufacturer.
- The hoods must be installed in accordance with the manufacturer's specifications and required airflow. All penetrations into the hood shall be sealed with UL Listed (YYXS, or YYXS7 in Canada) fittings.
- When the ECOAZUR® System Controller panel is positioned in a control cabinet at either end of a hood, it must be mounted at a minimum height of 915mm (36") above the cooking surface and have a 25mm (1") minimum air gap between the System Controller and the lateral side of the hood. It is not permissible to mount the System Controller on the top surface of the hood.

All penetrations into the hood shall be sealed with UL Listed (YYXS, or YYXS7 in Canada) fittings.

ECOAZUR® Modulating Dampers are not fire dampers and should solely be used as airflow control devices with an ECOAZUR® system.

Cooking appliance shutoff device integration to ECOAZUR® has not been evaluated to the European Directive on Appliances burning gaseous fuels (2016/426/EU). Cooking appliance shutoff device safety interlock must be implemented by a certified third party system in the European Union (by others). Other codes may apply in your country or territory. For more information, contact your Authorized Service Center.

Hoods shall be sized and configured to provide for the capture and removal of flue gas, smoke, vapors and cooking by-products, considering the cooking appliances below them. Although ECOAZUR® is designed to lower the ventilation rate in the kitchen when partial cooking loads are detected, it cannot resolve issues related to inadequate airflow during maximum ventilation.

If more information is needed, contact an Authorized Service Center or a licensed professional engineer before moving forward.

Warnings caution you about conditions which can result in serious injury or death and/or damage to the equipment. They also tell you how to avoid the danger. The warning symbols are used as follows:



ELECTRICITY WARNING warns of hazards from electricity which can cause serious injury and/or damage to the equipment.



GENERAL WARNING warns about conditions, other than those caused by electricity, which can result in physical injury and/or damage to the equipment.



WARNING! The ECOAZUR[®] system and related equipment should **ONLY** be installed by qualified personnel. Electrical wiring and connections must be made by a qualified electrician. Commissioning and service must only be performed by personnel that are knowledgeable in the operation of the equipment being controlled and should be aware of general safety precautions.



WARNING! The ECOAZUR[®] system and related equipment should be properly grounded. Improper grounding can result in a risk of electric shock.



WARNING! More than one circuit disconnect device may be required to de-energize the equipment before servicing. Dangerous voltage is present when input power is connected to the ECOAZUR[®] System Controller panel. External wiring can supply dangerous voltages to the terminals of relay outputs (RO1 through RO8).



WARNING! Lock out the electrical power supply to all equipment (ECOAZUR[®] System Controller panel, hood lights, VFDs, motors, etc.) before hood and duct cleaning procedures.



WARNING! Dangerous voltage is present when input power is connected to VFDs. After disconnecting the supply, wait at least 5 minutes (to let the intermediate circuit capacitors discharge) before removing the cover.



WARNING! Do not expose control panels to any water. Do not allow the electrical components of this system to come in contact with oil, grease, hot surfaces, water or chemicals.



WARNING! Legal regulations and regulations issued by authorities must be observed during installation.



WARNING! The ECOAZUR[®] system does not include a disconnect device. A means to disconnect input power must be installed between the AC power source and the ECOAZUR[®] system.

The branch circuit protection must:

- Be sized to conform to applicable safety regulations, including, but not limited to, both national and local electrical codes.
- Be locked in the open position during installation and maintenance work.



WARNING! The overall design of the installation must include emergency stop devices and/or any other safety equipment when required by your local jurisdiction.

Pressing the STOP key on the ECOAZUR[®] system keypad does NOT:

- Generate an emergency stop of the system.
- Separate the system from dangerous potential.



WARNING! Never pressure wash the ECOAZUR[®] components, including the optic sensors.



WARNING! It is the responsibility of the installer to make sure both electrical and gas appliances shut down in the event of a fire or a power loss to the building when this sequence is required by the authority having jurisdiction.



WARNING! Verify the site can supply the necessary power for each fan and the control panel.



WARNING! Ensure that all electrical switches and system components (including access doors) are returned to an operable state after the cleaning procedure.



WARNING! The ECOAZUR® system will start up automatically after an input voltage interruption. Dampers and exhaust fans may automatically be energized.



WARNING! The ECOAZUR® device enclosures may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user. Never attempt to repair a malfunctioning ECOAZUR® part, including any other related equipment such as VFDs (Variable Frequency Drives), dampers, motors, fans, etc.; contact your local Authorized Service Center for repair or replacement.



WARNING! Do not stare at the ECOAZUR® optic sensor light.



WARNING! In case of the occurrence of any problem, contact your local Authorized Service Center.

Read and understand instructions provided with any other equipment related the ECOAZUR® V6 DCKV control system. For more information, concerning your ECOAZUR® V6 DCKV control system, contact your authorized service center.

1.1 Receiving

Upon receiving the product, check to ensure all items are accounted for by referencing the delivery receipt or packing list. Inspect each crate or carton for shipping damage before accepting delivery. Alert the carrier of any damage detected. The customer will make a notation of damage (or shortage of items) on the delivery receipt and all copies of the bill of lading, which is countersigned by the delivery carrier. If damaged, immediately contact your Intellinox distributor or representative.

Any physical damage to the unit after acceptance is not the responsibility of Intellinox Technologies Inc.

1.2 Storage

Units are protected against damage during shipment. If the unit cannot be installed and operated immediately, precautions need to be taken to prevent deterioration of the unit during storage. The user assumes responsibility for the unit and accessories while in storage. The manufacturer will not be responsible for damage during storage. The ideal environment for storing the hood and hood accessories is indoors, above grade, in a clean, dry atmosphere that is sealed from the elements. While in storage, inspect equipment routinely. If any moisture, dirt or other accumulations are found on the hood or any of the parts, the source should be located and eliminated.

1.3 Unpacking

Verify that all required parts and the correct quantity of each item have been received. If any items are missing, report shortages to your Authorized Service Center to arrange for obtaining missing parts.

Remove all other shipping/packing materials.

1.4 Prior to Installation

Prior to installation, check with the authorities having jurisdiction on clearance requirements for structures surrounding the hood and other equipment. Consider access for servicing the equipment and the different components when locating the hood and duct accessories.

Electrical components with electrical connections shall be readily inspectable after the exhaust hood installation.

1.5 Handling

Units are to be rigged and moved by the lifting brackets provided or by the skid when a forklift is used. The location of brackets varies by model and size. Handle in such a manner as to keep from scratching or denting. A damaged finish may reduce the ability of the unit to resist corrosion.

1.6 Preventive Maintenance Program

The ECOAZUR® system requires a yearly inspection and preventive maintenance program to ensure safety and optimal performance. Contact your Authorized Service Center.

1.7 Product Disposal (W.E.E.E. Directive)

At the end of their useful life, the packaging and product should be disposed of via a suitable recycling center. Do not dispose of with household waste. Do not burn. All locally valid regulations and requirements must be observed.

2. Introduction

The purpose of this User's Manual is to equip the reader with the essential knowledge required for operating the ECOAZUR® V6 DCKV (Demand Control Kitchen Ventilation) system. Additionally, this document provides guidance on maintenance and troubleshooting of the ECOAZUR® control system.

Should the need for further information arise, the following reference materials are available:

- ECOAZUR® Product Specifications (E6PS-EN) - Details on product design characteristics
- ECOAZUR® Installation Manual (E6UM-EN) - Guidelines for mechanical installation
- ECOAZUR® Programming Guide (E6PG-EN) - Instructions for parameter setup and navigating interfaces
- ECOAZUR® Electrical Diagrams - Project-specific wiring instructions

The ECOAZUR® control system interfaces with third-party devices, such as Variable Frequency Drives, Electronically Commutated Motors, fans, hood fire suppression systems, cooking appliance shutoff devices, and other equipment. It is recommended to consult the manufacturer's specific documentation and instructions for the safe and proper operation and maintenance of these devices.

The installation instructions may indicate typical component locations for reference only. Project specific instructions on the ECOAZUR® Electrical Diagrams must be followed.

Only ECOAZUR® V6NC series network cables may be used to interconnect hood network components.

Minimum ECOAZUR® requirements concerning all other low voltage control cables are the following: 18 AWG, 75°C (167°F), shielded and plenum (FT6) rated.

ECOAZUR® components with electrical connections shall be readily inspectable after installation of the exhaust hood.

2.1 Abbreviations & ECOAZUR® Components

BMS: Building Management System

CS: Current Switch

DCKV: Demand Control Kitchen Ventilation

ECM: Electronically Commutated Motor

HC: ECOAZUR® Hood Controller

IB: ECOAZUR® Iris Bleu® Optic Sensor

KP: ECOAZUR® Keypad

MD: ECOAZUR® Modulating Damper (exhaust duct)

NC: ECOAZUR® Network Cable

PS: ECOAZUR® Power Supply

PT: ECOAZUR® Pressure Transmitter

RS: ECOAZUR® Room Sensor

RTU: Roof Top Unit

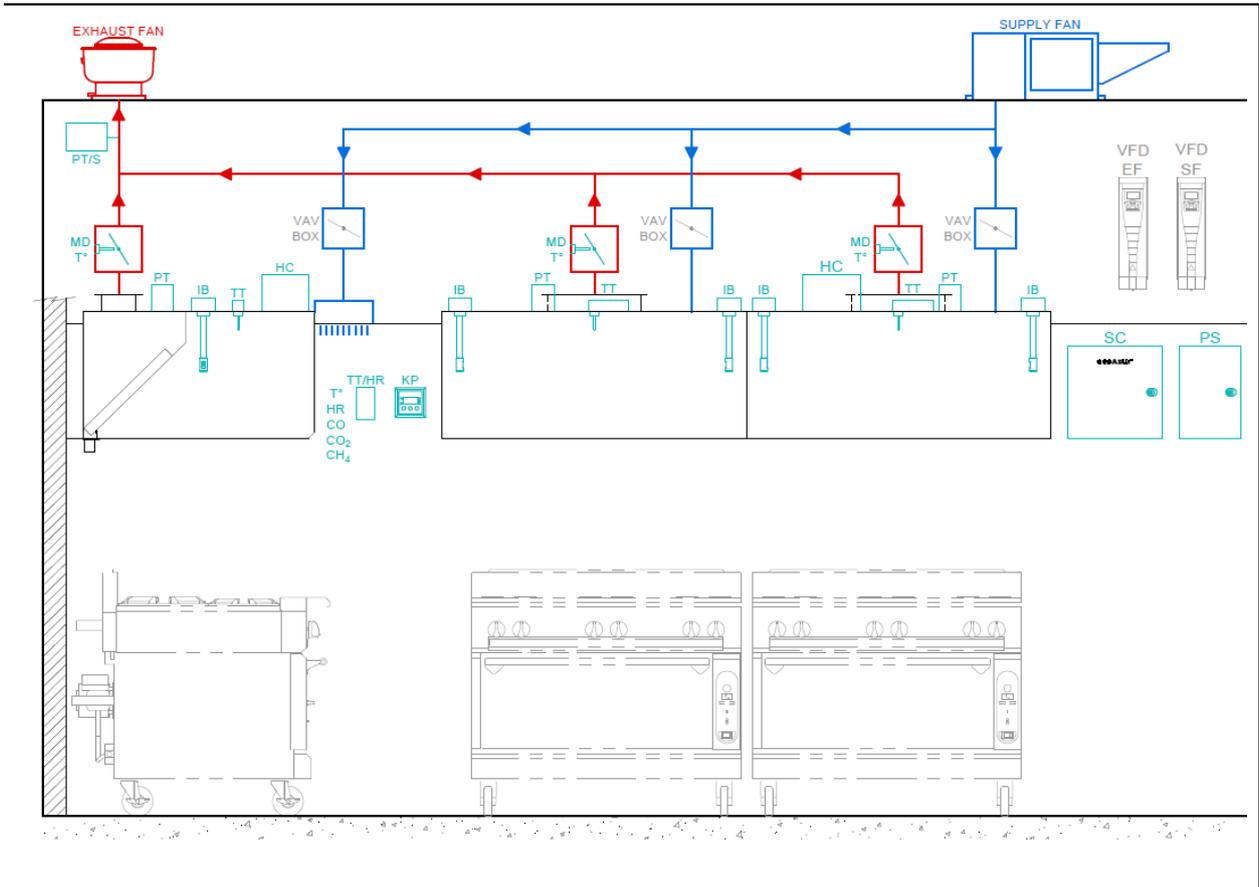
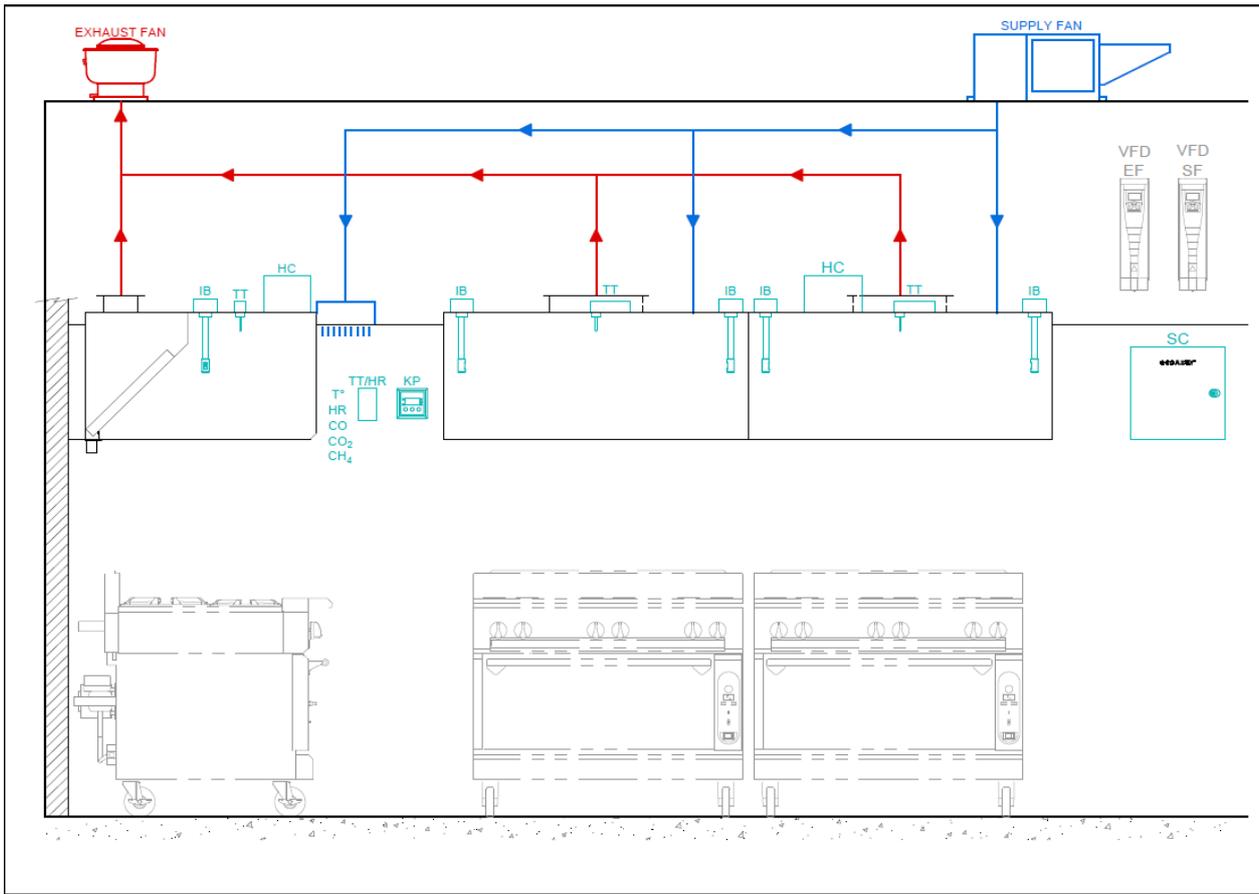
SC: ECOAZUR® System Controller

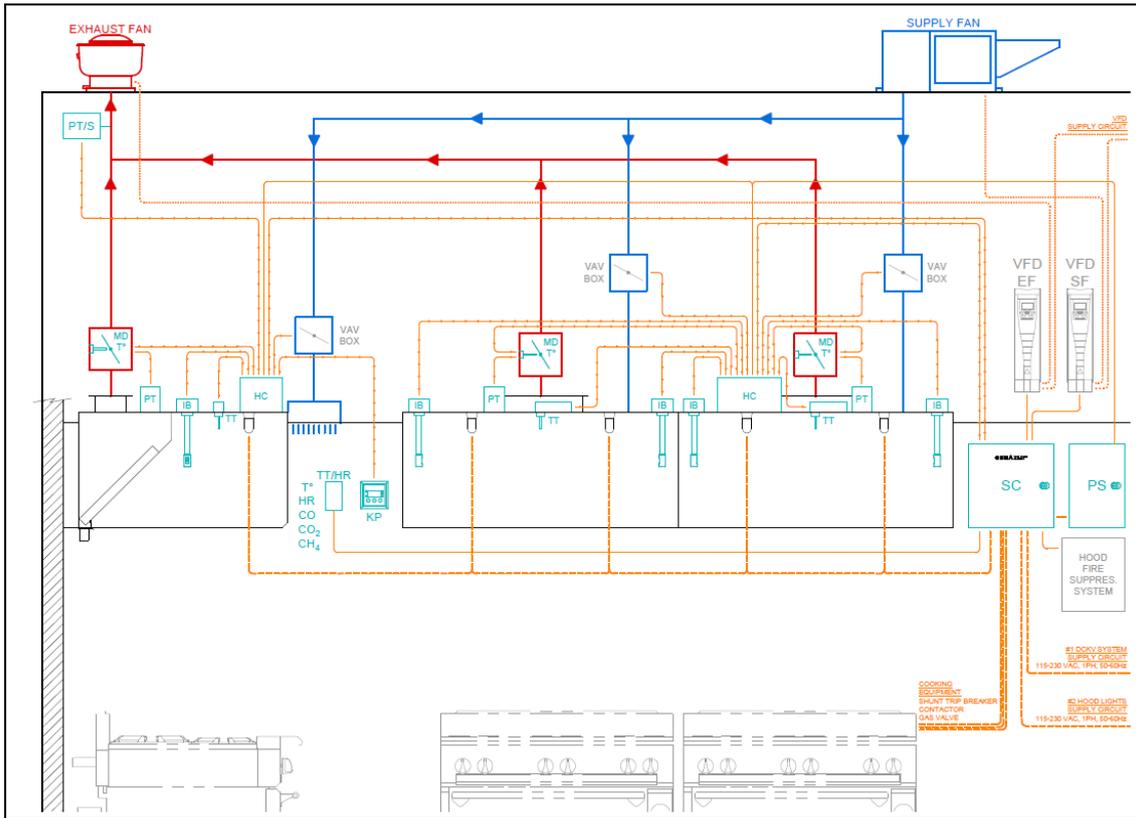
TT: ECOAZUR® Temperature Transmitter

VB: Variable air volume Box (supply duct)

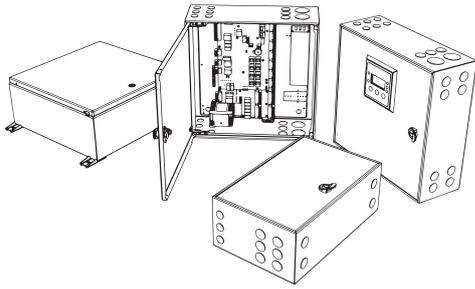
VFD: Variable Frequency Drive

3. System Overview Drawings





4. System Controller & Power Supply Panel, V6SC-xxx & V6PS-xxx



REQUIRED TOOLS

(According to conduits dimensions)

1/8"

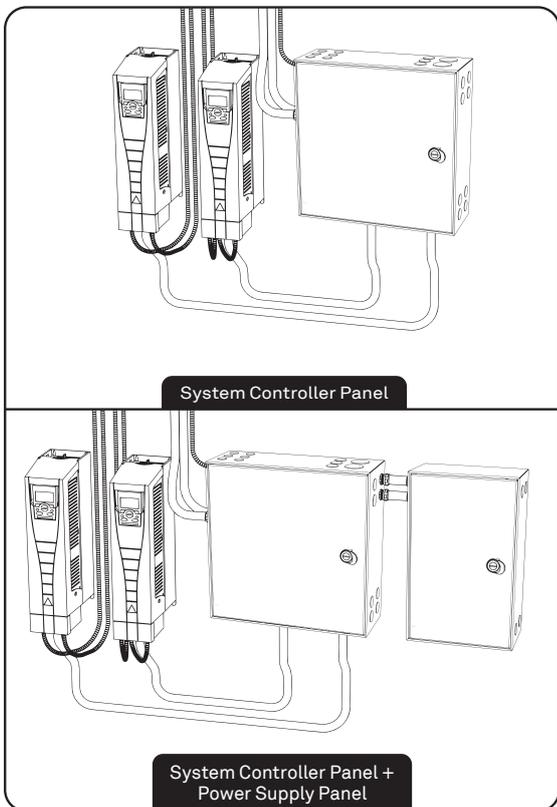
HARDWARE

CAUTION!

Processor Panel Product Numbers: V6SC-100, -110, -200, -210, -220, -230, -240, -250, -300, -310, -340, -350, -410, -440, -450
 Power Supply Panel Product Numbers: V6PS-210, -220, -230, -310, -320, -330, -410, -420, -430
 Other components: V6SC-011, -021, -041

1 Mark & Drill

Recommended Locations



FOLLOW NATIONAL AND LOCAL STANDARDS AND CODES

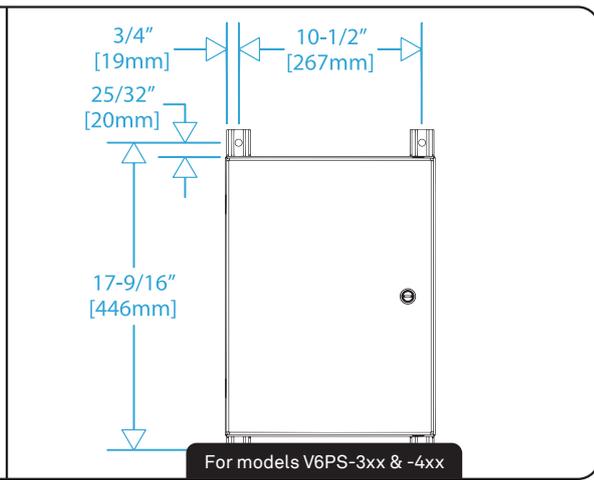
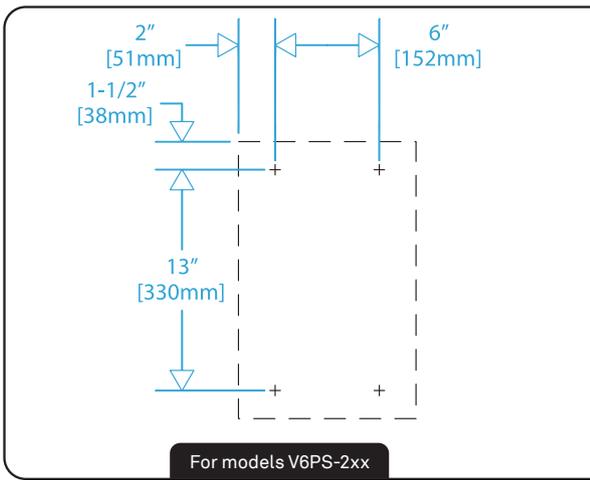
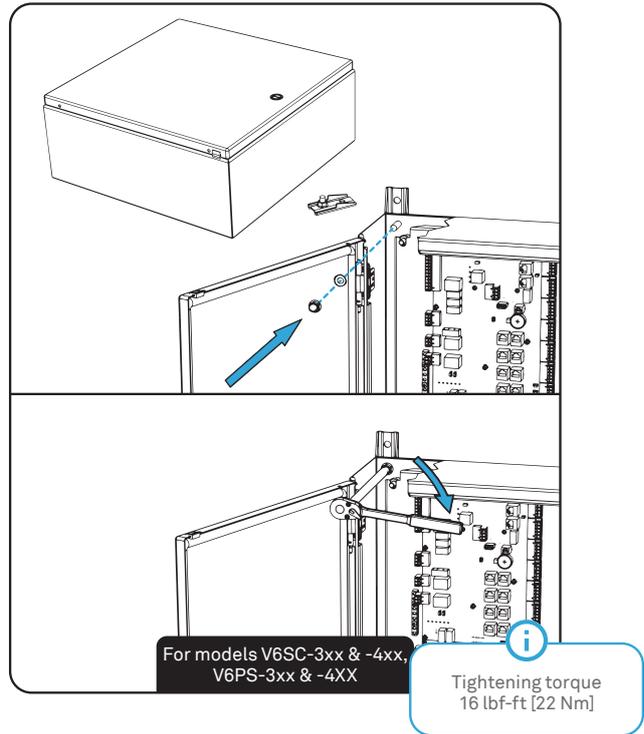
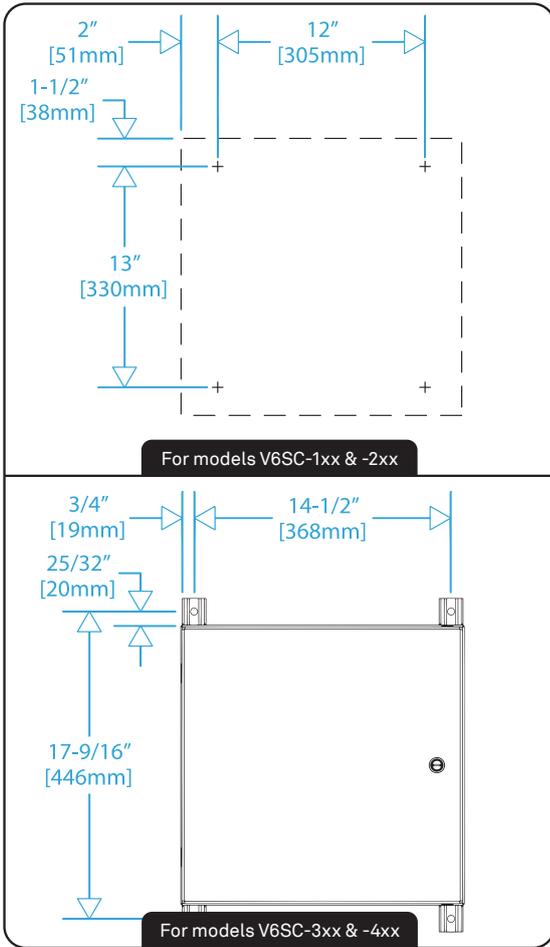
4" min. [102mm] (TYP.)

