

# AVANI Closed Bag-House Collector



Customer:	Kearns High School		
Customer PO#:			
AVANI SO#:		Tested By:	
Serial #:	PO NO.8770 . Serial #: 141811		
Ship Date / Install Date:			

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



# AVANI Closed Bag-House Collector

## General Safety Information

### MACHINE WARNING SIGNS

#### **▲ DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

#### **▲ WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

#### **▲ CAUTION**

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

Used without the safety alert symbol (▲) indicates potentially hazardous situation which, if not avoided, may result in property damage.



Warning of electric shock



Do not expose the equipment to rain or use in damp locations.



Figure 1



Do not use the equipment around flammable products, if not avoided, sparks can ignite vapors from flammable products. Read and understand all warnings and operating instructions before using this equipment. Failure to follow all instructions may result in electric shock, fire, and/or serious personal injury or property damage.



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## Specifications

Motor .....	20 HP x 1 pc
.....	208V /60HZ /3PH
Air Volume (C.F.M) .....	10,000 Ft <sup>3</sup> /Min (16980 M <sup>3</sup> /Hr)
Inlet Size .....	14" x 1 pc (dia. 360 mm)

Cartridge Filter: 8" x 88.5" x 32 pcs

Material: Polyester

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Filter Area: 80 m2 (864 ft2)  
Horizontal Positioned Filters  
Gasket and Latched Doors.  
Powder Coated Paint

Include:

- Filter Chamber
- Hopper
- Inlet
- Fan/Motor combination
- 1/16HP Vibration Motor x 2pcs

Construction: 13 Gauge Steel  
Max. Operating Temp.: 120°C  
Paint Color: Blue

Dimension (L x W x H)..... 172.2" x 54.6" x 174.1"  
..... (4,370 x 1,386 x 4,420 mm)

UL control box for Closed Bag-Hose Collector and Blower.

\*\*\*Drums (**DRUM NOT INCLUDED** in standard accessories).

# AVANI Closed Bag-House Collector

## General Safety Information

(Continued)



***Use this product carefully to effectively avoid any possible danger. Observe the following safety regulations to avoid bodily injury due to electrocution during use.***

Read this Manual carefully before operating the product and preserve the Operation Manual properly.

1. Keep work area clean and organized.
  - A disorderly working environment will cause inconvenience and danger during operation.
2. Check if the working environment is suitable for using the product.
  - Do not use the product in a humid environment.
  - Use the product in a good working environment to reduce risks.
  - Do not use the product in a flammable gas or liquid environment to avoid danger.
3. Keep other persons away from the product, except for the operator, to avoid danger.
  - Do not let children get close to the product. All wires used by the product shall be in a safe location to prevent children from touching them.
4. All tools shall be safely stored.
  - When the tools are not used, please store them in a dry place safely beyond the reach and access of children.
5. If the machine breaks down, contact a service technician. Do not attempt to repair and possibly damage the machine.
6. When using the product, be sure to put on a welding suit and mask.
7. Use the electrical wires correctly.
  - During use, do not drag the electrical wires forcefully. Do not use these wires if fraying or current leakage occurs to avoid injury to the operator.
8. Before replacing parts, shut off power to the machine.
  - Check that the switch is in "on" or "off" position. Do not attempt the replacement when the machine is running. To replace parts or filter material, make certain that the switch is "off".
9. Use the power cord correctly. The total

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length of power cord shall not exceed 10 feet to avoid low power due to a drop in voltage and to prevent a possible hazard.

## **⚠ WARNING**

***When connecting the product,***

***always follow the instructions in the Operation Manual to avoid injuries.***

### 10. Care and Maintenance:

- Confirm that the parts/accessories have been fully assembled and will not adversely affect the machine operation.
- Check if the machine is operated properly.
- Replace damaged parts or accessories according to the instructions of the Manual. If the said instructions are not specified in the Manual, have a professional technician carry out the maintenance or replacement.
- Check that the electrical specifications of this machine meet safety requirements, and that the maintenance is carried out by a professional technician. Use original manufacturer's parts and accessories to avoid injury.
- If a problem occurs, contact your dealer immediately.

## **ADDITIONAL DUST COLLECTOR SAFETY RULES**

The Bag-House Collector can be dangerous if it is operated incorrectly. Therefore, the product must be used cautiously to avoid causing a hazard or damage. Unnecessary injuries may occur by failing to follow the instructions of the Safety Rules Manual. Be sure to put on protection equipment or suit that can protect your body, such as helmet and eye mask to avoid injuries from occurring. If any doubts or any unfitness occurs during use, be sure to stop the operation immediately. Keep in mind that the user shall be liable for using according to the specified safety rules and for operating the machine correctly.

1. Read this Manual carefully before operating the product.
2. Be sure to follow local electrical and safety regulations and observe the electrical safety standards practiced in the relevant area. All electrical wire connections and installation shall be carried out by a professional technician.
3. Do not operate the product near flammable materials, as sparks may ignite these materials and cause an explosion. Please confirm there aren't

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any flammables near the working site to avoid hazard.

4. This product is suitable for collecting smoke and welding oil gas. Do not use it in collecting iron chips and dust at the same time to avoid producing sparks.
5. Before replacement of parts or filter materials, be certain that the switch is disconnected.
6. Do not kink the power cord and keep it away from oil, chemicals or flammables.
7. Check that the voltage, phase count and grounding wire match the machine requirements.
8. When the fan blades are operated at high speed, do not reach hand near these blades to prevent finger from breaking or clothes/necktie from getting caught. Do not put the hand or foreign matter into the air inlet to avoid getting caught in the high-speed rotation of fan blades.
9. When not in use, all air inlets of Welding Smoke Treatment Machine shall be covered.