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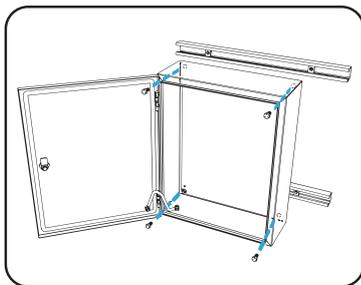
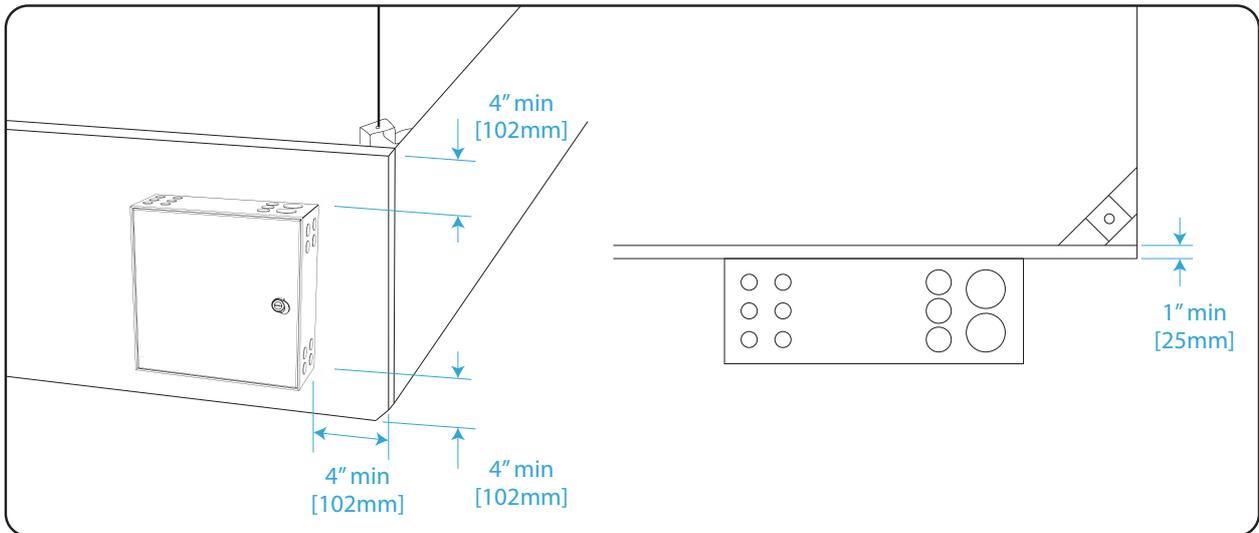
For Canada and USA 39-3/8" [1000 mm]

Mark & Drill (cont'd)



Mark & Drill (cont'd)

Hood Mount



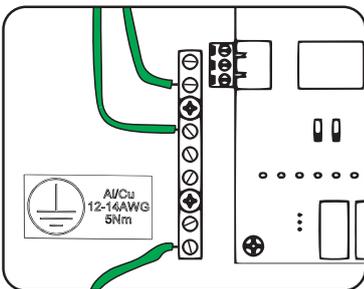
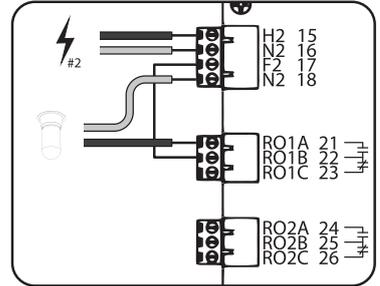
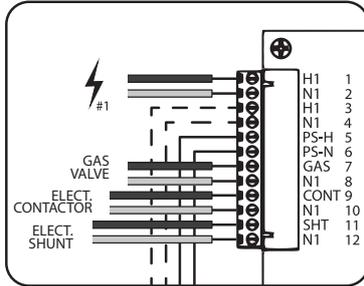
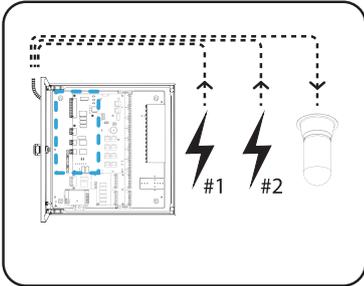
Use any of the following conduits and fittings:

- EMT Ø1/2" or 16mm RMC
- EMT Ø3/4" or 21mm RMC
- EMT Ø1-1/4" or 35mm RMC

For models V6SC-1xx & -2xx

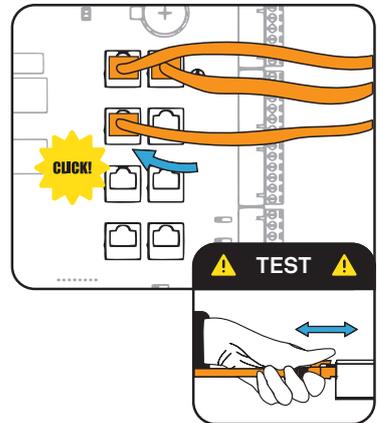
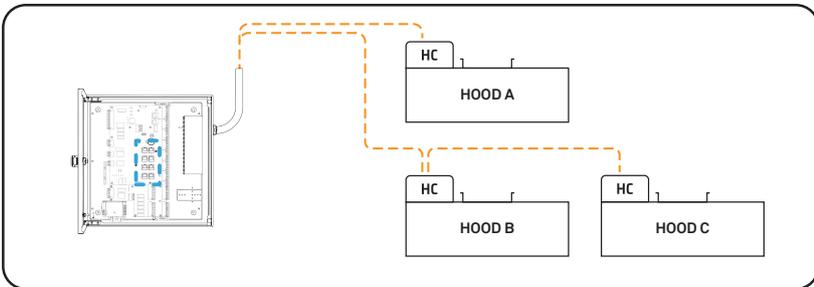
For models V6SC-3xx & -4xx

2 Connect 115/230V Circuits

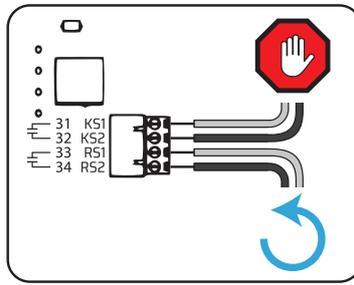
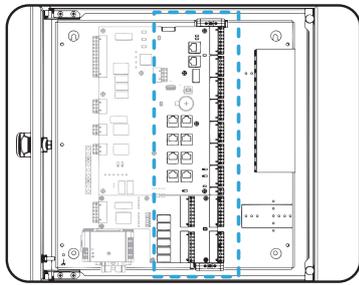
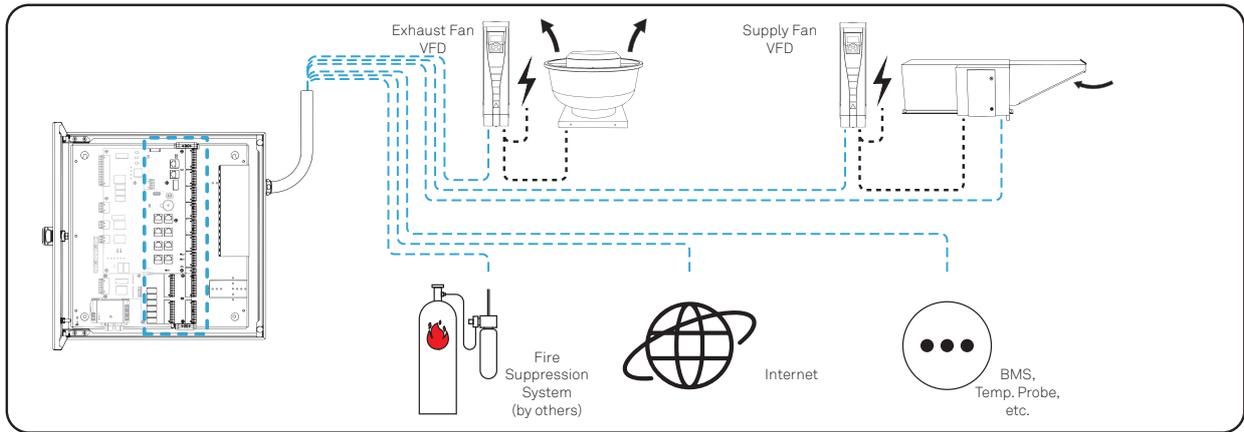


Caution! Refer to ECOAZUR® Electrical Diagrams

3 Connect Low Voltage Circuits (24V MAX.)



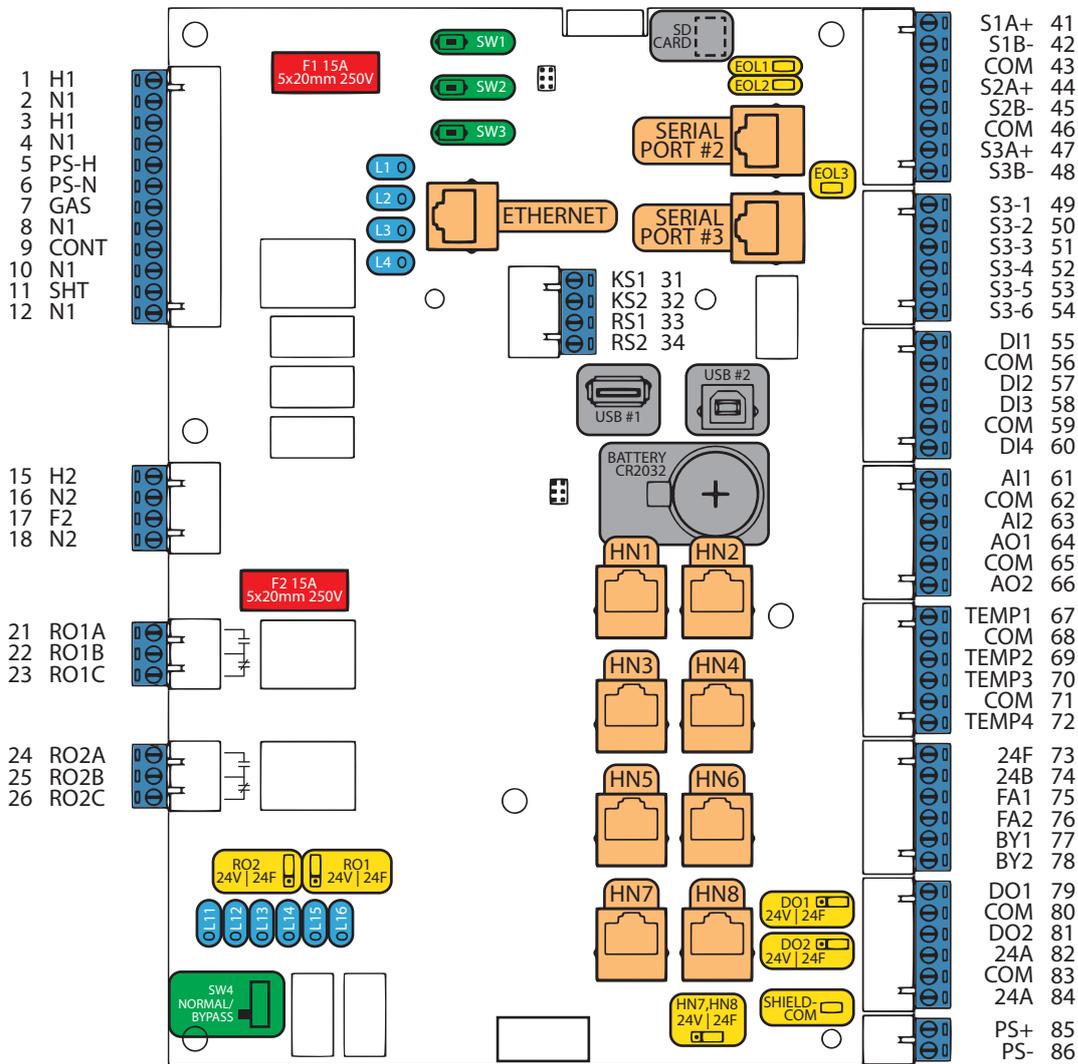
Connect Low Voltage Circuits (24V MAX.) (cont'd)



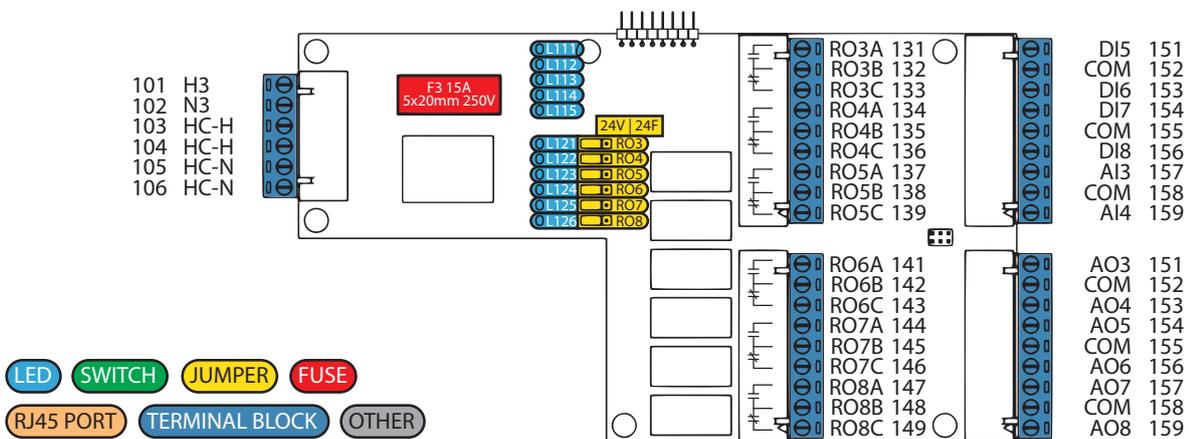
Caution! Refer to ECOAZUR® Electrical Diagrams

4 Board Configuration

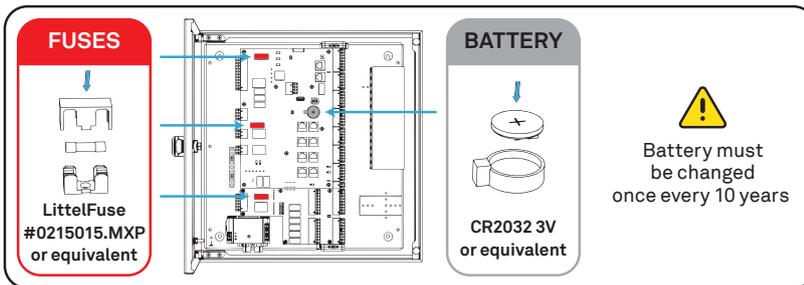
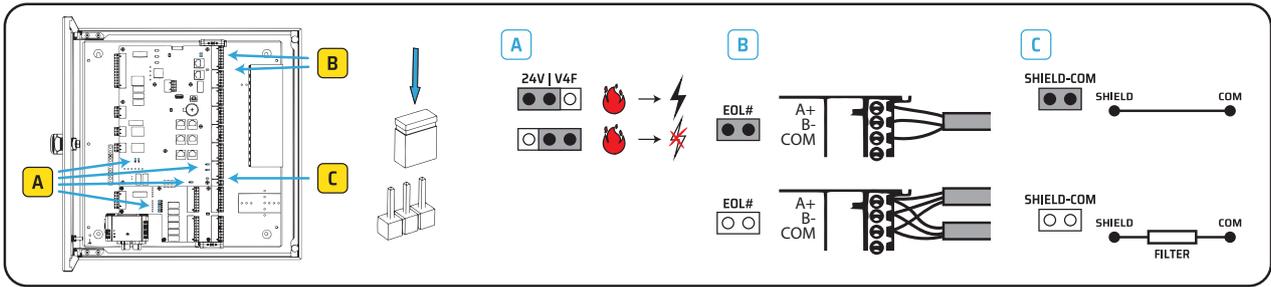
System Controller Board for models V6SC-xxx(V6SC-011)



Extension I/O Board for models V6SC-x10, -x30 & -x50 (V6SC-021)

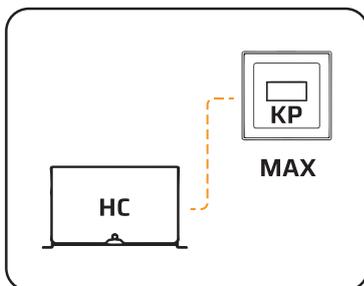
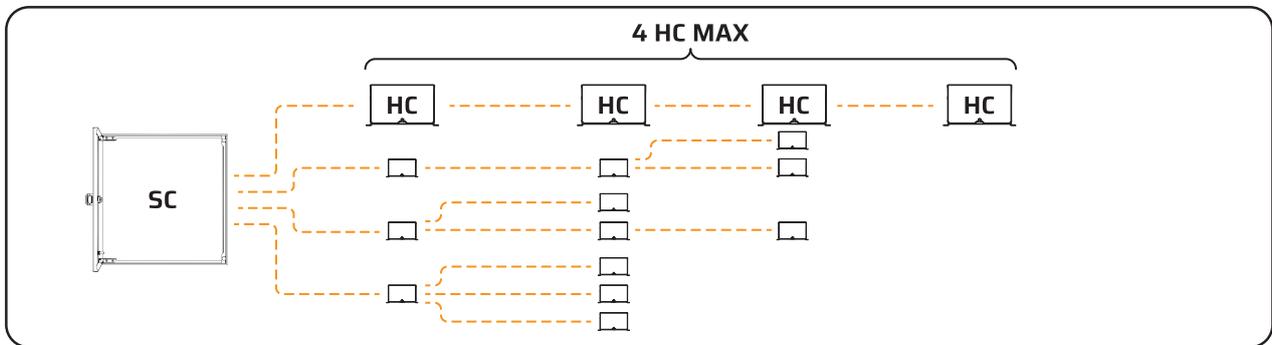


Board Configuration (cont'd)



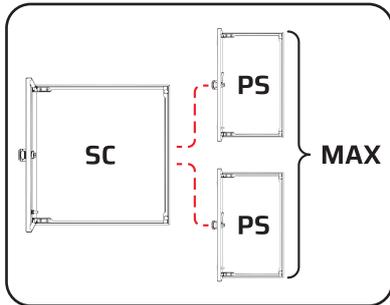
5 System Design Rules

Hood Network



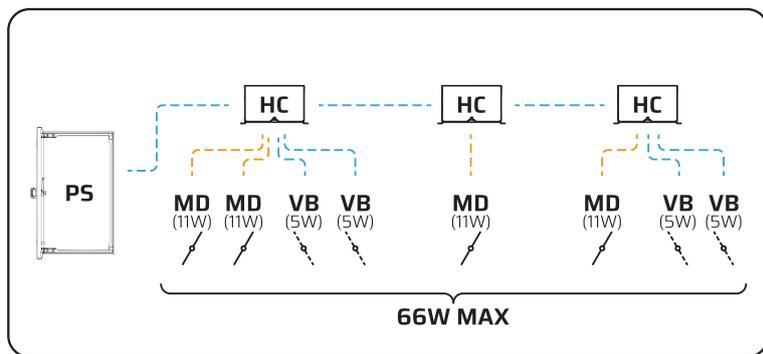
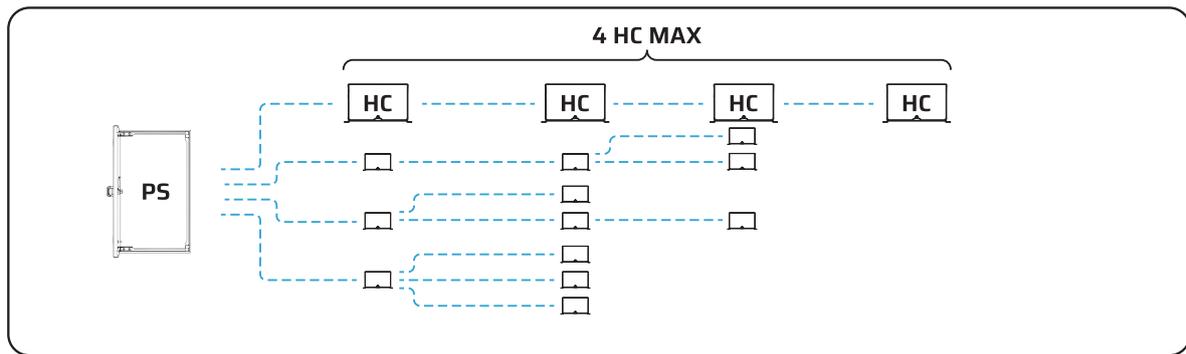
Caution! Max. 4 Hood Controllers per System Controller hood network port (HN1 through HN8)
Max. 1 Keypad per Hood Controller

System Design Rules (cont'd)
Power Supply Panels



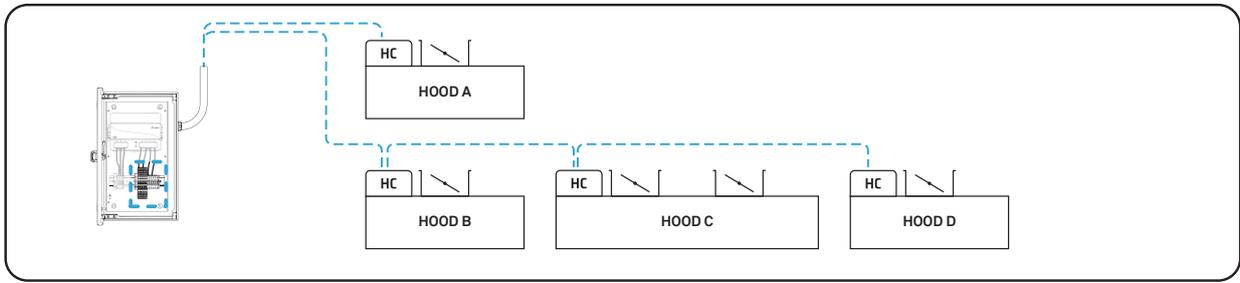
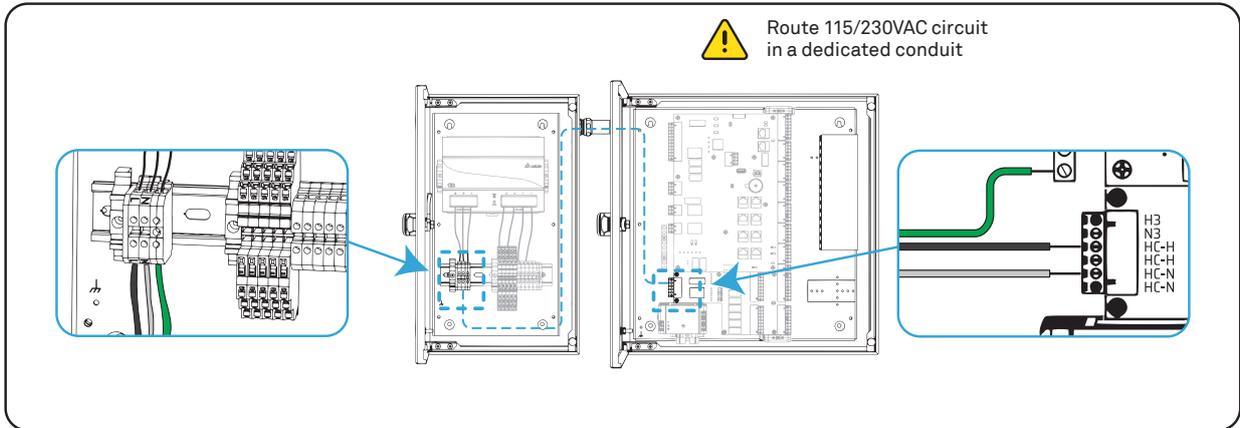
Caution! Max. 2 Power Supply panels per System Controller
 Max. 2 circuits (24 VDC, 4A) per Power Supply panel (for models V6PS-210, -310 & -410)
 Max. 5 circuits (24 VDC, 4A) per Power Supply panel (for models V6PS-220, -320 & -420)

Low Voltage Circuits (24 VDC) connected to Hood Controllers with Modulating Dampers and VAV Boxes



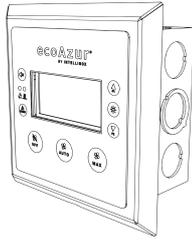
Caution! Max. 4 Hood Controllers per Power Supply circuit (24 VDC, 4A)
 Max. 11W per Modulating Damper
 Max. 5W per VAV Box
 Max. 66W total per Power Supply circuit (24 VDC, 4A)
 Max. 250mA for external devices connected to "24A" auxiliary terminals per Power Supply circuit (24 VDC, 4A) & -420

6 Connect Power Supply Panel V6PS-xxx (if applicable)



Caution! Refer to ECOAZUR® Electrical Diagrams

5. Recessed Keypad, V6KP-100 & -200



REQUIRED TOOLS

- #2 
- 1/4" 

HARDWARE

- 1-1/4" [32mm] x2
- 3/4" [19mm] x1
- #8 [M4] Screws x2

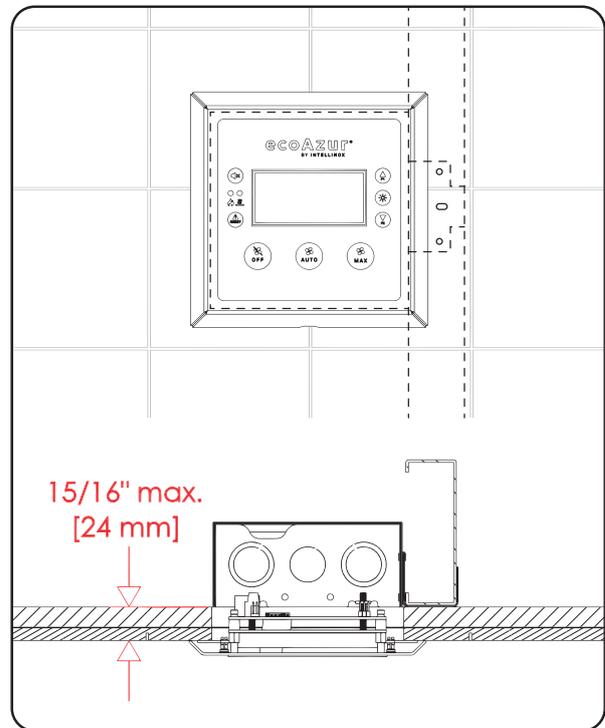
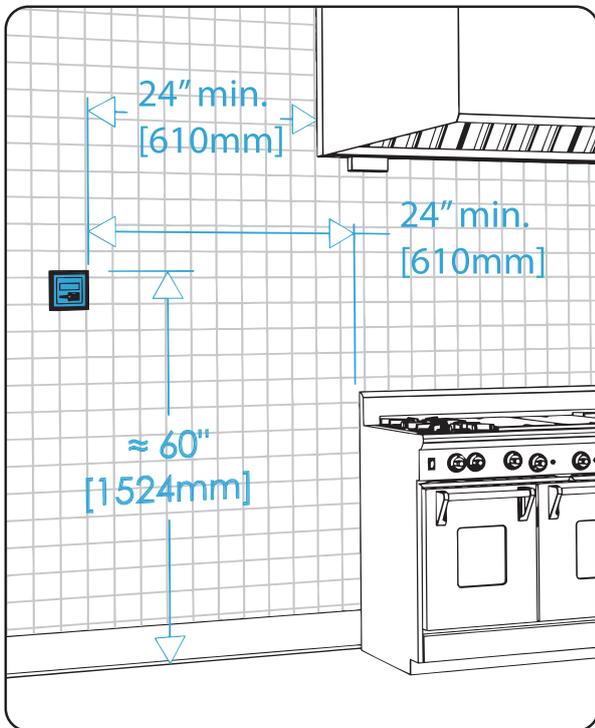
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CAUTION!

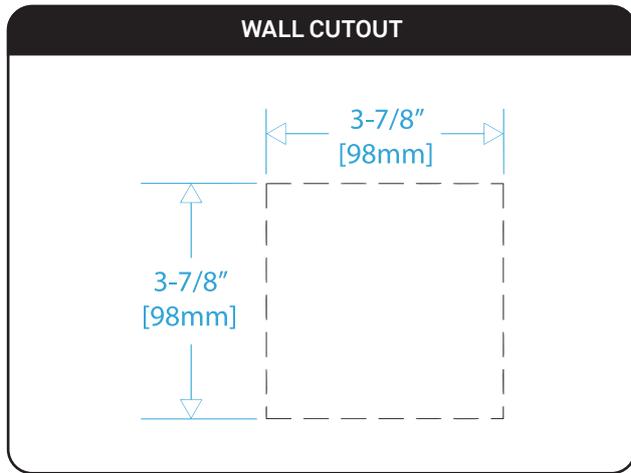


1 Mark & Drill

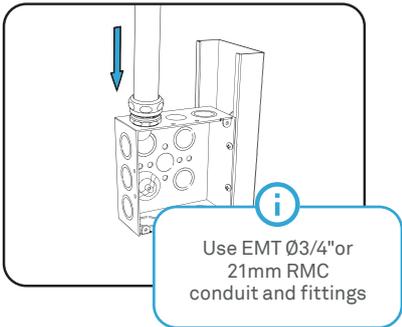
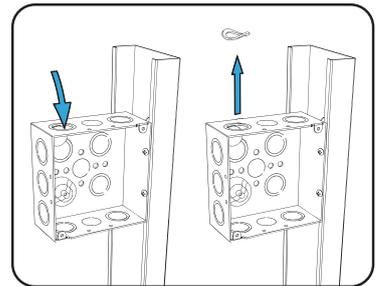
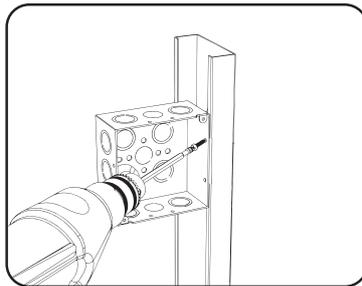
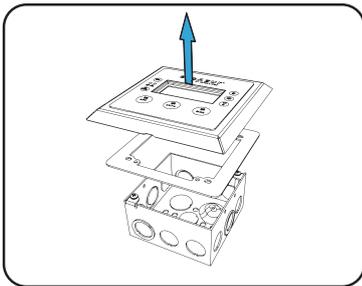
Recommended Location



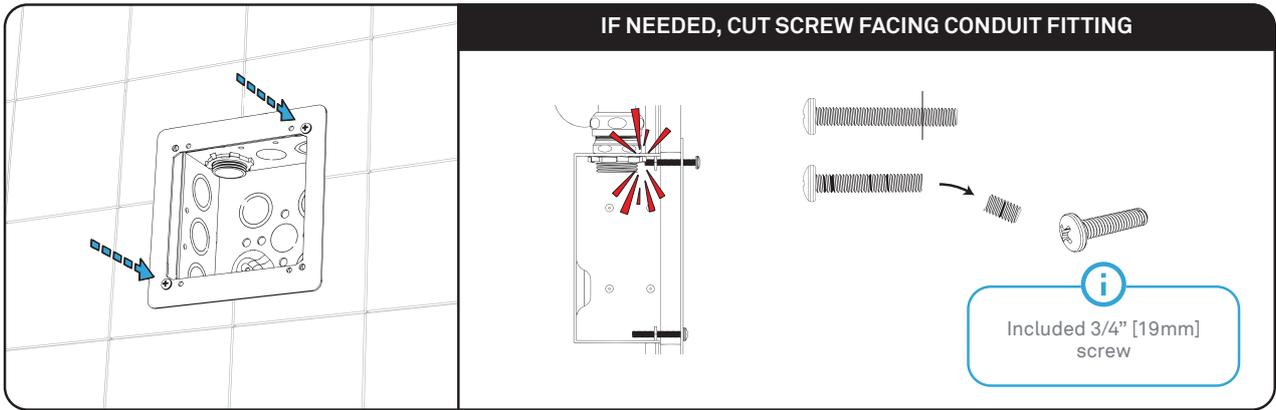
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2 Install

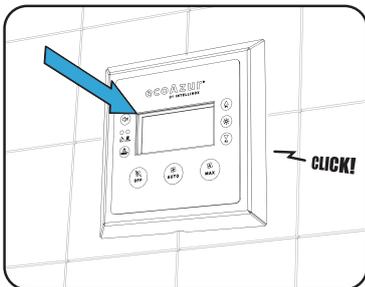
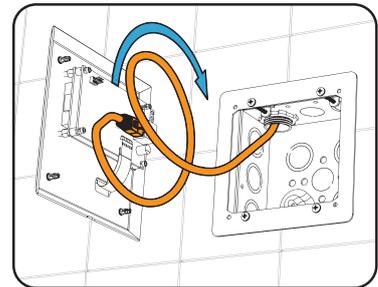
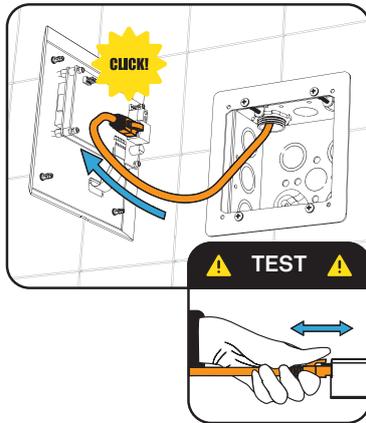
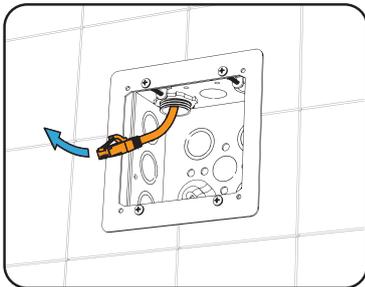


Install (cont'd)

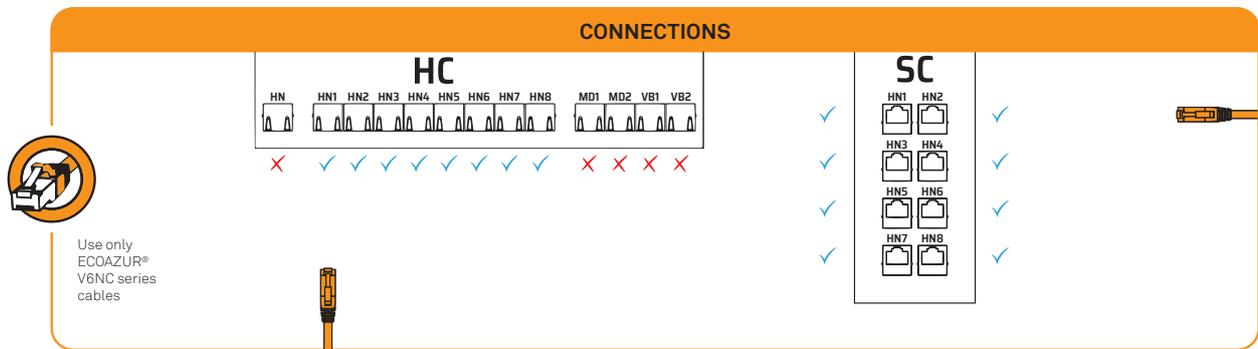
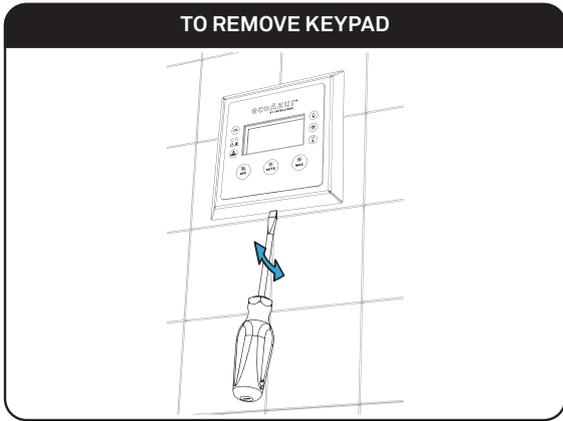


Caution! This step must be done after finished wall completion

3 Connect



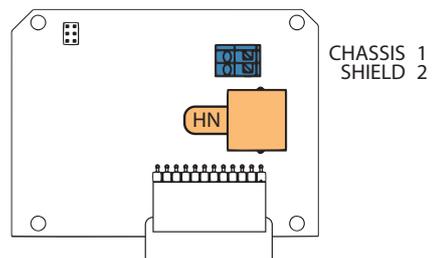
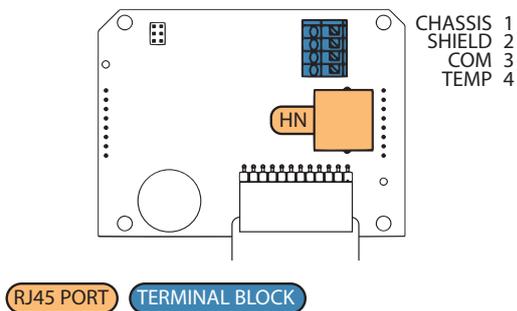
Connect (cont'd)



PCBs Layout

Keypad board for model V6KP-100 (V6KP-011)

Keypad board for model V6KP-200 (V6KP-021)



6. Recessed Keypad (Hood Mount), V6KP-100 & -200



REQUIRED TOOLS

-  #2 
-  1/4" 

HARDWARE

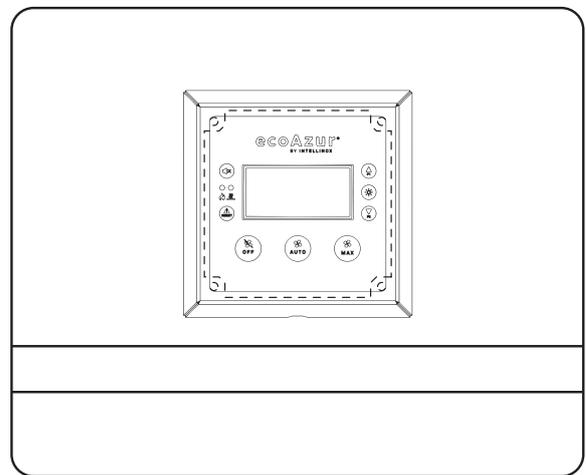
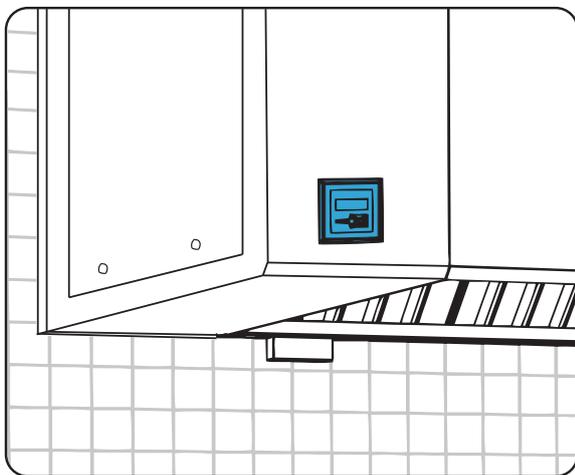
 x2 1-1/4" [32mm]	 x1 3/4" [19mm]	#8 [M4] Screws  x2 (not included)
---	---	---

CAUTION!

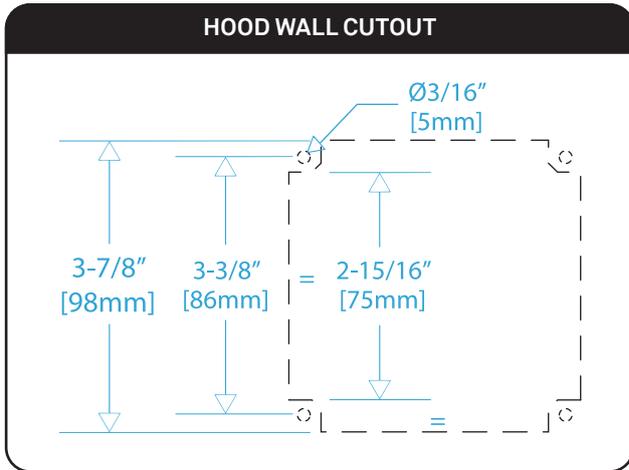


1 Mark & Drill

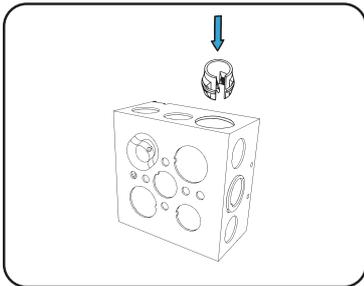
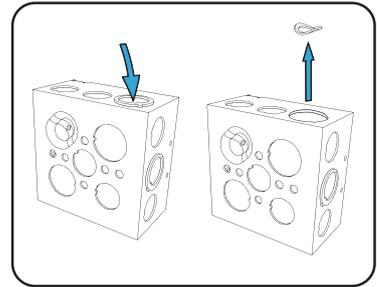
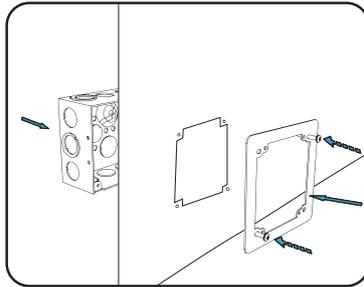
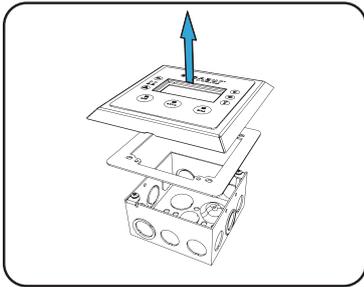
Recommended Location



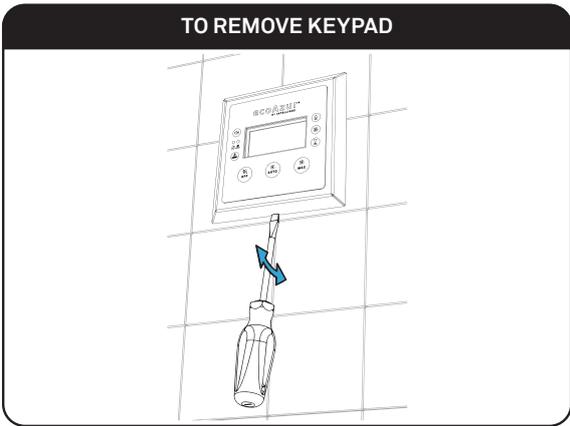
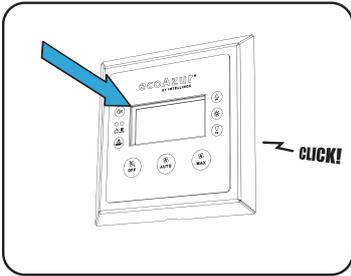
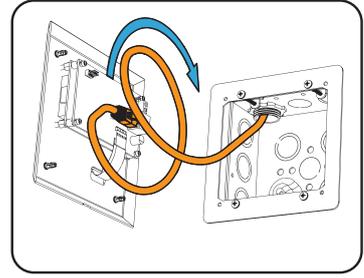
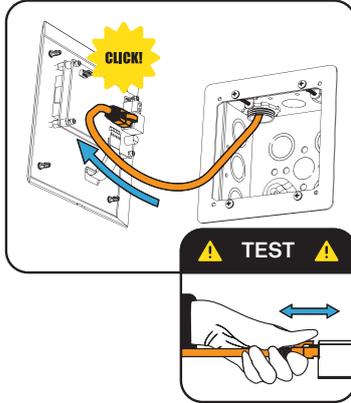
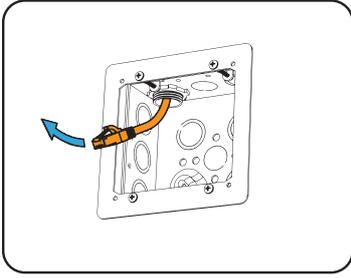
Mark & Drill (cont'd)



2 Install



3 Connect



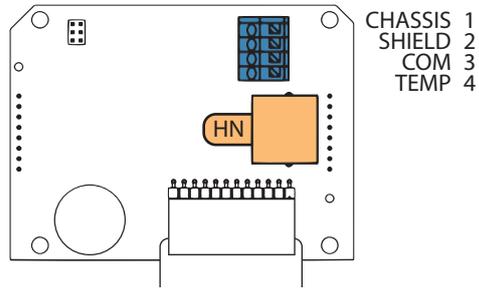
CONNECTIONS

HC										SC				
HN	HN1	HN2	HN3	HN4	HN5	HN6	HN7	HN8	MD1	MD2	V81	V82		
✗	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓

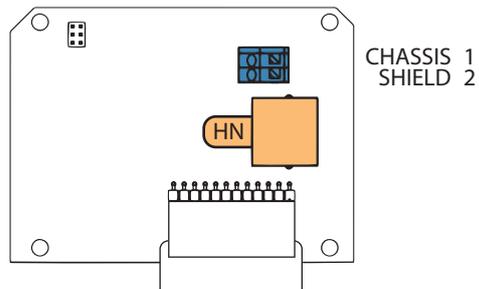
Use only ECOAZUR® V6NC series cables

PCBs Layout

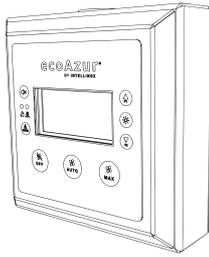
Keypad board for model V6KP-100 (V6KP-011)



Keypad Lite board for model V6KP-200 (V6KP-021)



7. Wall Mount Keypad, V6KP-110 & -210



REQUIRED TOOLS

#2
1/4"

HARDWARE

#8 [M4] Screws

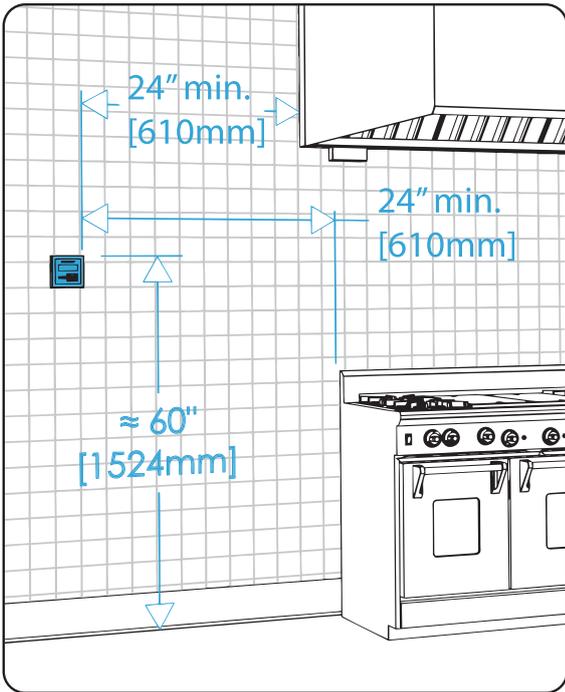
x4
x4

(not included)

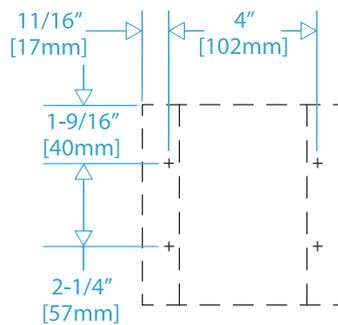
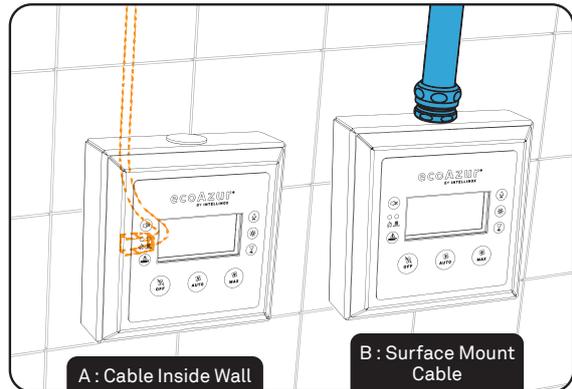
CAUTION!

1 Mark & Drill

Recommended Location

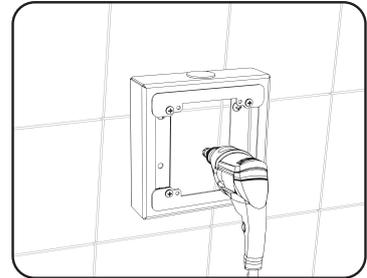
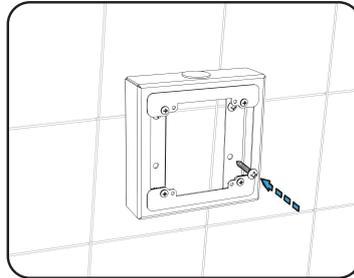
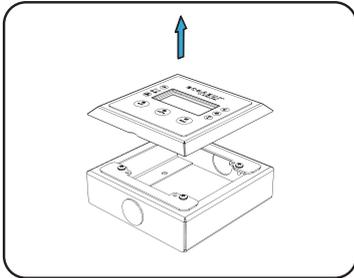


Installation Options



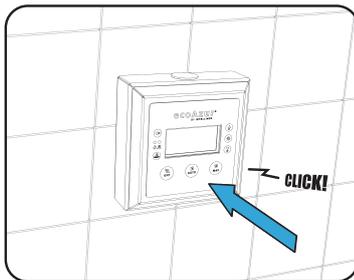
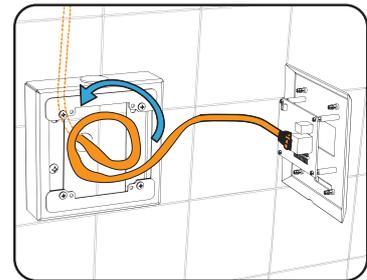
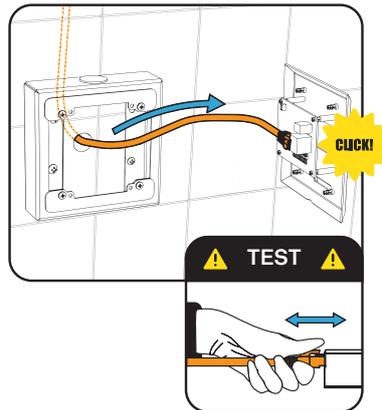
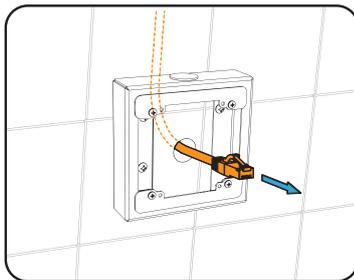
i Anchors plugs are recommended to fix the display to the wall (not included)

2 Install



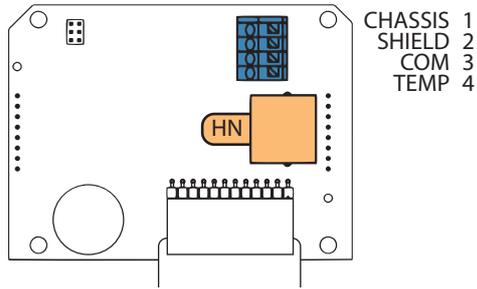
For Option A

3 Connect (option A)

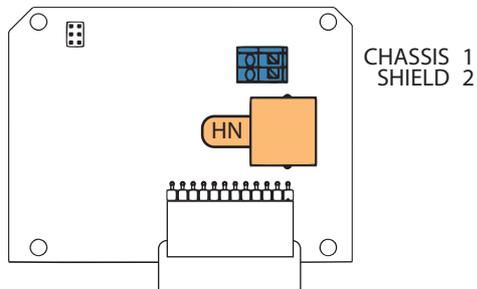


PCBs Layout

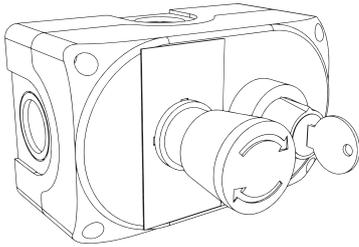
Keypad board for model V6KP-100 (V6KP-011)



Keypad Lite board for model V6KP-200 (V6KP-021)



8. OFF Override Station, V6KP-410



REQUIRED TOOLS

#2 \oplus

HARDWARE

#8 [M4] Screws

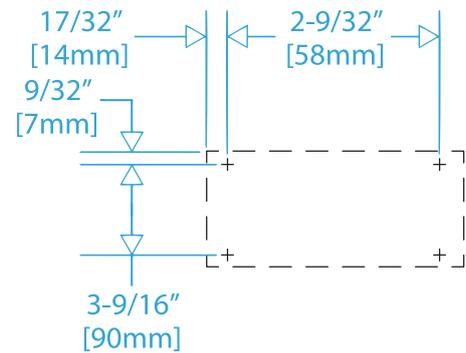
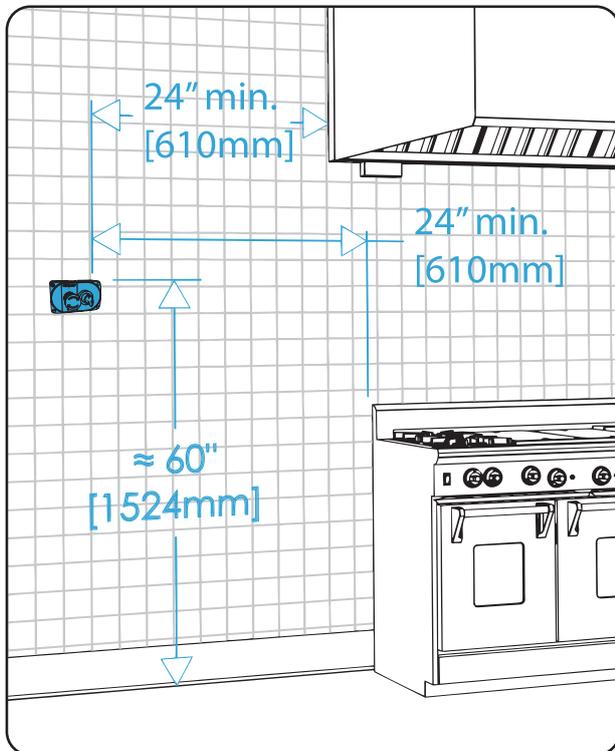
x2

(not included)

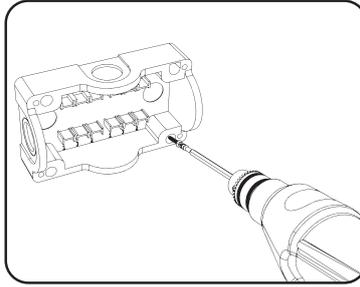
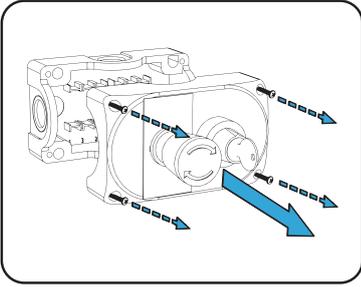
CAUTION!

1 Mark & Drill

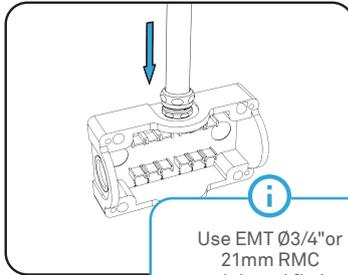
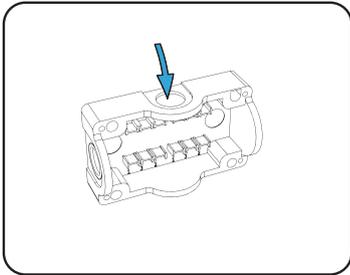
Recommended Location



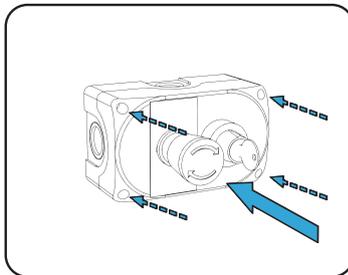
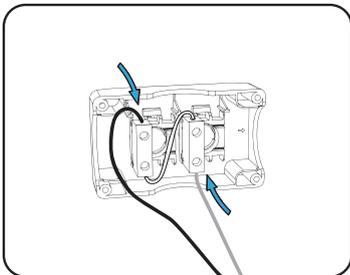
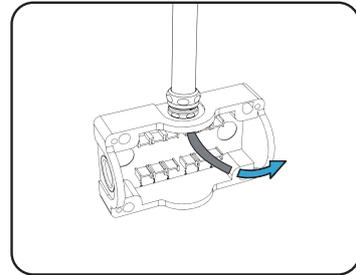
2 Install



3 Connect



Use EMT Ø3/4" or 21mm RMC conduit and fittings

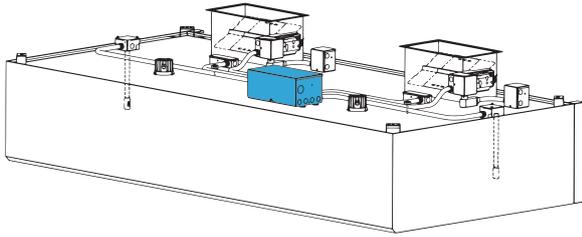


Caution! Refer to ECOAZUR® Electrical schematics

Caution! Minimum Cable Requirements

- Plenum/FT6 - Shielded
- 18 AWG (0.75 mm²) - 75° C (167° F) rated temp.

9. Hood Controller, V6HC-100 & -2xx



REQUIRED TOOLS

#2
11/32" [9mm]

HARDWARE

8-32 [M4]

x4 x4
x4 x4

(not included)

CAUTION!

TYPES OF ENCLOSURE

V6HC-100

V6HC-200

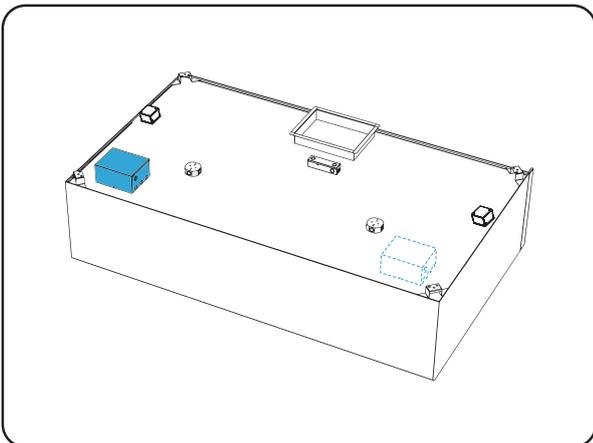
V6HC-210

V6HC-220

Hood Controller Enclosures: V6HC-100, -200, -210, -220
Other Components: V6HC-011, V6HC-021, V6MD-021

1 Mark

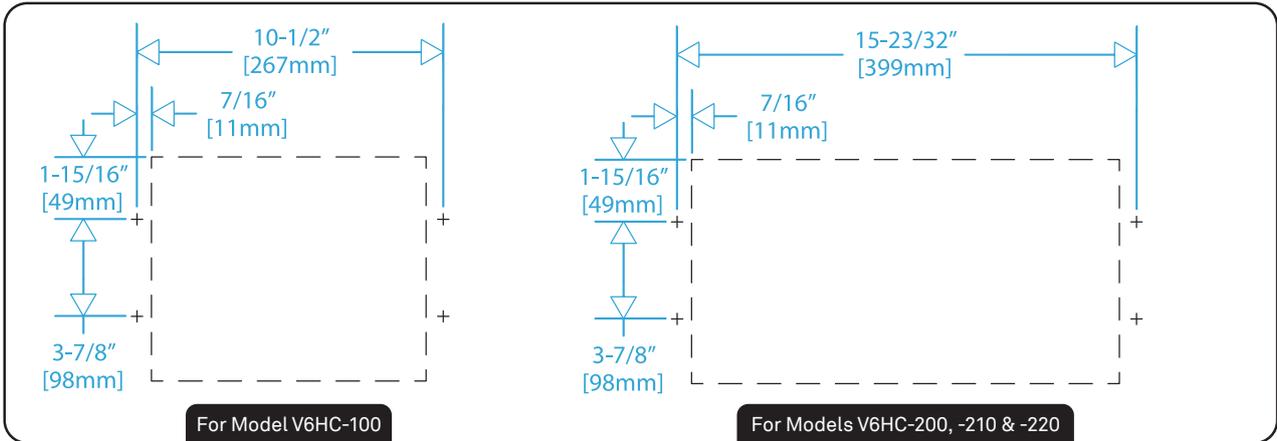
Recommended Locations



REQUIRES 8" [203mm] CLEARANCE OVER HOOD

8" [203mm]

Mark (cont'd)



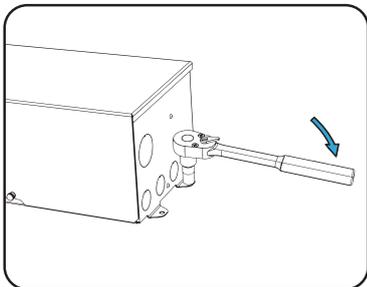
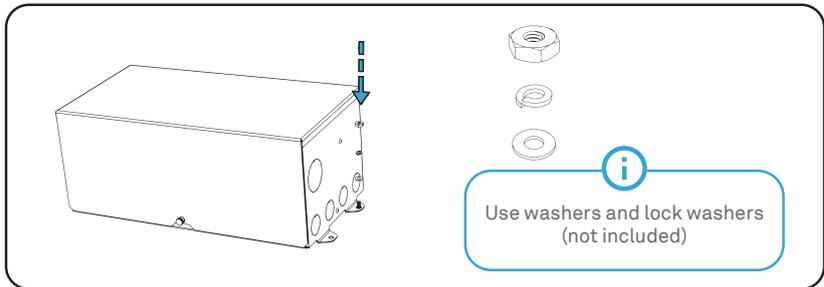
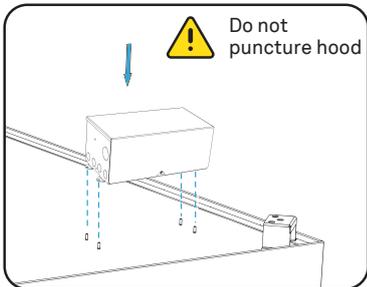
For Model V6HC-100

For Models V6HC-200, -210 & -220

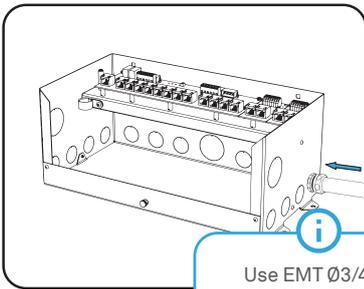
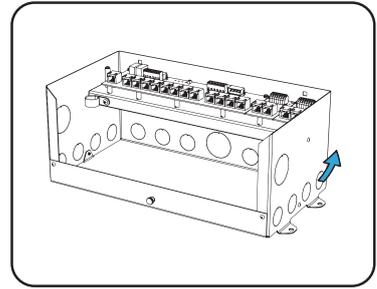
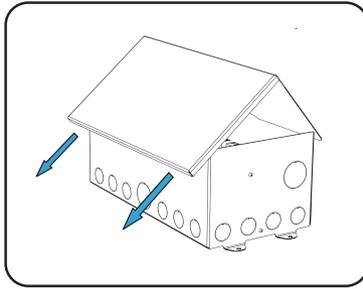
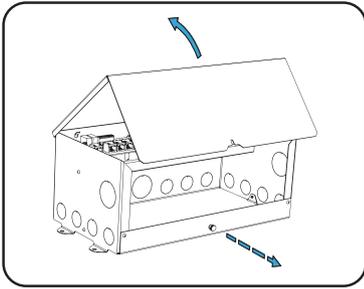


i
Welded studs 8-32 [M4] are recommended to secure the enclosure on top of the hood (not included)

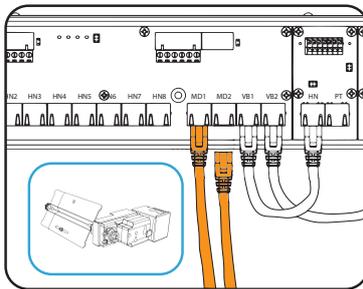
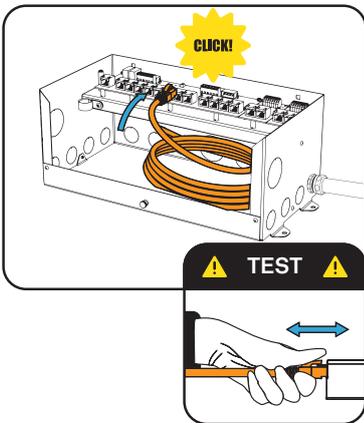
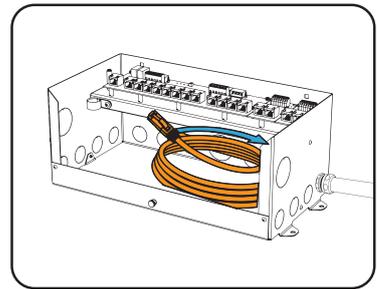
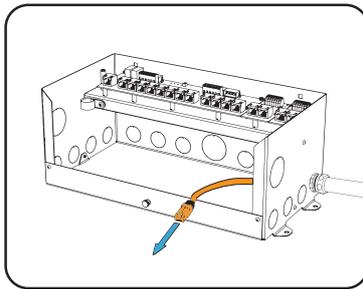
2 Install



3 Connect V6NC Cables

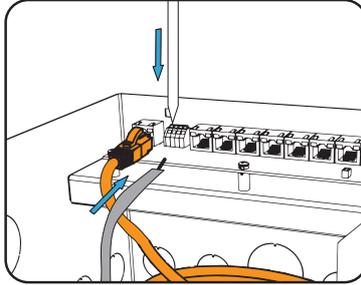
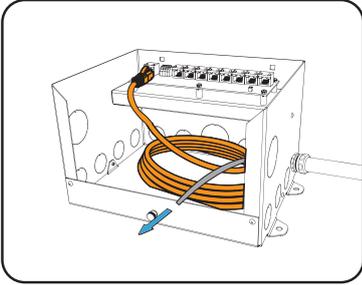


i
Use EMT Ø3/4" or
21mm RMC
conduit and fittings

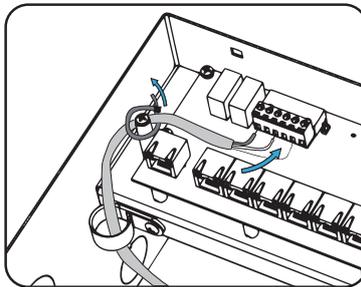
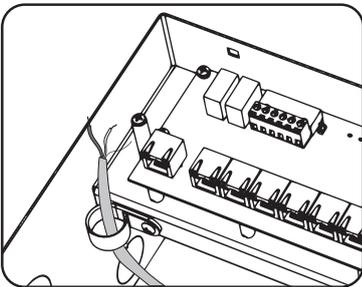
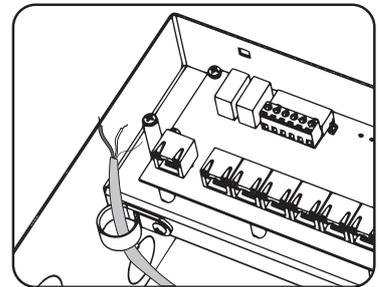
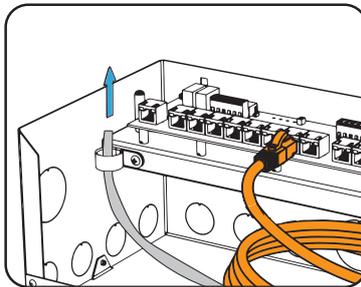
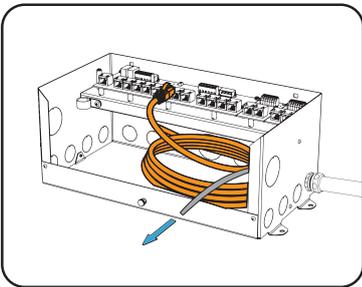


4 Connect Control Cables

For model V6HC-100

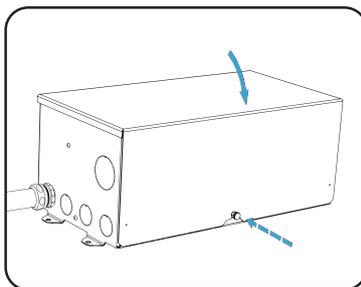
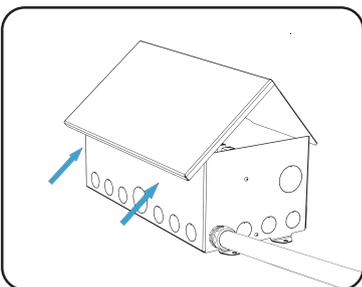


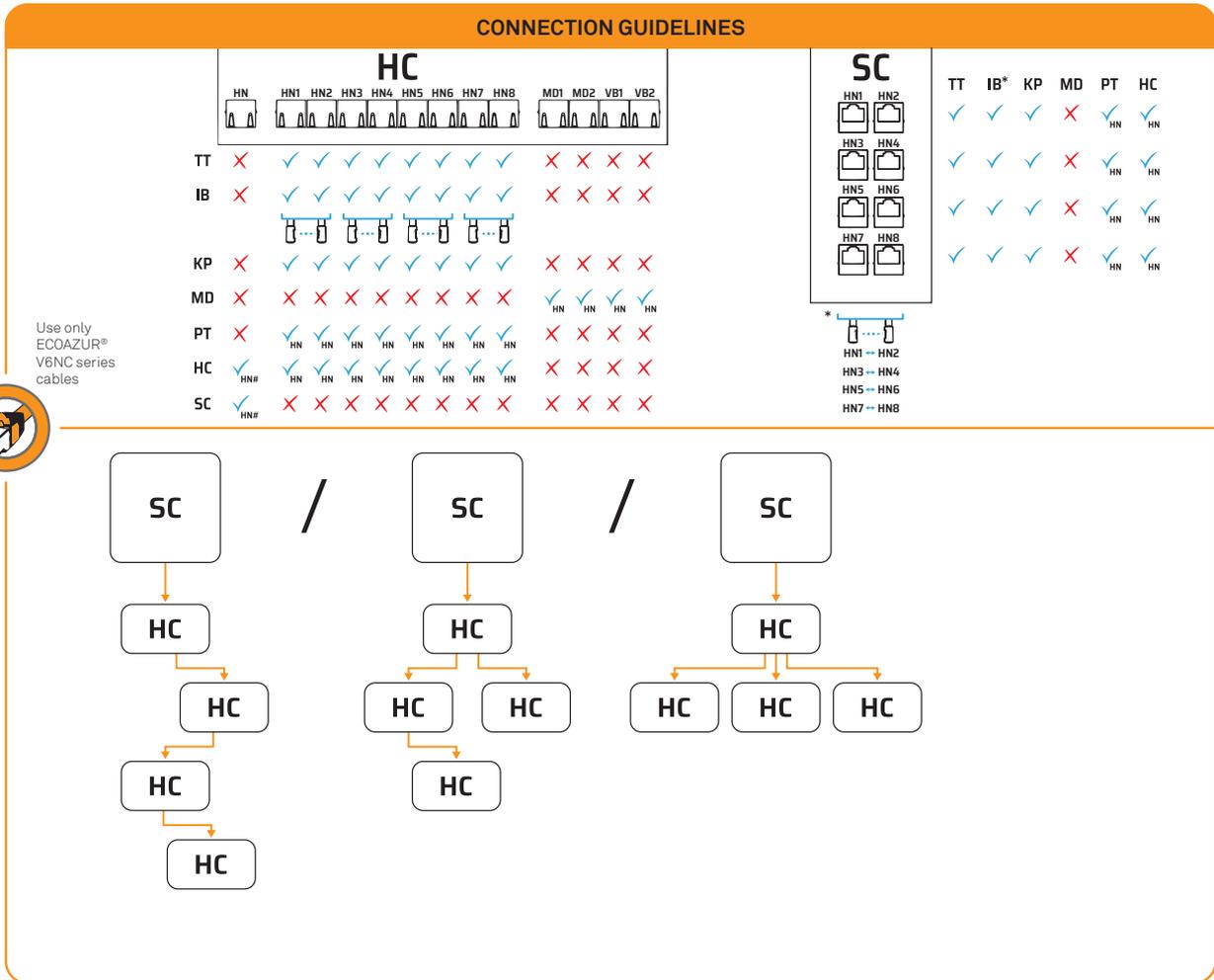
For models V6HC-200, -210 & -220



Caution! Refer to ECOAZUR® Electrical Diagrams

Caution! Minimum Cable Requirements
- Plenum/FT6 - Shielded
-18 AWG (0.75 mm²) - 75° C (167° F) rated temp.

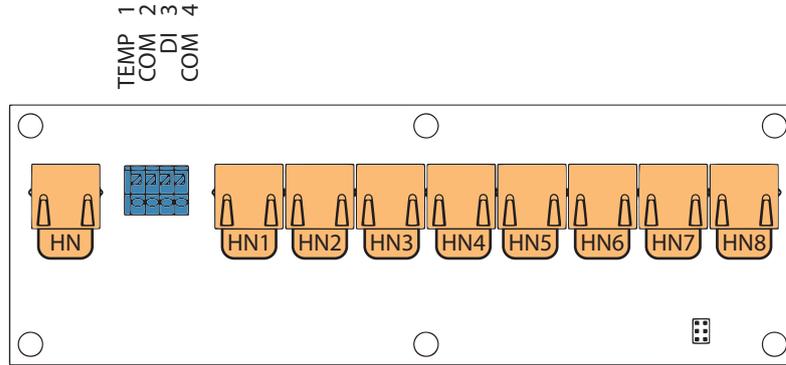




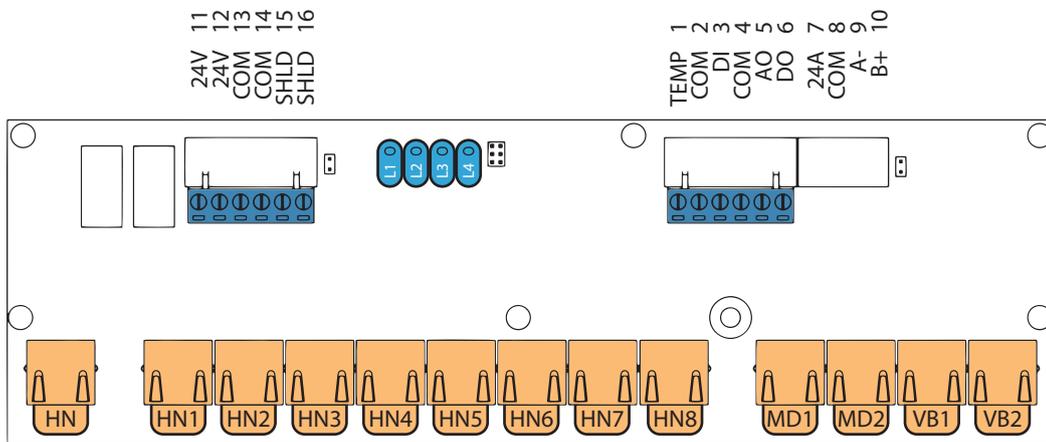
Caution! System Limits:
 - Max 4 HC by SC input (HN)
 - See V6SC-xxx & V6PS-xxx section for MAX number of devices

PCBs Layout

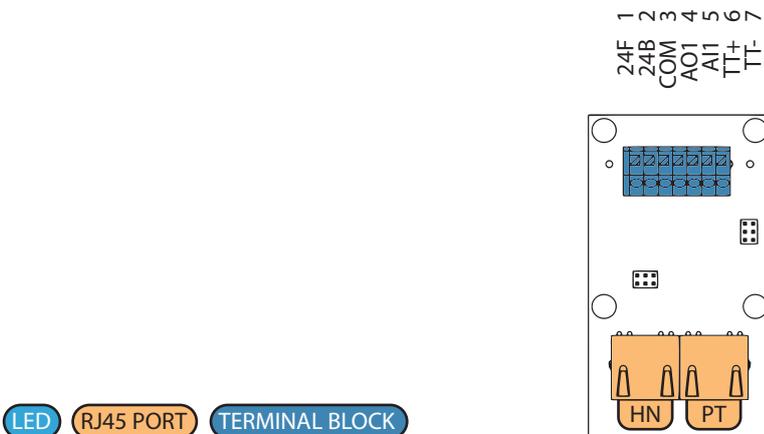
HNPTHood Controller board for model V6HC-100 (V6HC-011)



Hood Controller board for models V6HC-200, -210 & -220 (V6HC-021)

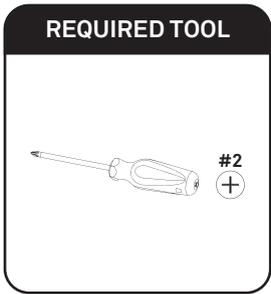
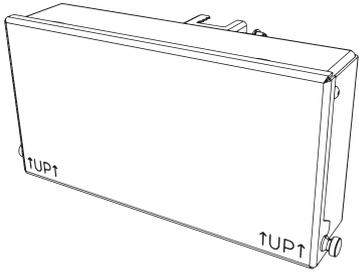


Modulating Damper board for models V6HC-210 & -220 (V6MD-021)



LED RJ45 PORT TERMINAL BLOCK

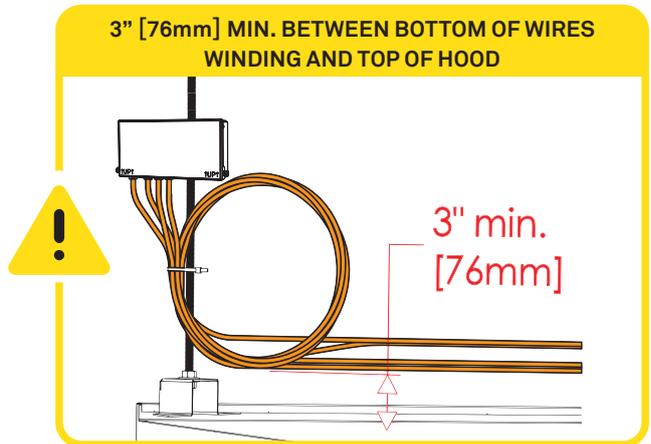
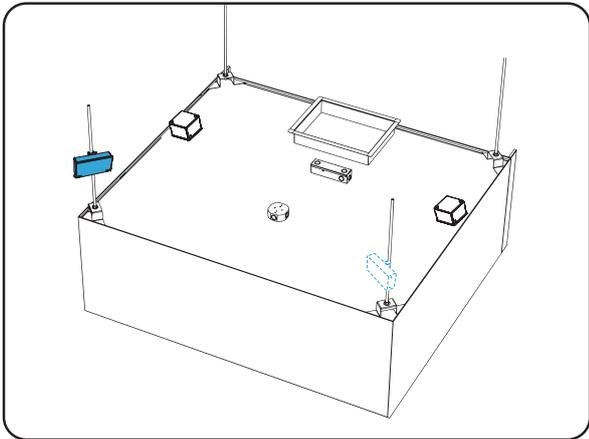
10. Hood Controller (Rod Mount), V6HC-110



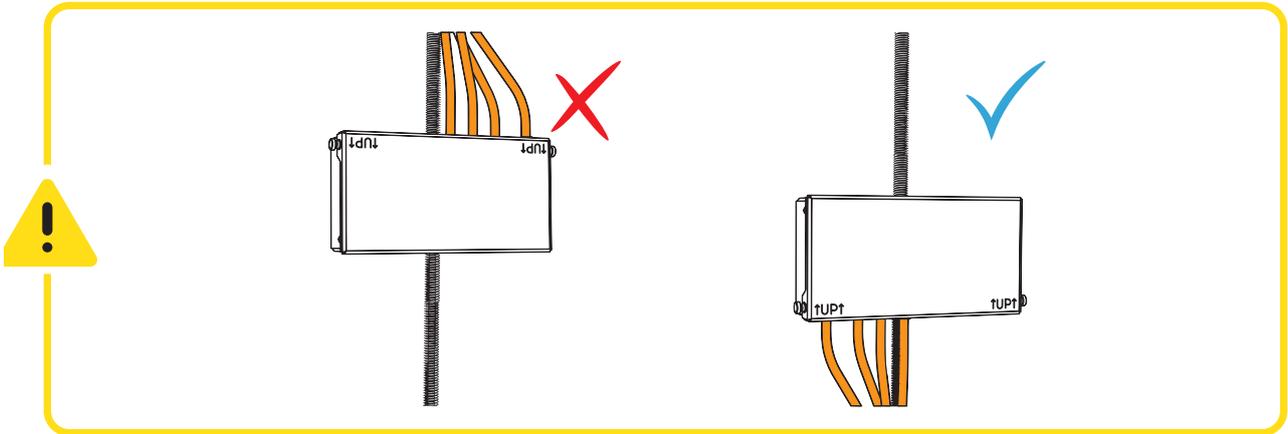
Other Component: V6HC-011

1 Mark

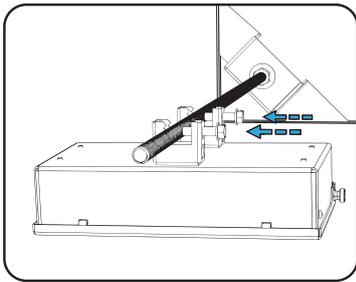
Recommended Locations



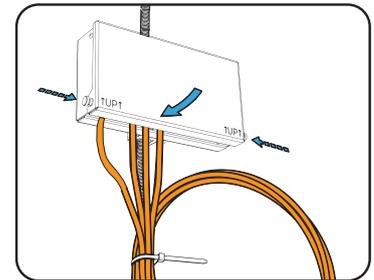
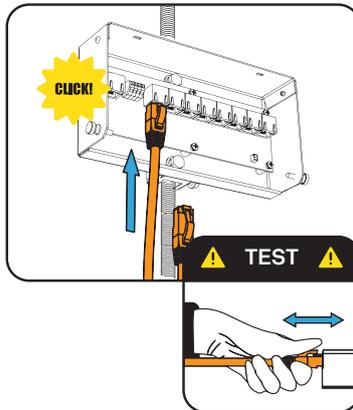
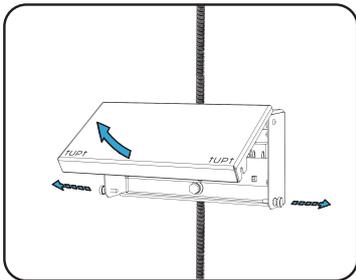
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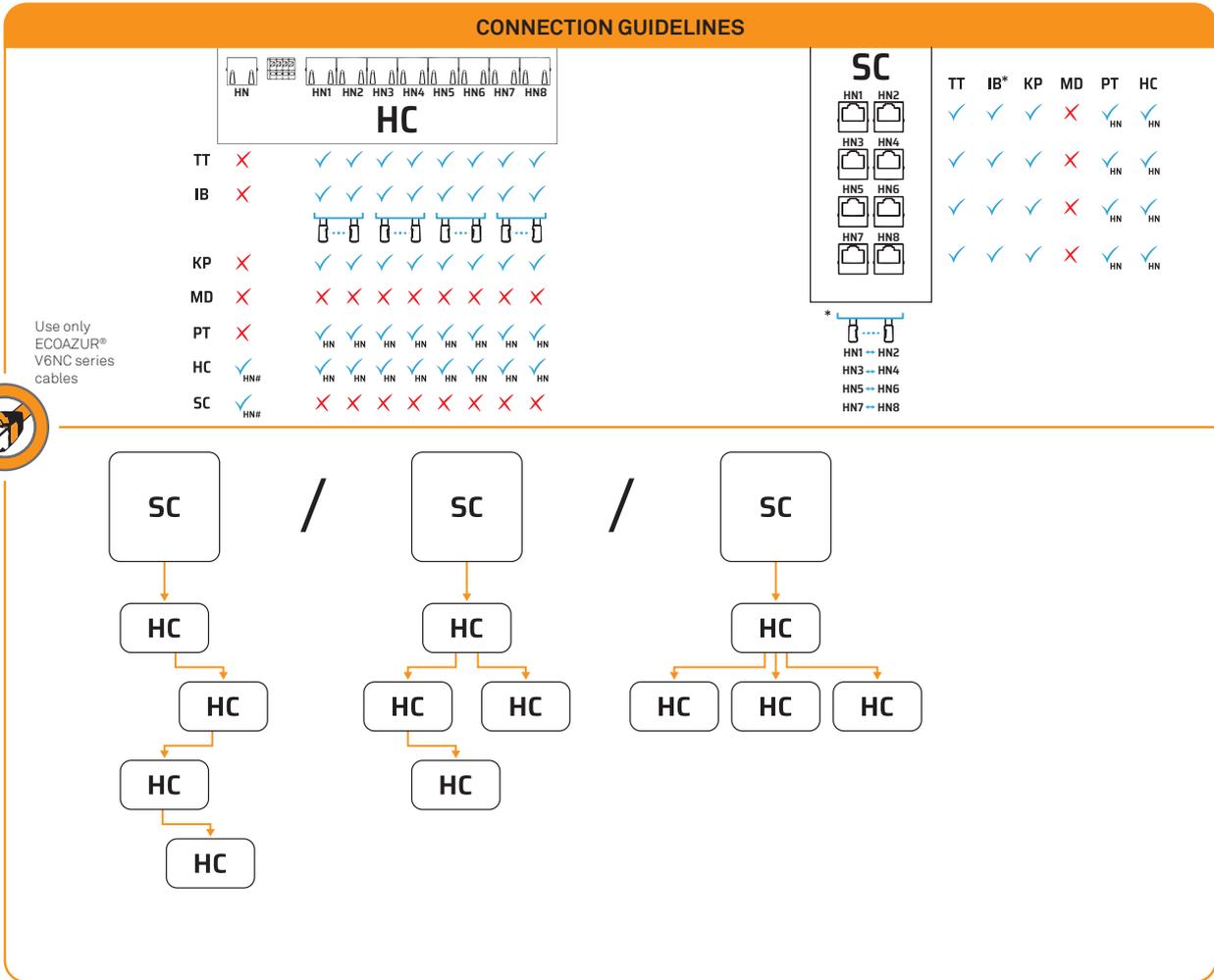


2 Install



3 Connect

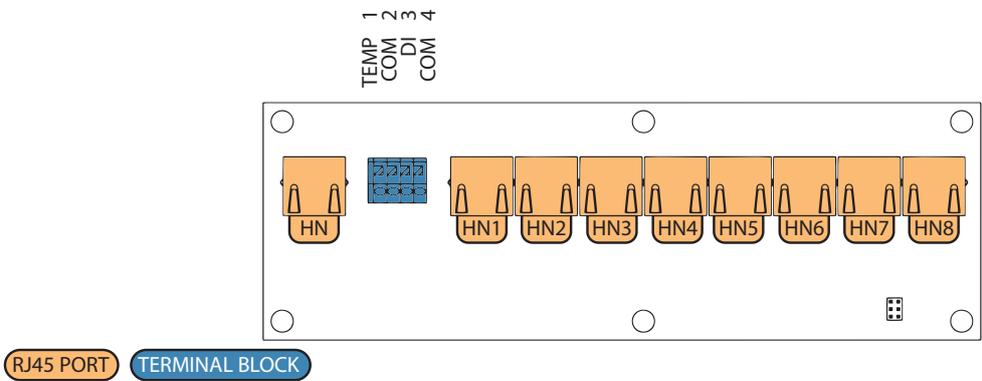




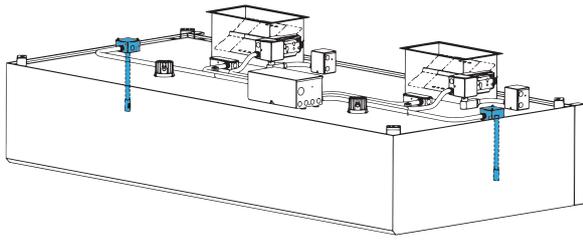
Caution! System Limits:
 -Max 4 HC by SC input (HN)
 - See V6SC-xxx & V6PS-xxx section for MAX number of devices

PCB Layout

Hood Controller board (V6HC-011)



11. IRIS BLEU® Optic Sensor, V6IB-300 & -310



REQUIRED TOOLS

- 1-3/8" [35mm] (Screw)
- #2 (Screwdriver)
- 1-7/8" [48mm] (Wrench)
- 3/32" (Hex Key)

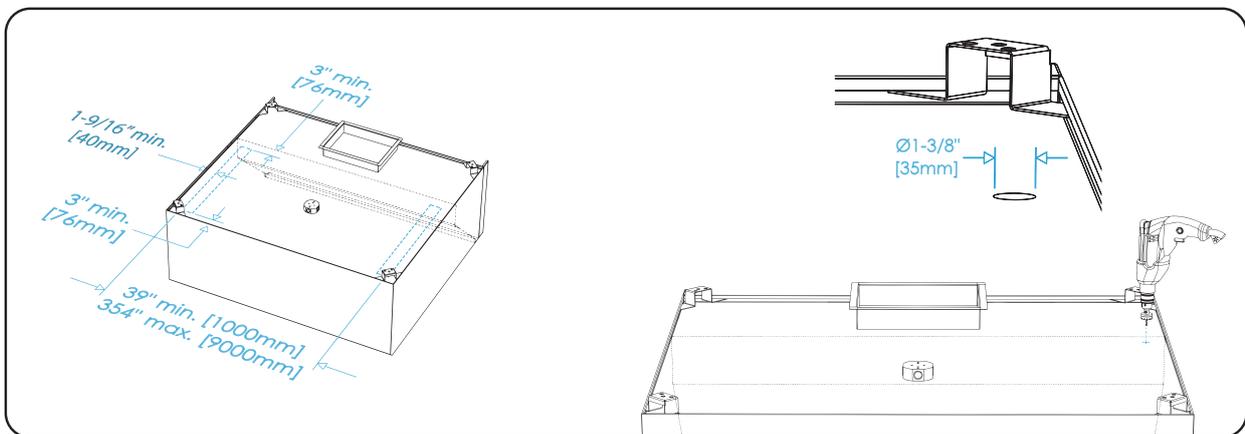
CAUTION!

RELATIVE COMPONENTS

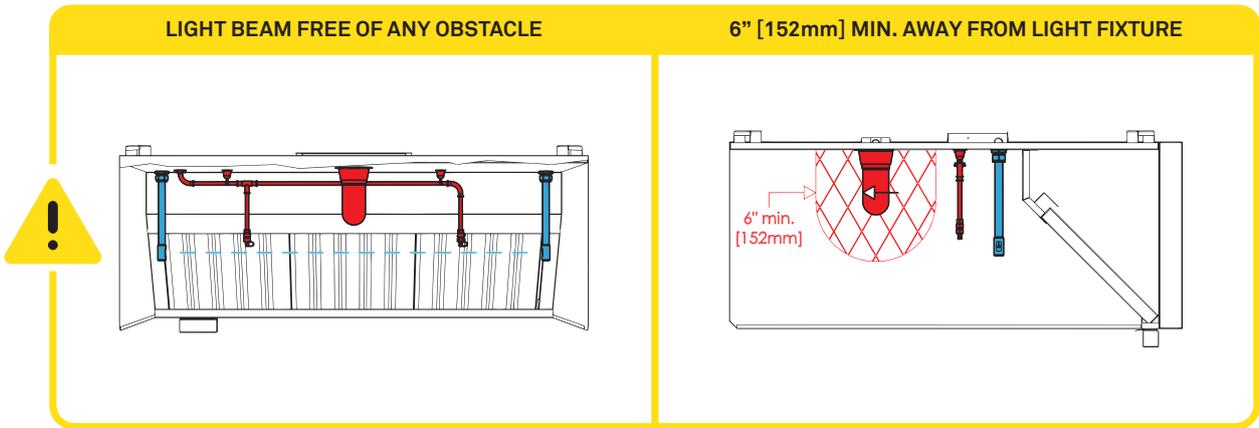
- 2x V6IB-520 (Sensors)
- 2x V6IB-410 / V6IB-420 / V6IB-430 (Pipes)
- 2x V6IB-440 (Washers)
- 2x V6IB-300 / V6IB-310 (Optic Sensors)

Optic Sensor Components: V6IB-300, -310, -410, -420, -430, -440, -450, -460, -510, -520, -530, -900

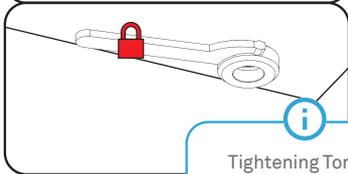
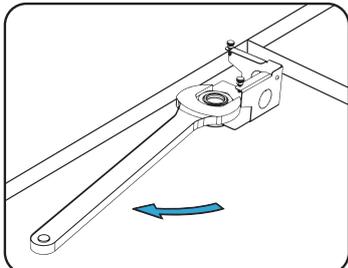
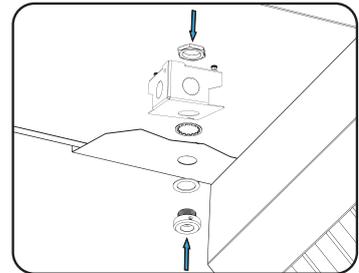
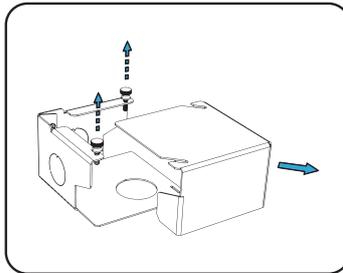
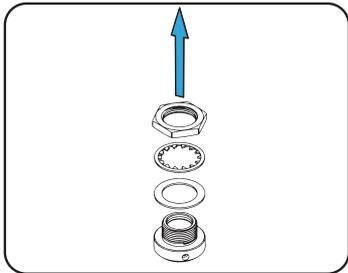
1 Mark & Drill



Mark & Drill (cont'd)

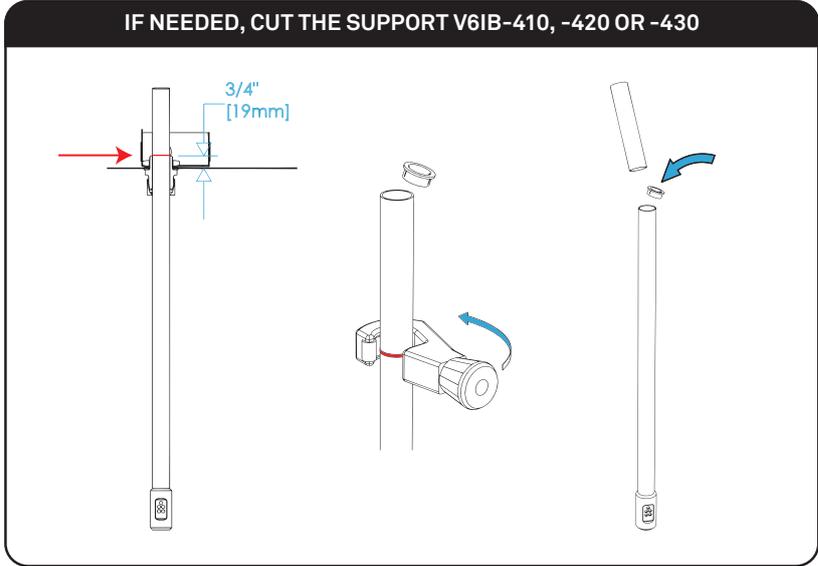
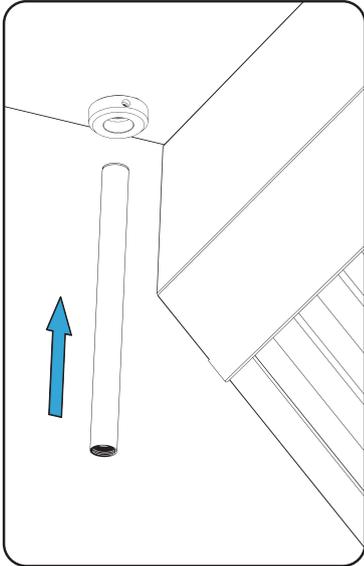


2 Install Compression Seal V6IB-440 & Enclosure V6IB-520



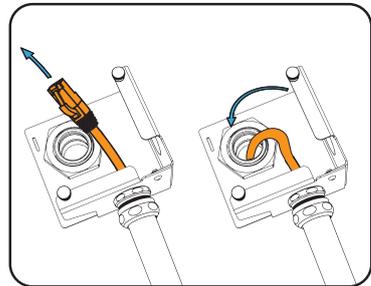
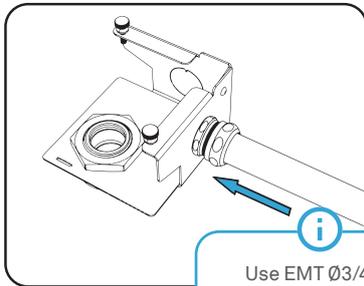
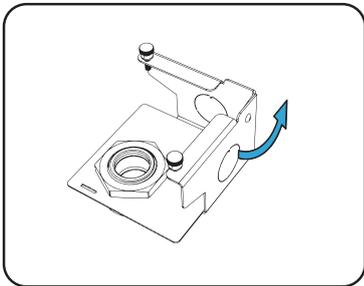
i
Tightening Torque
60 lbf-ft [82 Nm]

3 Install Support V6IB-410, -420 or -430

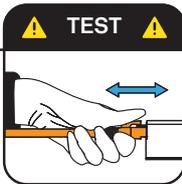
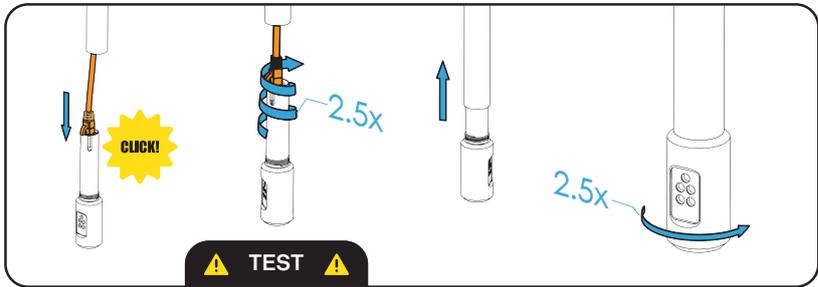
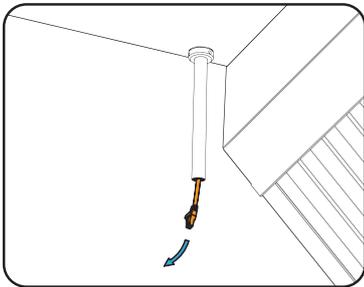


See Section 5 for optional Lateral & Central Brackets V6IB-450 & -460

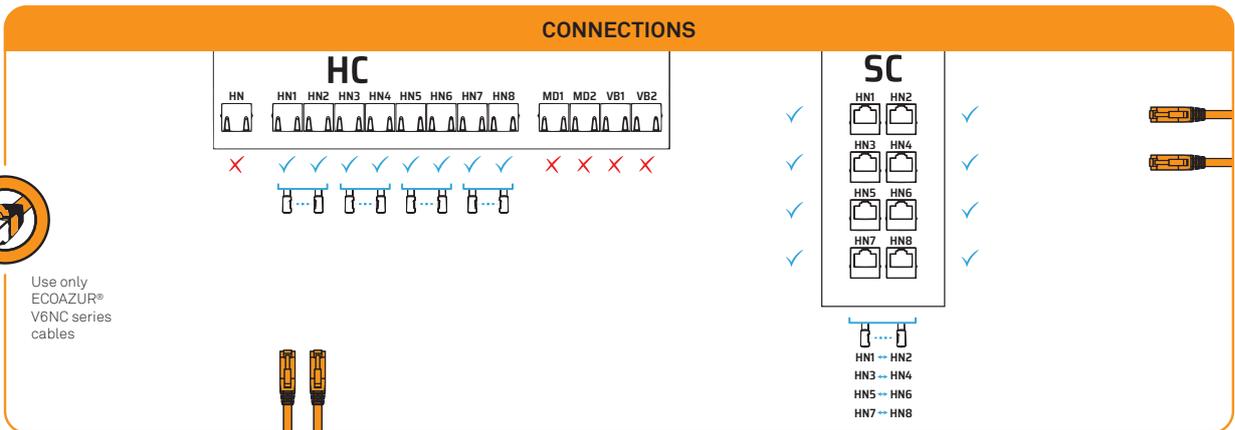
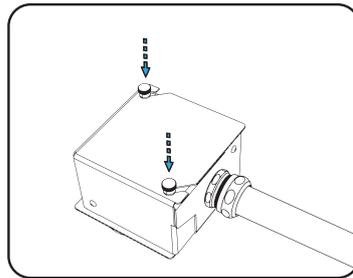
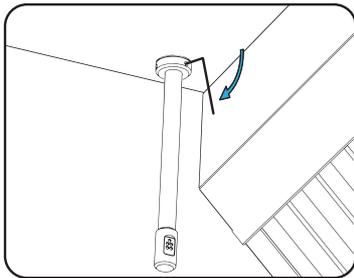
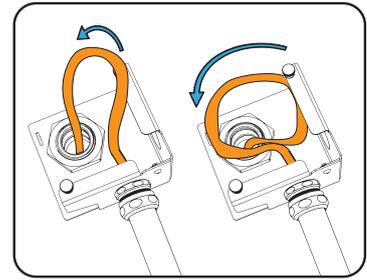
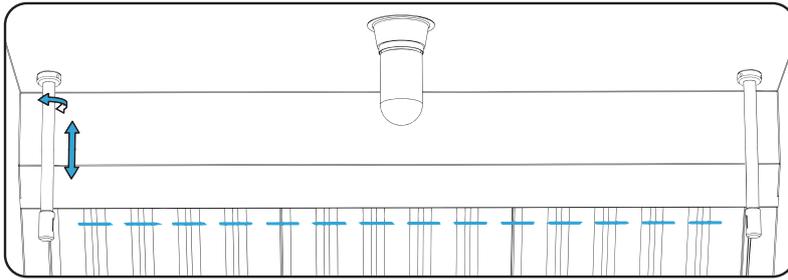
4 Install & Connect Sensor V6IB-300 or -310



i Use EMT Ø3/4" or 21mm RMC conduit and fittings



Install & Connect Sensor V6IB-300 or -310 (cont'd)



5 Install Lateral or Central Brackets V6IB-450 or -460 (optional)

REQUIRED TOOLS

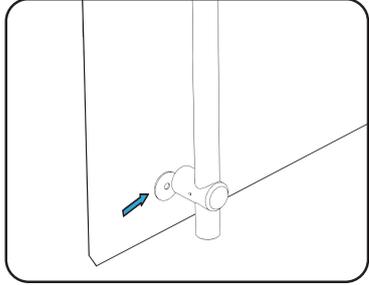
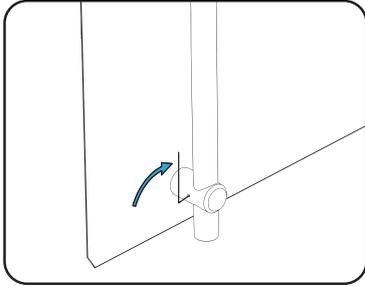
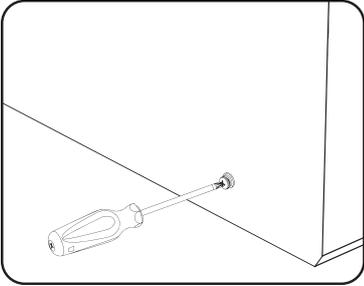
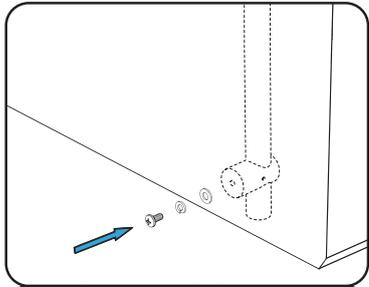
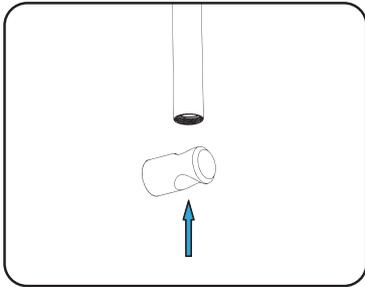
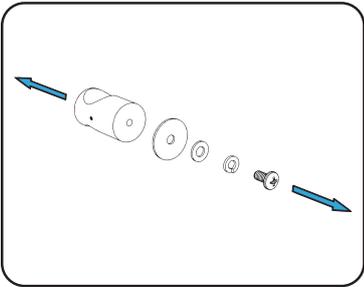
Ø9/32"

#2

1/16"

CAUTION!

9/32" min.
[7mm]



6 Install Passthrough Compression Seal V6IB-530(optional)

REQUIRED TOOLS

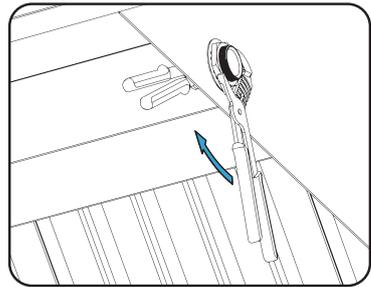
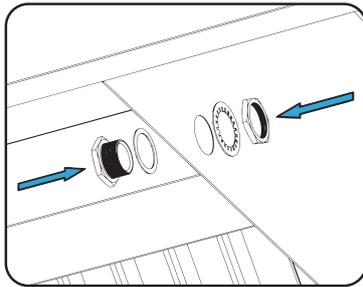
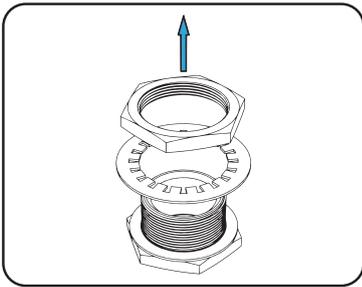


2-1/2" [64mm] x2

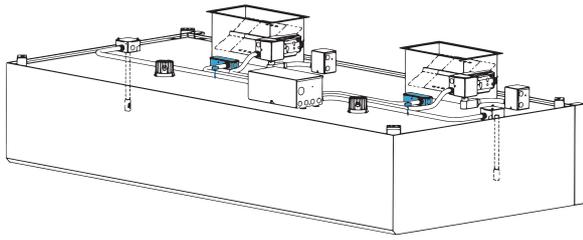
CAUTION!



2-1/2" [64mm]



12. Temperature Transmitter, V6TT-100



REQUIRED TOOLS

1-7/16" [37mm]

#2

3/4" [19mm]

CAUTION!

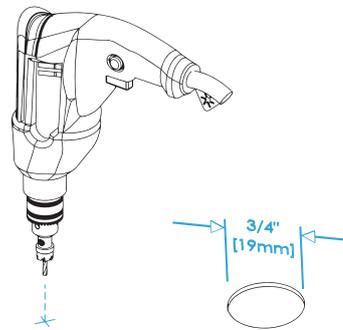
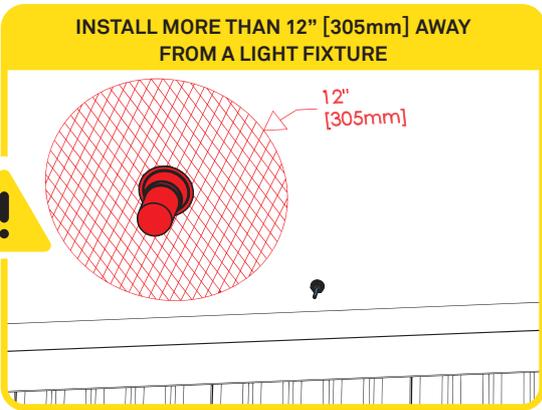
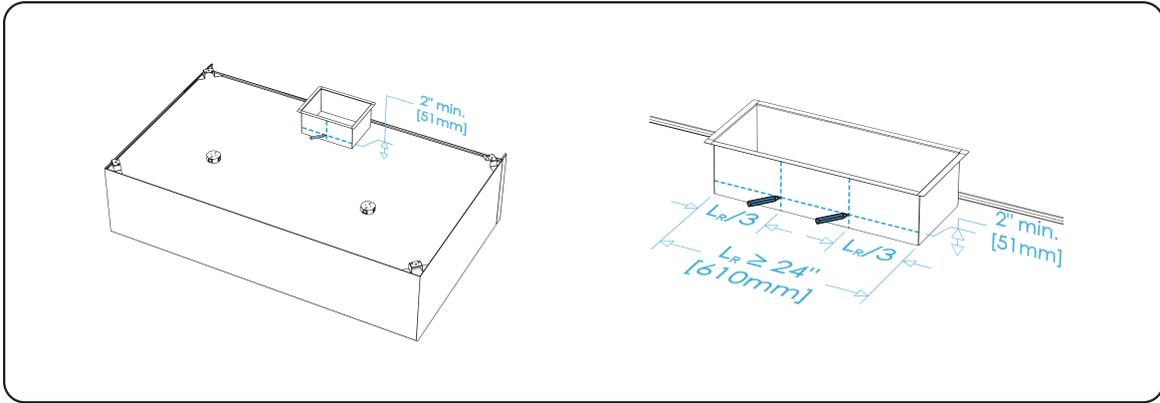
Other Component: V6TT-900

1 Mark & Drill

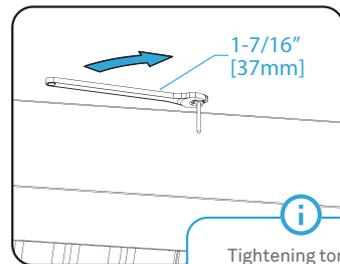
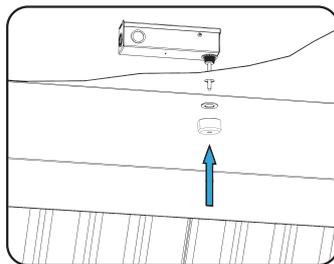
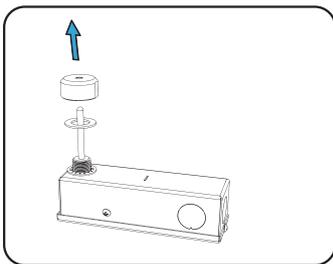
In front of filters

← L →	
96" < L ≤ 144" [2438mm] < L ≤ [3658mm]	2
144" < L ≤ 192" [3658mm] < L ≤ [4877mm]	3

Mark & Drill (cont'd)
In the hood riser

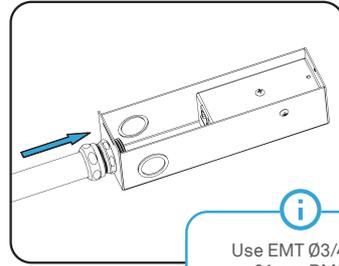
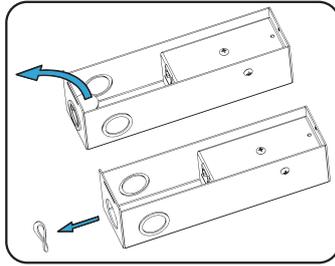
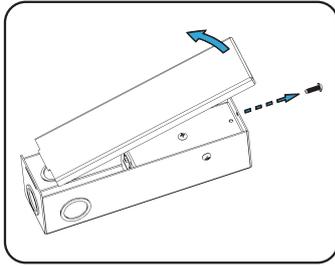


2 Install

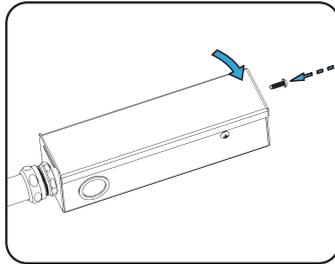
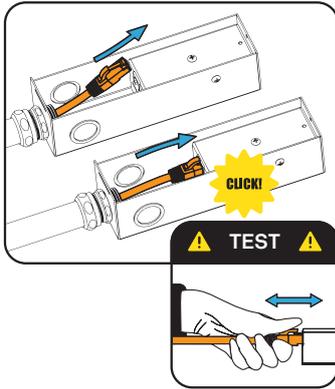


i
Tightening torque
30 lbf-ft [41 Nm]

3 Connect



i
Use EMT Ø3/4" or 21mm RMC conduit and fittings

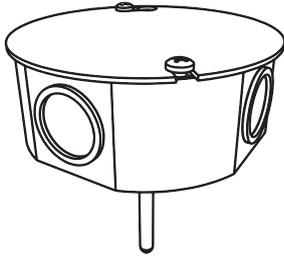


CONNECTIONS

HC												SC								
HN	HN1	HN2	HN3	HN4	HN5	HN6	HN7	HN8	MD1	MD2	VB1	VB2								
X	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓

Use only ECOAZUR® V6NC series cables

13. Temperature 10K Probe, V6TT-110



REQUIRED TOOLS

1-1/8" [29mm] 3/4" [19mm]
 #2 1-1/8" [29mm]

Other Component: V6TT-900

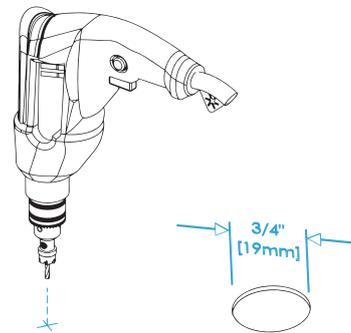
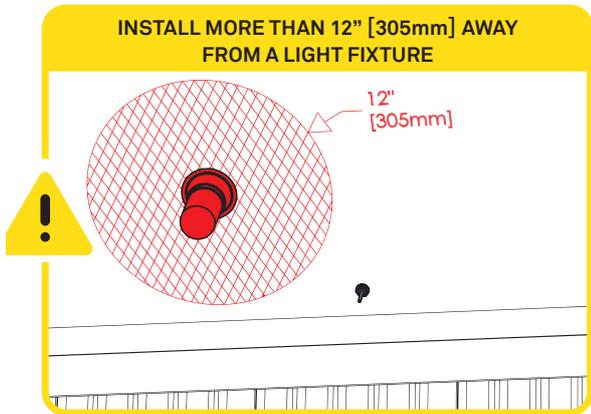
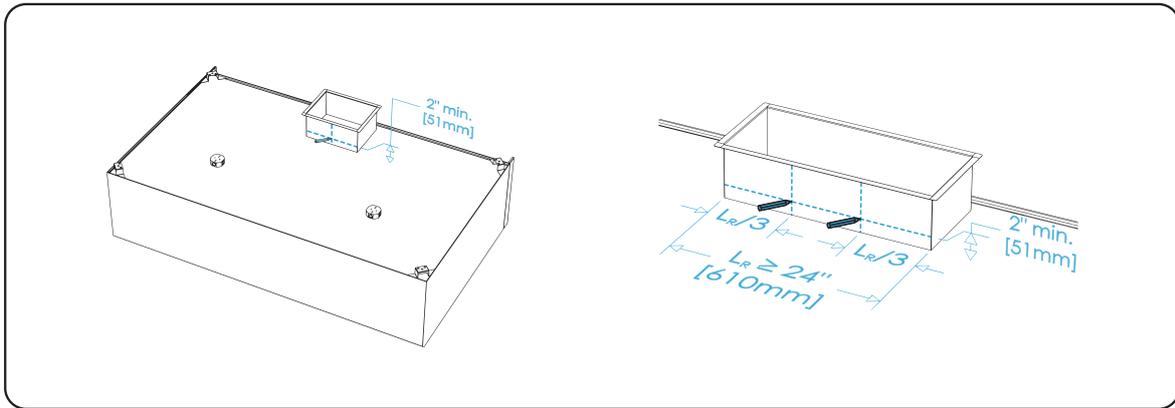
CAUTION!

1 Mark & Drill

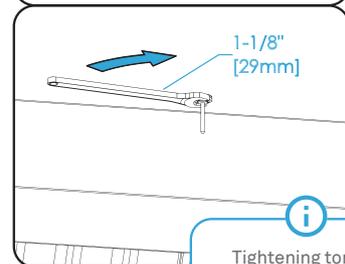
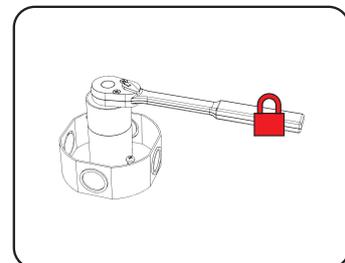
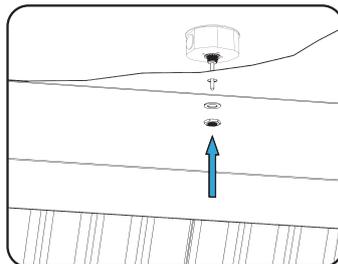
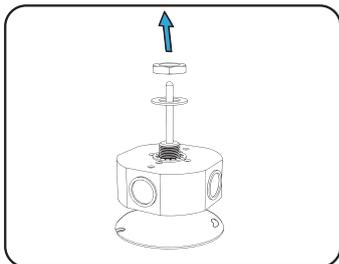
In front of filters

← L →	
96" < L ≤ 144" [2438mm] < L ≤ [3658mm]	2
144" < L ≤ 192" [3658mm] < L ≤ [4877mm]	3

Mark & Drill (cont'd)
In the hood riser

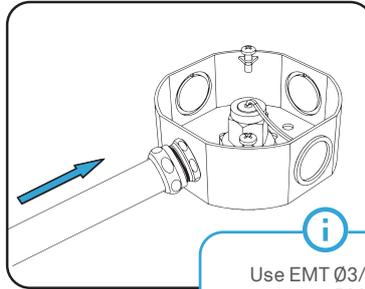
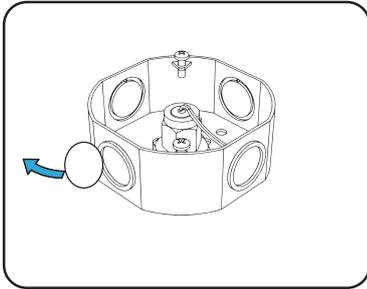


2 Install

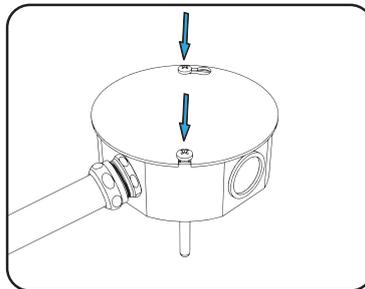
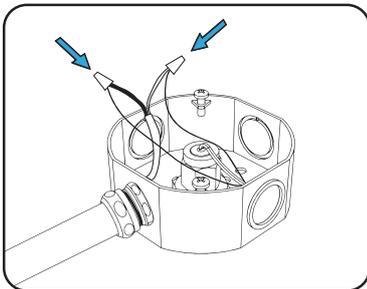
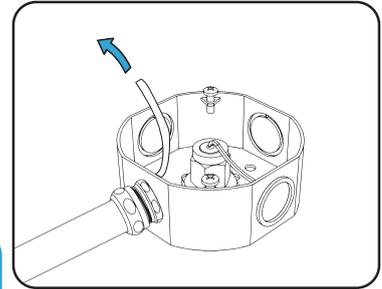


i
Tightening torque
30 lbf-ft [41 Nm]

3 Connect



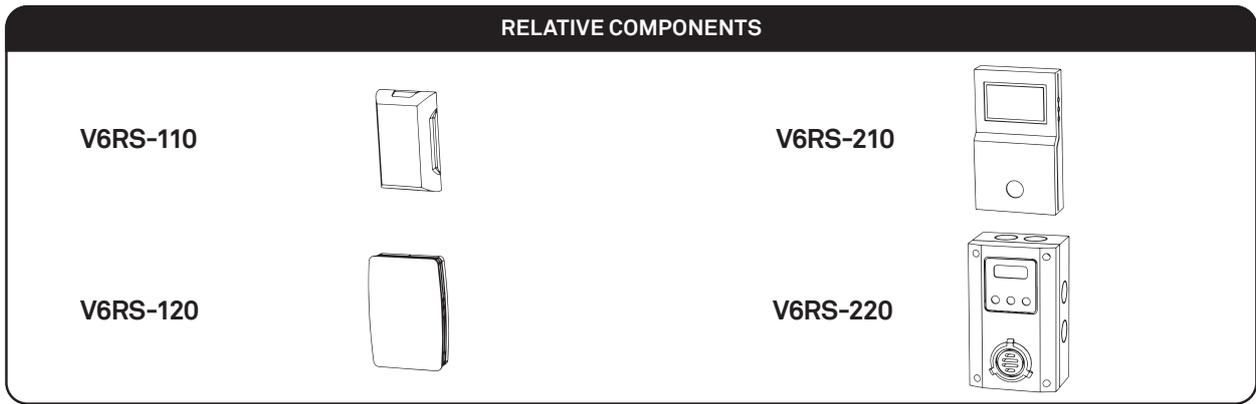
i
Use EMT Ø3/4" or
21mm RMC
conduit and fittings



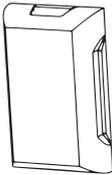
Caution! Refer to ECOAZUR® Electrical Diagrams

Caution! Minimum Cable Requirements
- Plenum/FT6 - Shielded
-18 AWG (0.75 mm²) - 75° C (167° F) rated temp.

14. Room Sensor, V6RS-xxx



Install & Connect Temperature Sensor V6RS-110

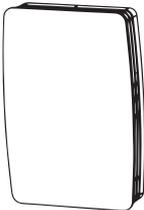


 Sensor must be wall-mounted at 48" [1219mm] to 72" [1829mm] from the floor, away from hoods or heat sources

 Location must be indicative of average kitchen temperature

Caution! Refer to ECOAZUR® Electrical Diagrams

Install & Connect Multi-Sensor V6RS-120

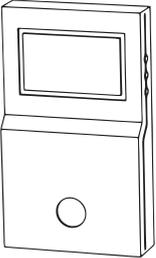


 Sensor must be wall-mounted at 48" [1219mm] to 72" [1829mm] from the floor, away from hoods or heat sources

 Location must be indicative of average kitchen temperature

Caution! Refer to ECOAZUR® Electrical Diagrams

Install & Connect CO Sensor V6RS-210

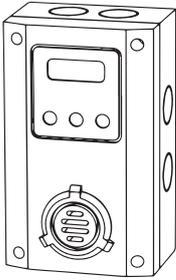


 Sensor must be wall-mounted at 48" [1219mm] to 72" [1829mm] from the floor

 Location is determined by local codes and jurisdiction

Caution! Refer to ECOAZUR[®] Electrical Diagrams

Install & Connect Natural Gas (CH₄) Sensor V6RS-220

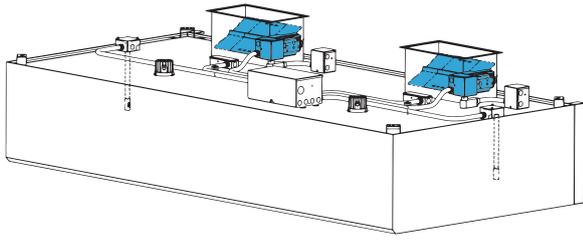


 Sensor must be wall-mounted at 6" [152mm] to 18" [457mm] below ceiling

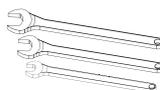
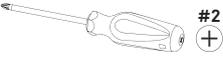
 Location is determined by local codes and jurisdiction

Caution! Refer to ECOAZUR[®] Electrical Diagrams

15. Modulating Damper, V6MD-100 & -200

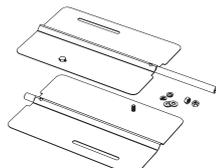
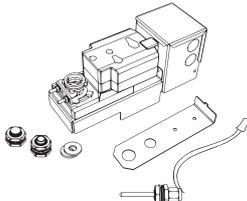


TOOLS REQUIRED

	3/4" [19mm] +		1-1/4" [32mm] +
	7/8" [22mm]		1-1/8" [29mm] +
	#2 +		7/16" [11mm] +
			10mm

CAUTION!

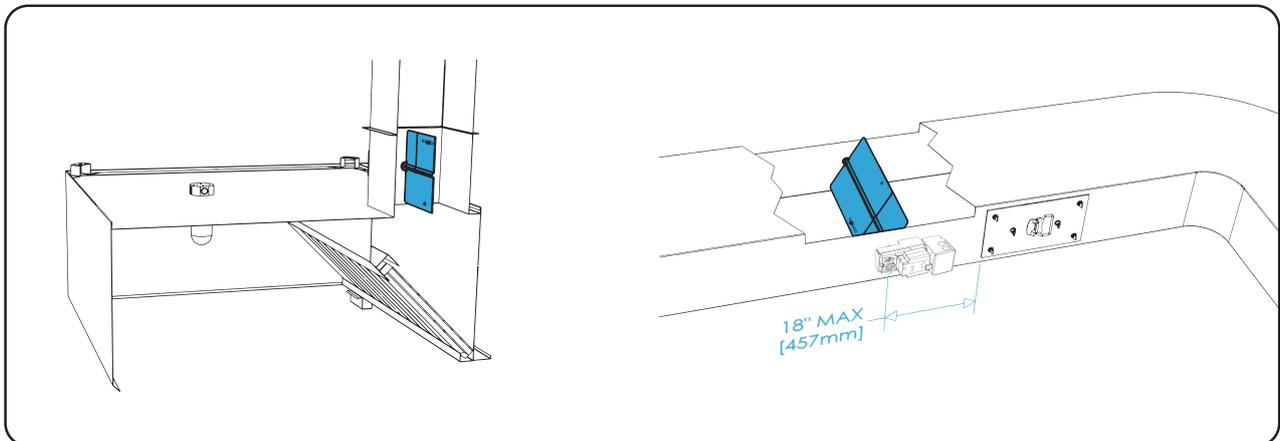
RELATIVE COMPONENTS

1x V6MD-3xx		1x V6MD-100 / V6MD-200	
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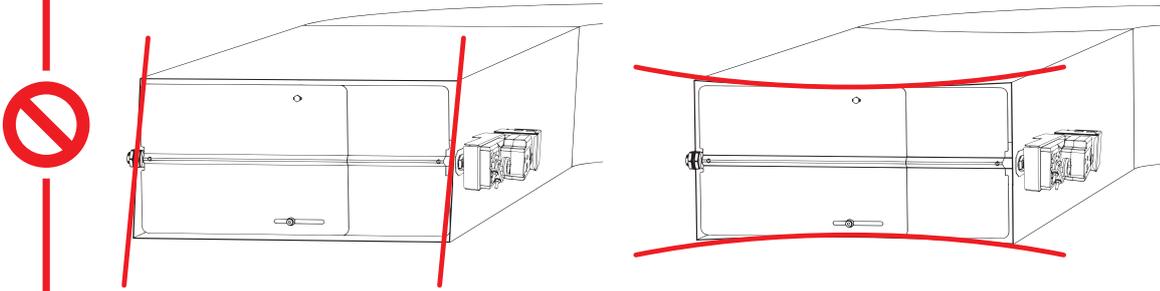
Modulating Damper Components: V6MD-011, 100, -200, -310, -320, -330, -340, -350, -360, -370, -380, -390, -3A0, -410, -420, -430, -510, -520, -530, -900

1 Mark & Drill

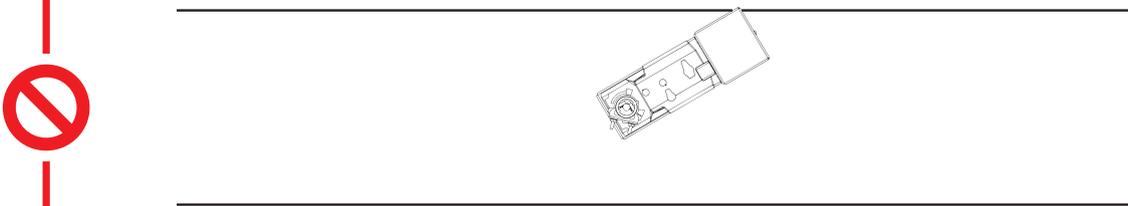
Recommended Locations



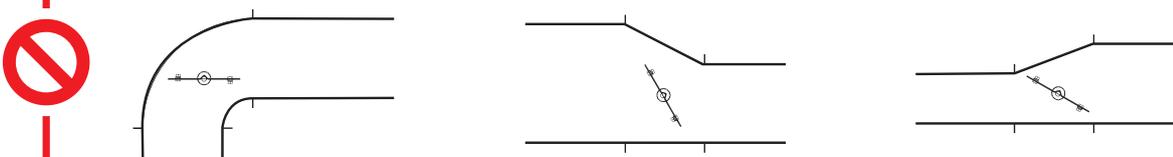
DAMPER MUST BE INSTALLED IN A STRAIGHT DUCT SECTION



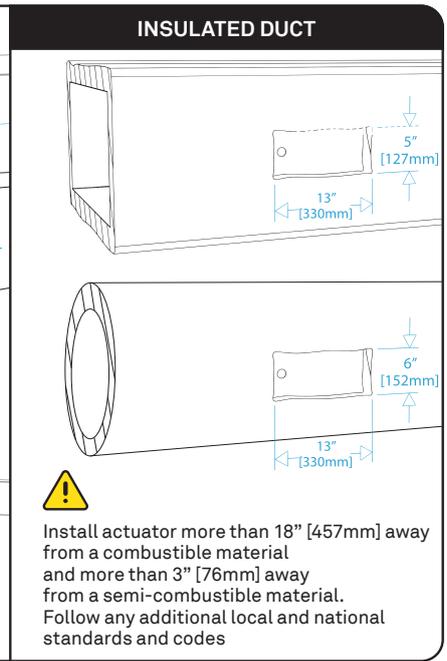
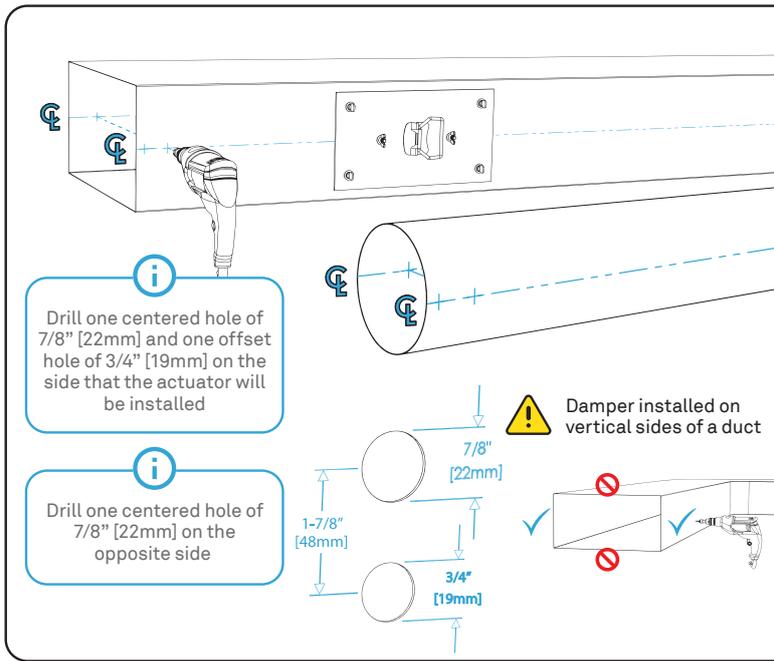
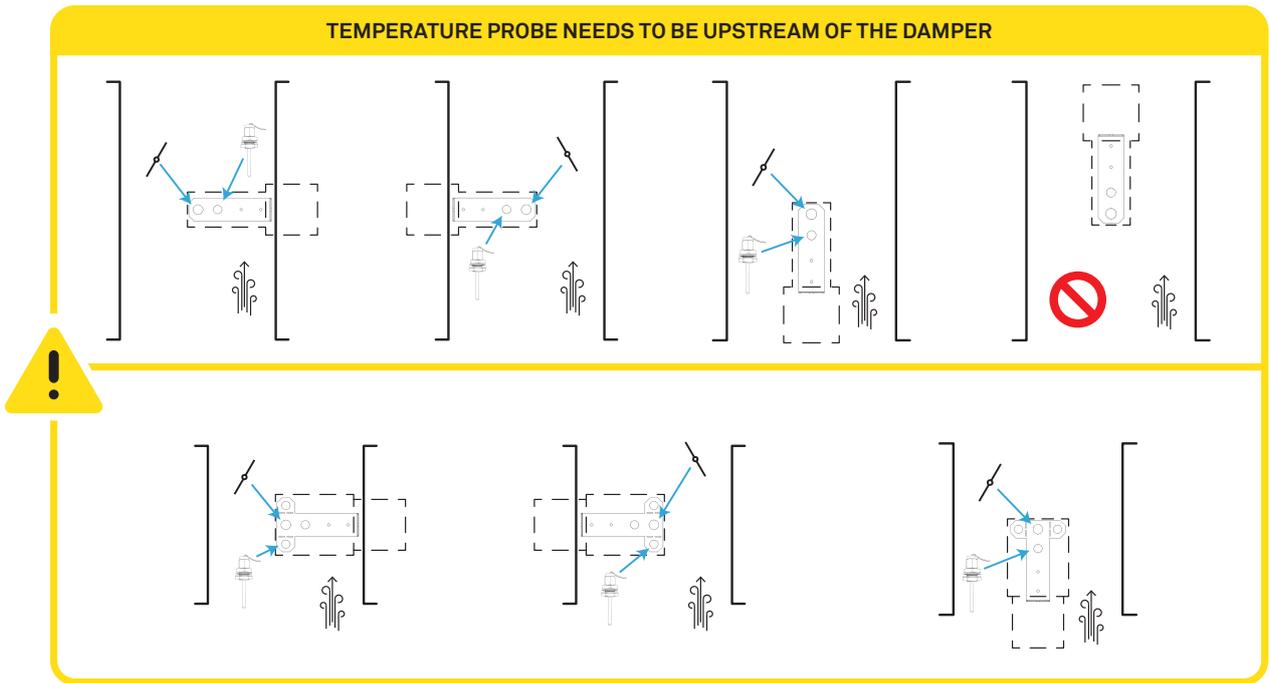
ACTUATOR ORTHOGONAL TO DUCT



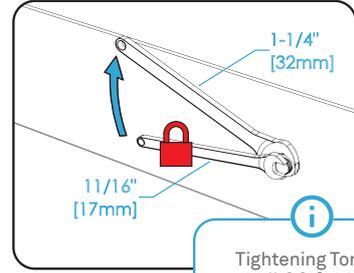
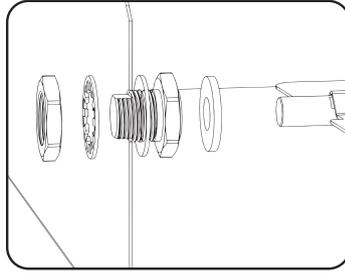
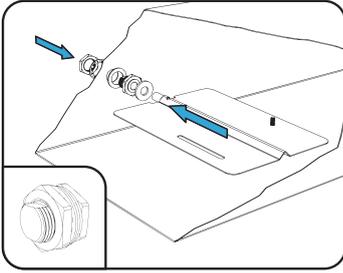
DO NOT INSTALL DAMPER IN A CONNECTION PIECE



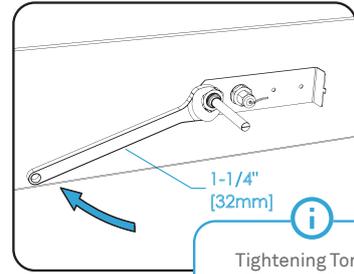
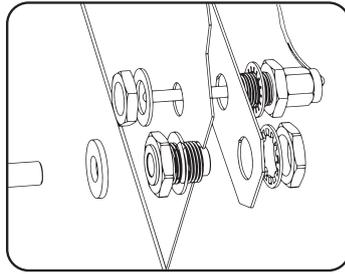
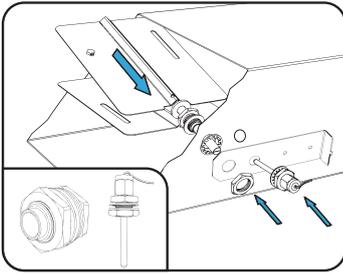
Mark & Drill (cont'd)



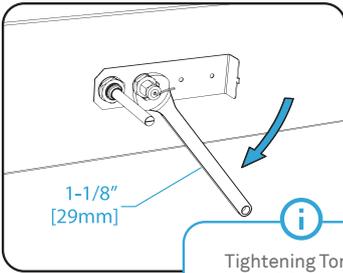
2 Install Damper Blades V6MD-3xx



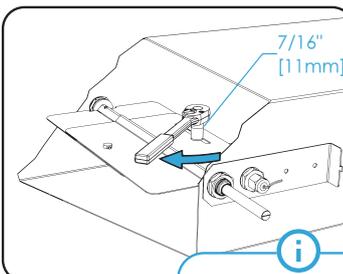
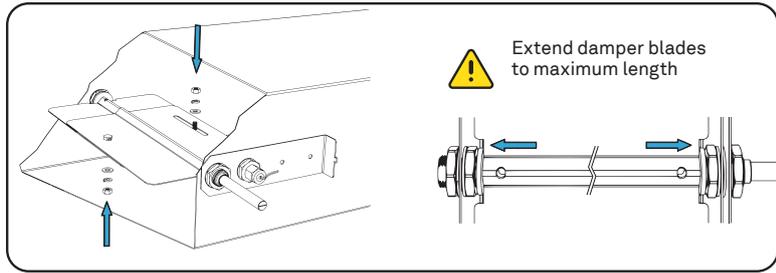
i
Tightening Torque
60 lbf-ft [82 Nm]



i
Tightening Torque
60 lbf-ft [82 Nm]

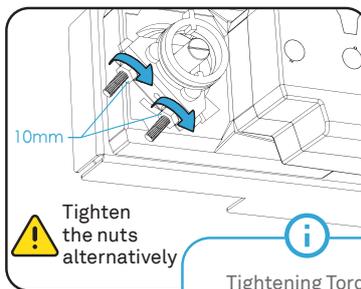
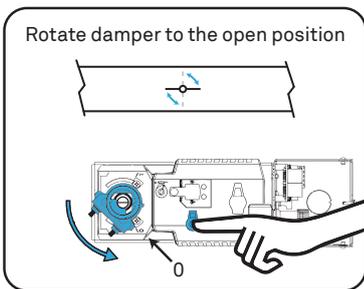
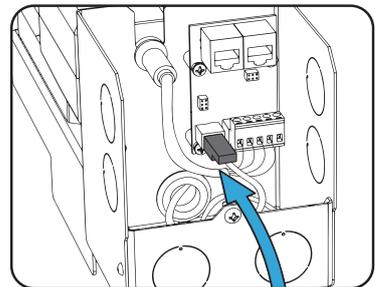
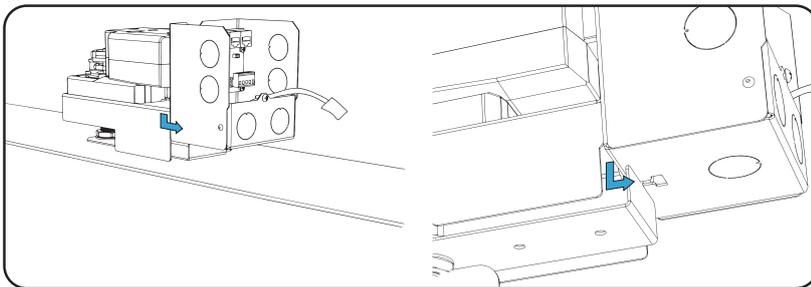
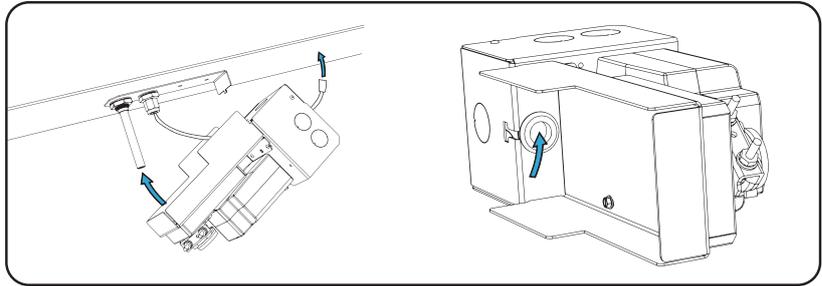
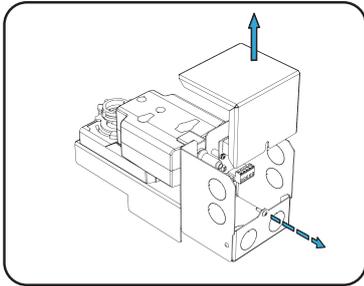


i
Tightening Torque
30 lbf-ft [41 Nm]

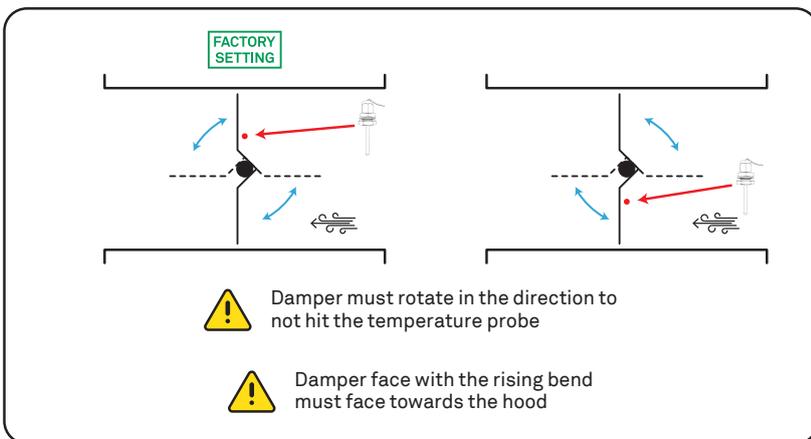


i
Tightening Torque
15 lbf-ft [20 Nm]

3 Install Actuator Assembly



i Tightening Torque
5 lbf-ft [7 Nm]



ACTUATOR CONTROLS

DIRECTION OF ROTATION

FACTORY SETTING

0: Open Position

1: Open Position

FAIL-SAFE POSITION

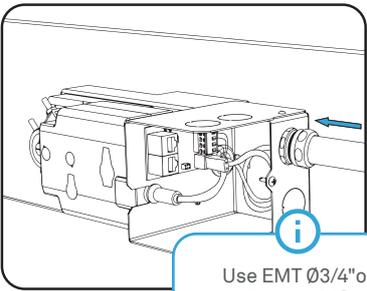
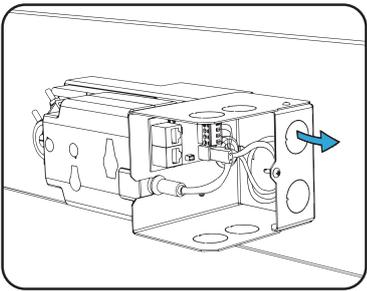
⚡ =

FACTORY SETTING

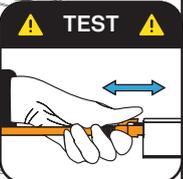
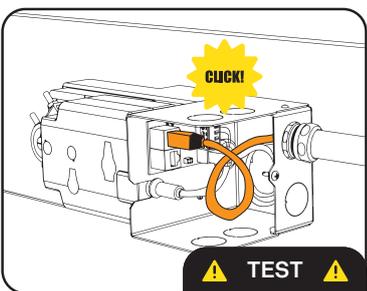
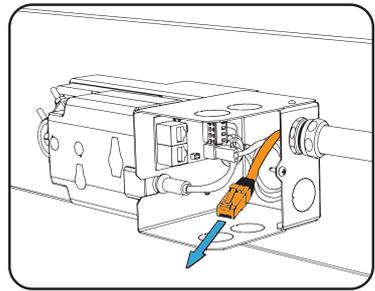
CCW 0

CW 1

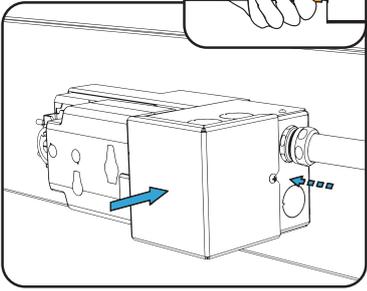
4 Connect



i
Use EMT Ø3/4" or 21mm RMC conduit and fittings



i
Optional



CONNECTIONS

HC

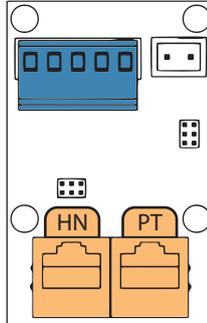
HN	HN1	HN2	HN3	HN4	HN5	HN6	HN7	HN8	MD1	MD2	VB1	VB2
x	x	x	x	x	x	x	x	x	✓	✓	✓	✓

Use only ECOAZUR® V6NC series cables

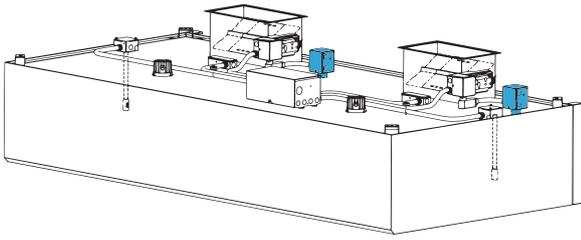
PCB layout
Modulating Damper board (V6MD-011)

1 2 3 4 5 6 7
24F 24B COM AO1 AI1 TT+ TT-

RJ45 PORT TERMINAL BLOCK



16. Hood Pressure Sensor, V6PT-100



REQUIRED TOOLS

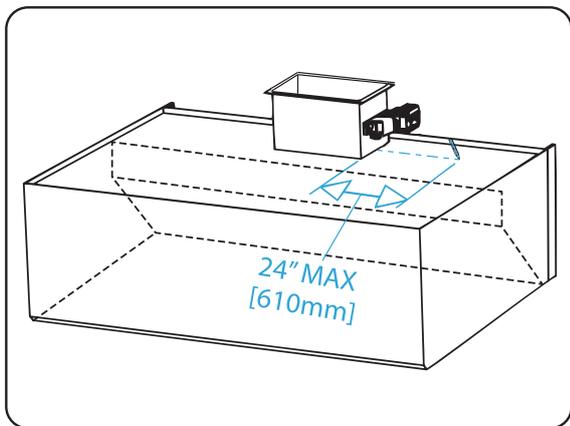
3/4" [19mm]
1-1/8" [29mm]
#2 (+)

CAUTION!

Hood Pressure Sensor Components: V6MD-011, V6PT-021, -100, -900

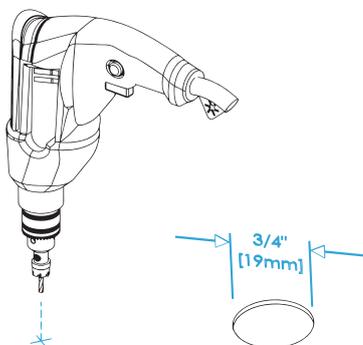
1 Mark & Drill

Recommended Location



INSTALL NOT MORE THAN 24" [610mm] AWAY FROM THE HOOD RISER

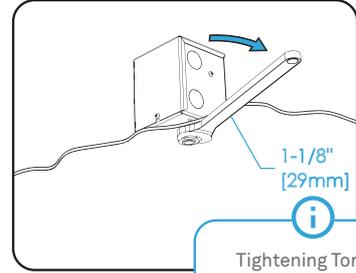
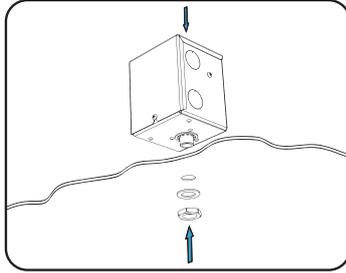
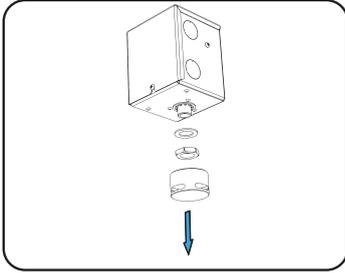
24" MAX [610mm]



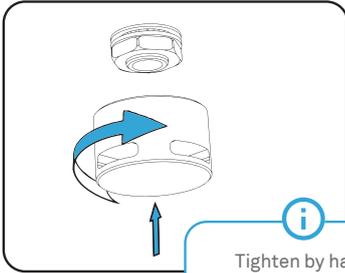
REQUIRES 5-1/2" [140mm] CLEARANCE OVER HOOD

5-1/2" [140mm]

2 Install

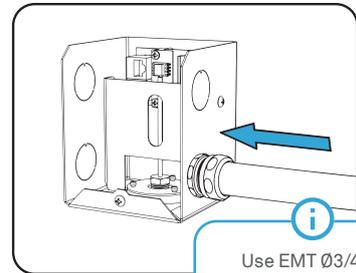
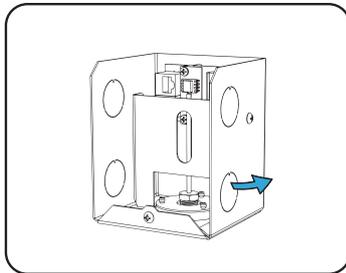
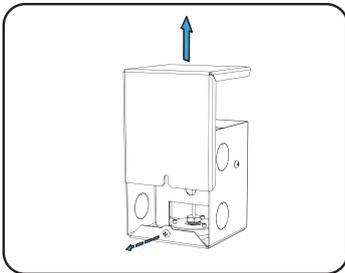


1-1/8" [29mm]
i
Tightening Torque
30 lbf-ft [41 Nm]

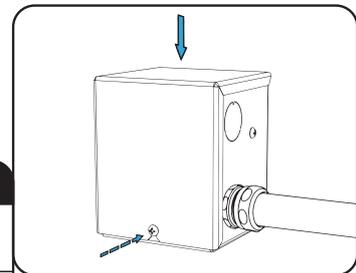
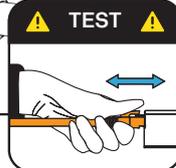
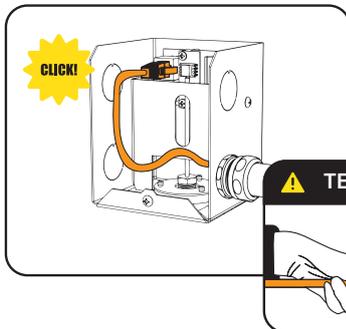
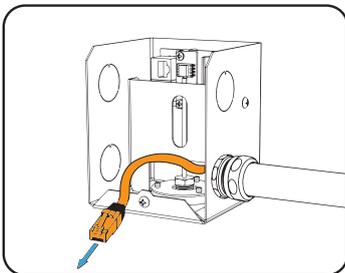


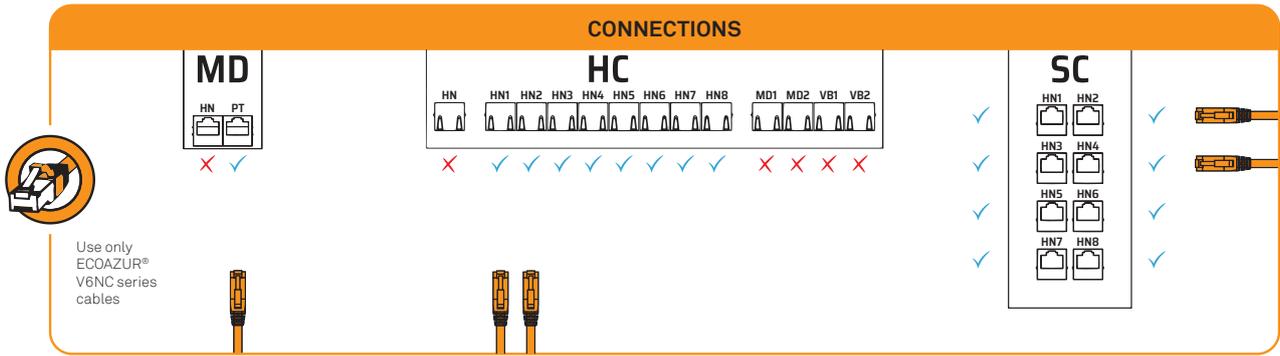
i
Tighten by hand

3 Connect



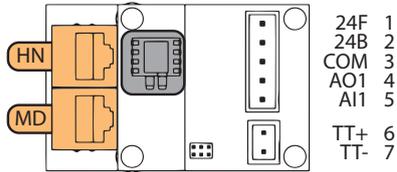
i
Use EMT Ø3/4" or
21mm RMC
conduit and fittings





PCB Layout

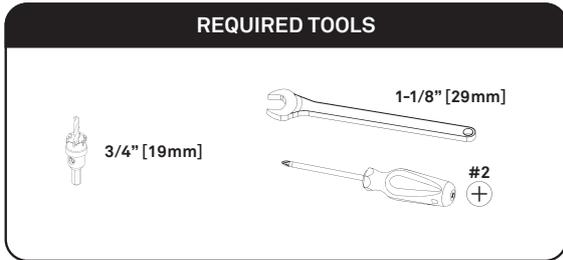
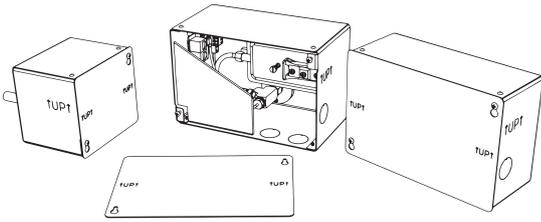
Hood Pressure Sensor board (V6MD-011 + V6PT-011)



RJ45 PORT

PRESS. SENSOR

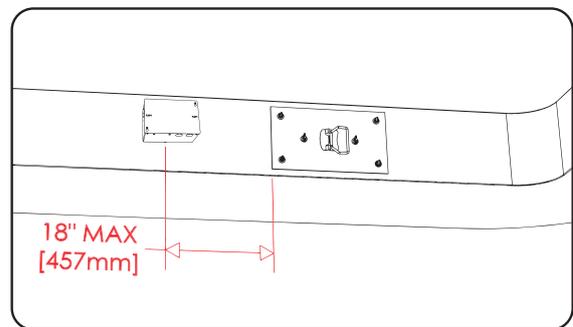
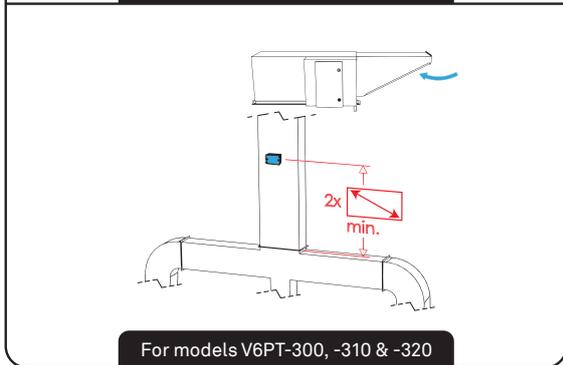
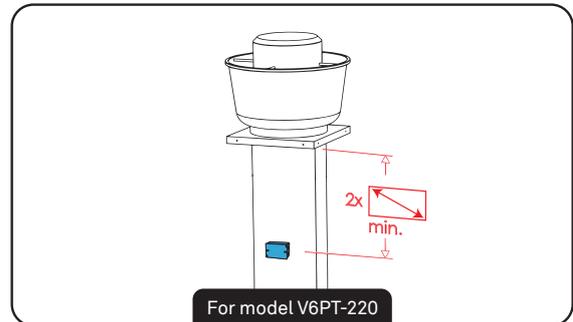
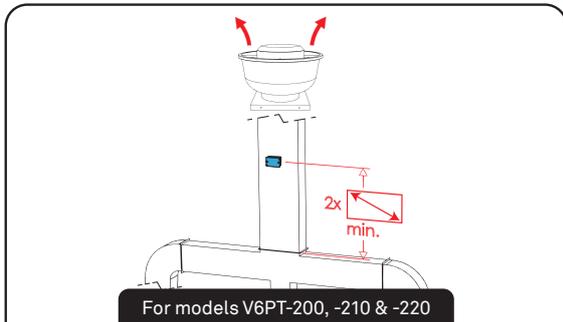
17. Duct Pressure Sensor, V6PT-2xx & -3xx



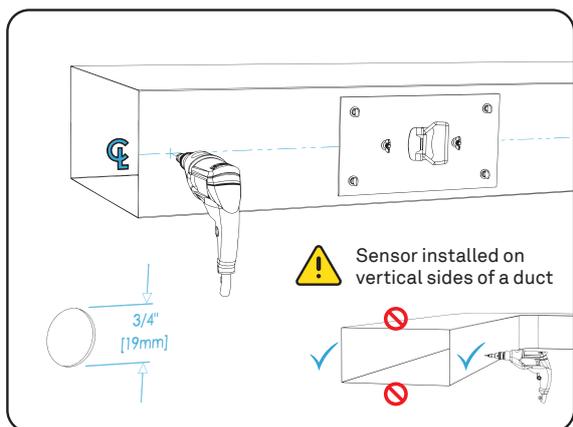
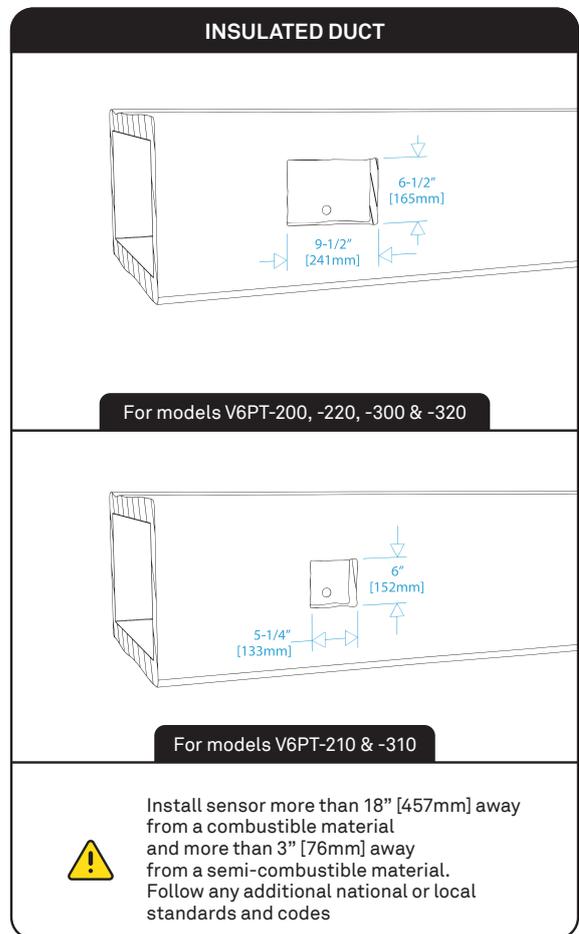
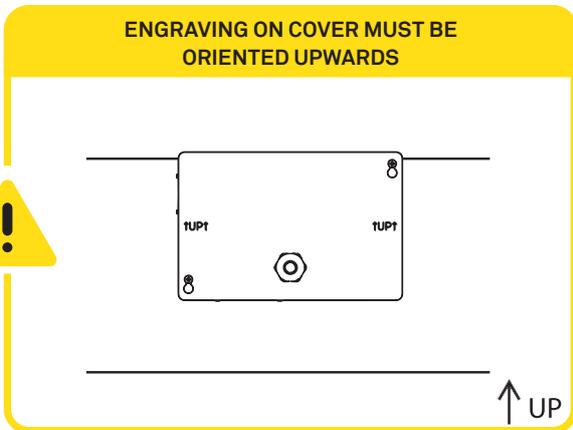
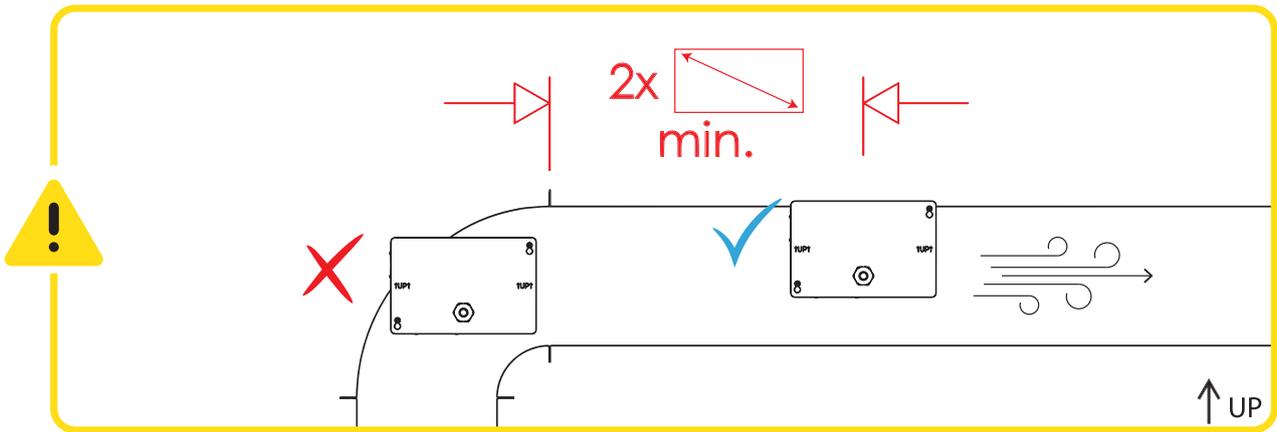
Duct Pressure Sensor Components: V6MD-011, V6PT-021, -200, -210, -220, -300, -310, -320, -900

1 Mark & Drill

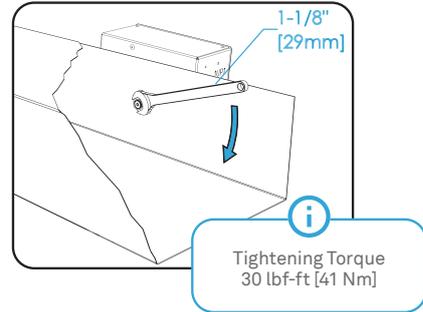
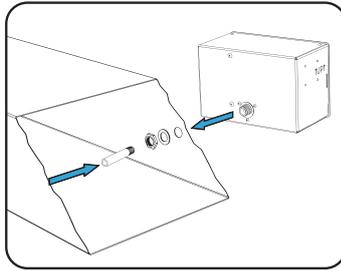
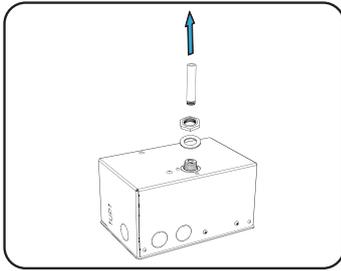
Recommended Location



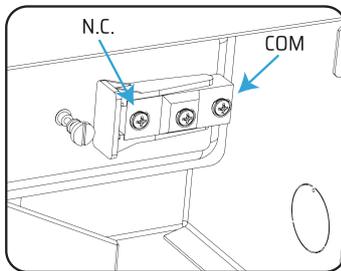
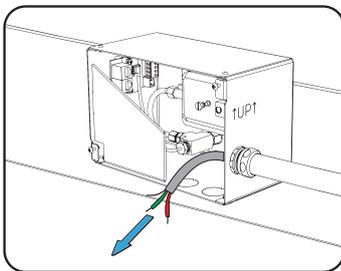
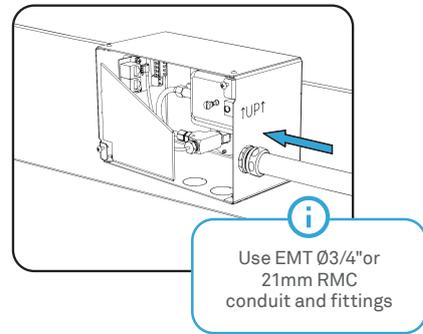
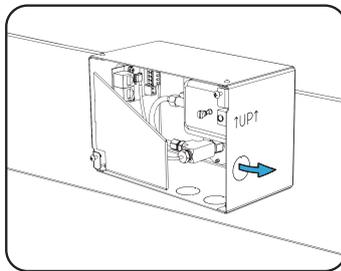
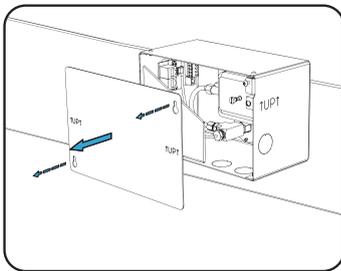
Mark & Drill (cont'd)



2 Install



3 Connect Pressure Switch (for models V6PT-200, -220, -300 & -320)



⚠ CAUTION! ⚠

Refer to ECOAZUR® Electrical Diagrams

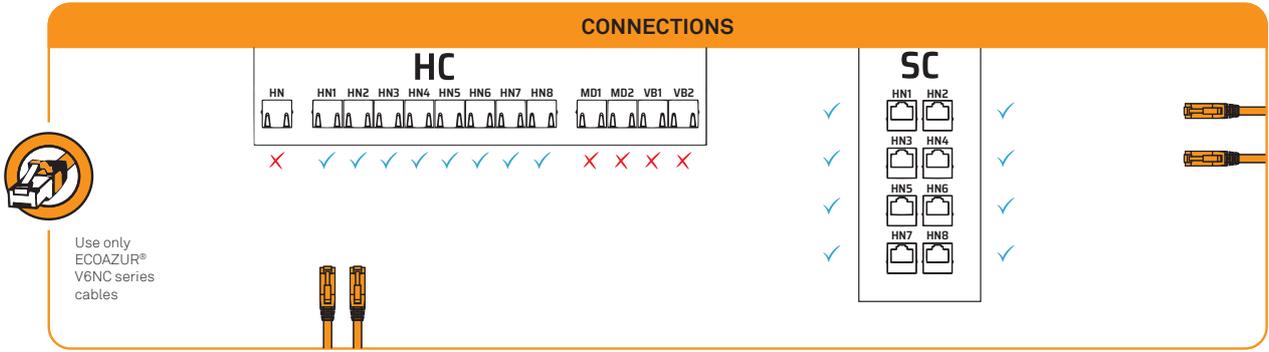
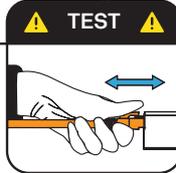
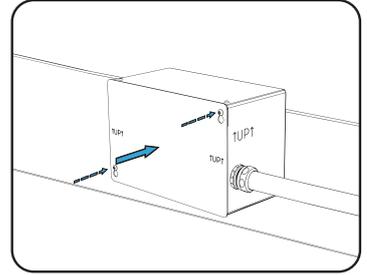
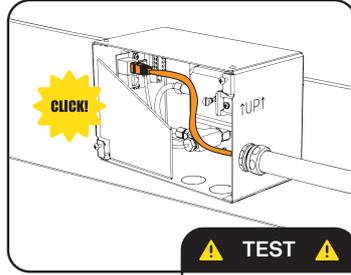
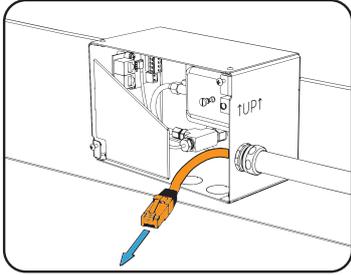
Minimum Cable Requirements

- Plenum/FT6
- 18 AWG [0.75 mm²]
- Shielded
- 75° C [167° F] rated temp.

- Factory calibrated at 2" w.c.
- Each full turn represents approximately 1.2" w.c.
- Check the line to confirm setting

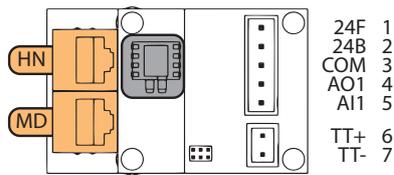
⚠ 24V MAX

4 Connect ECOAZUR® PCB (for models V6PT-200, -210, -300 & -310)



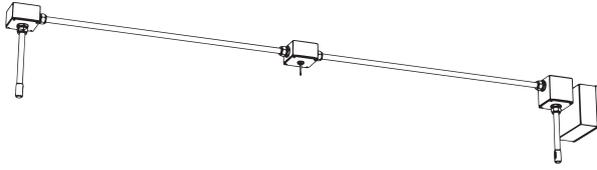
PCB Layout

Duct Pressure Sensor board (V6MD-011 + V6PT-021)

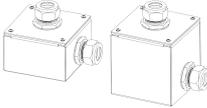
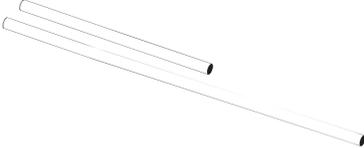


RJ45 PORT PRESS. SENSOR

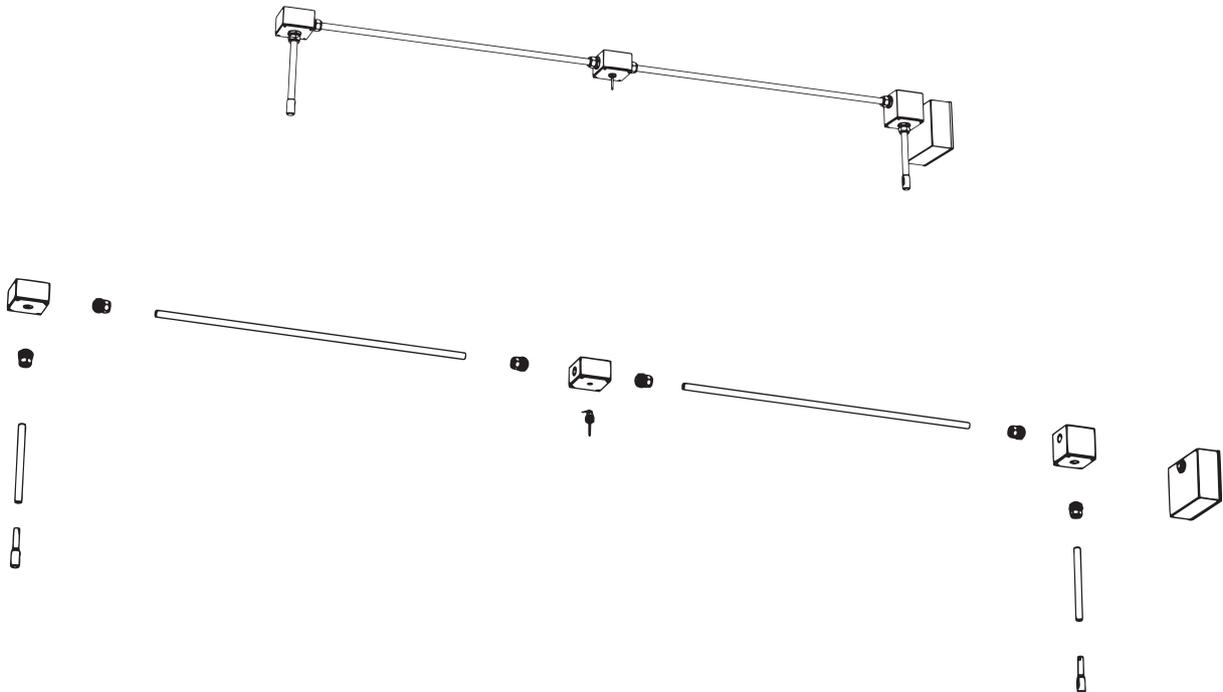
18. Limited-Access Assembly, (Alternate Installation Method), V6LA-xxx



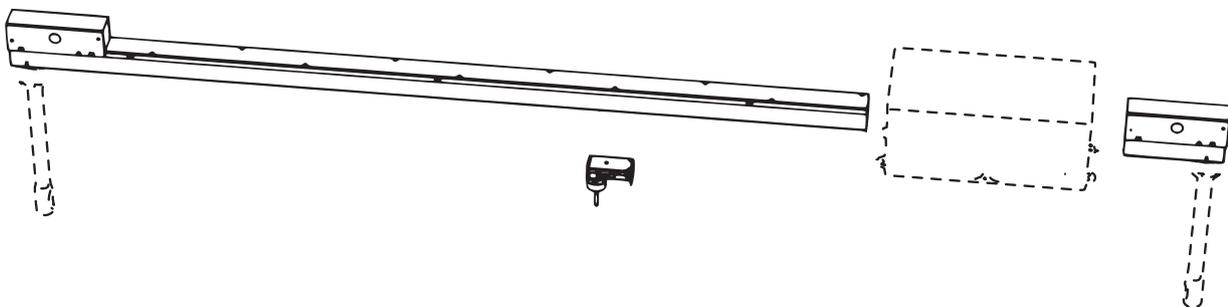
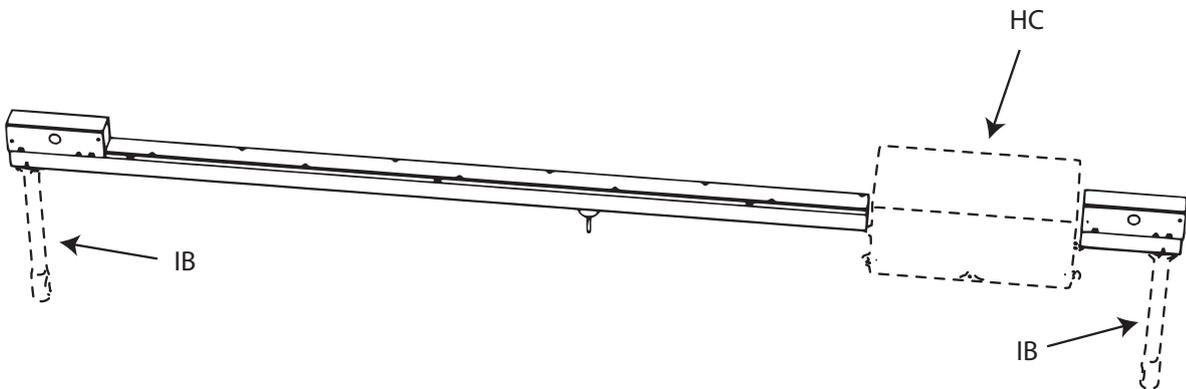
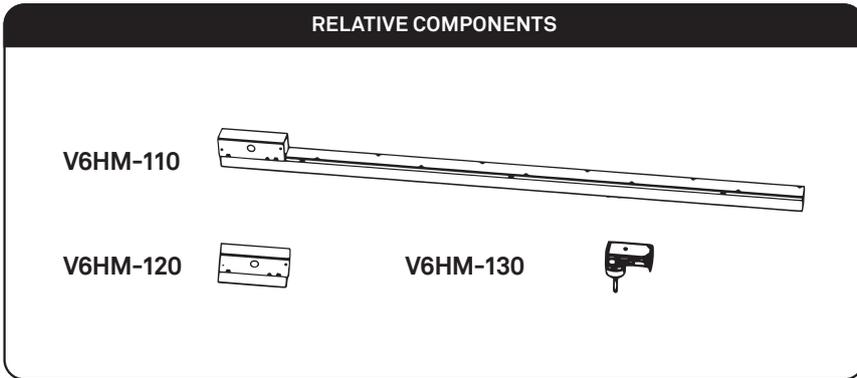
RELATIVE COMPONENTS

V6LA-2xx		V6LA-4xx	
V6LA-3xx		V6LA-510	

Limited-Access Assembly Components: V6LA-210, -220, -230, -240, -310, -320, -410, -420, -430, -440, -510



19. Wiring Channel Assembly (Alternate Installation Method), V6HM-xxx





ETS NORD AS

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11415 Tallinn
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info@etsnord.ee
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