## Assembly

***Do not connect the Welding Smoke Treatment Machine before the***

**▲WARNING** *assembly is finished and you have read and understood all of the precautions stated in the Manual.*

**NOTE:** For correct assembly, refer to the Illustrations and Parts List on pages 19-23.

## Installation

### MOVING AND TRANSPORTATION

The net weight of this machine is about 2425.06 lbs. It CANNOT be handled and transported without the help of lifting tools. For your safety, read all instructions carefully.

**▲WARNING** *Do not move without the help of others to avoid causing danger.*

## ELECTRICAL INSTALLATION

### POWER CONNECTION

1. Confirm that the power is properly connected under normal power supply condition. It is recommended to provide manual shutdown device before connecting power.
2. It is recommended to protect the control equipment with suitable grade of fuse, and the length of fuse and power cord shall not be over 10 feet.

### SHUTDOWN

1. Disconnect power by manual method.

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- When stopping operation, check if the switch is under off status.

## **EARTHING WIRE**

Connect yellow/green wires to the earthing wire power jack. Confirm that the earthing wire has been properly connected before connecting main power cord to the machine at all times.

### **⚠ WARNING**

***Do not disconnect the wiring jack***

***before cutting off power!***

## **POWER INSTALLATION AND STORAGE**

The electrical power is configured as following. If conditions are beyond the scope stated below, then it is required to ensure that the power is well arranged and safe.

- Ambient temperature: Between 41°F and 131°F. If the time is over 24 hours, then the ambient average temperature shall not be over 122°F.

Humidity: Between 30% and 95%

- Altitude: 3,280 feet
- Moving and Storing: -13°F to 131°F. For short-time storage (less than 24 hours), the storage temperature can be up to 158°F.

## **Operation**

### **PRIOR TO START UP**

Purpose: The Dust Collector is specially suitable for treating the smoke generated during ordinary welding processing work, which can effectively collect and screen the smoke resulting from the welding work in maintaining the air quality of the working environment.

- Before starting the machine, be sure to read this Manual carefully.
- Before starting the machine, check if relevant safety protection measures have been taken according to the Manual.
- Before starting the machine, watch the motor turning direction according to the instruction of arrow direction.

### **START UP**

- To ensure satisfactory performance for the Welding Smoke Treatment Machine, please confirm the air volume, power and the matching table of the Welding Smoke Treatment Machine.
- Connect power according to electrical installation procedure after installing the Welding Smoke Treatment Machine and the table. Disconnect power according to electrical installation procedure when the machine is not used.
- The Welding Smoke Treatment Machine



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shall be turned on and off by pushing I/O button. Under normal operation status, use such I/O button.

## Unpacking

The machine should be unpacked carefully. Check if the machine and components are consistent with those indicated in the Parts List. If any doubt arises or when the components are incomplete, contact your dealer.

## OPERATION - Filter Cleaning

1. If you experience a reduction in vacuum, proceed with the following action(s)
  - Adjust cleaning frequency via the timer board by increasing the frequency of vibration.
  - The manual filter vibration button are used for filter-bag cleaning and for maximum effectiveness should be used as follows:
    - The unit should be power off, press the manual filter vibration button for 10 seconds to cleaning filter bag. Repeat to press manual filter vibration button once to twice.
  - Turn Power off four minutes later, the vibration motor will be shaking to clean filter bag for 3 circulations. The parameter was present in IC Panel.
  - Cleaning as noted above should be daily or as any decrease in vacuum is observed.
2. If timer is set for maximum cleaning frequency and vacuum is not sufficient for optimal operation, contact Avani for filter replacement (See contact information in this manual)

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## Dimension (in mm/inch)

<i>DO NOT SCALE</i>	<i>IF IN DOUBT ASK</i>		Revisions			
			Rev	Description	Date	Approved

- AV-C-600V SPECIFICATION -

- YI Direct Drive Blower
- YI Motor: 20HP x 1 pc
- YI CFM: 10,000 ft<sup>3</sup>/min @ 7" SP
- YI Include:
  - UL Control Boxes for Bag House and Blowers
- YI Inlet: 16"
- YI Cartridge Filter: Dia. 8" x 88.5" x 32pcs
- YI Material: Polyester
- YI Filter Area: 864ft<sup>2</sup>
- YI Horizontal Positioned Filters,
- YI Gasket and Latched Doors,
- YI Powder Coated Paint and
- YI Include:
  - Filter Chamber
  - Hopper
  - Inlet
  - Fan/motor combination
  - 1/16HP shaker x 2pcs
- YI Dimension: 54.6" x 172.2" x 174.1" (1386 x 4370 x 4420mm)
- YI Construction: 13 Gauge for panel;
- YI Max. Operating Temp.: 120°C
- YI Paint Color: Blue

\*\*Drums not included.

AVANI ENVIRONMENTAL INTL. INC. Sales Department 95 Cypress Drive Youngsville, NC 27596 (919) 570-2862 info@avanienvironmental.com		Date	Name	Part Number:	Title:
	Drawn by:	2014-05-08	***	****	AV-C-600V Closed bag house
	Checked by:				
The drawings, AutoCAD, 3-D Models, and specifications are the property of Avani Environmental Int. Inc. (AE) and may not be reproduced, distributed, modified, or otherwise used, except provided herein, without the express written permission of AE.					Size <b>A</b> Scale 1 = 1    Drawing Number: SF-C-600V + DBN-200

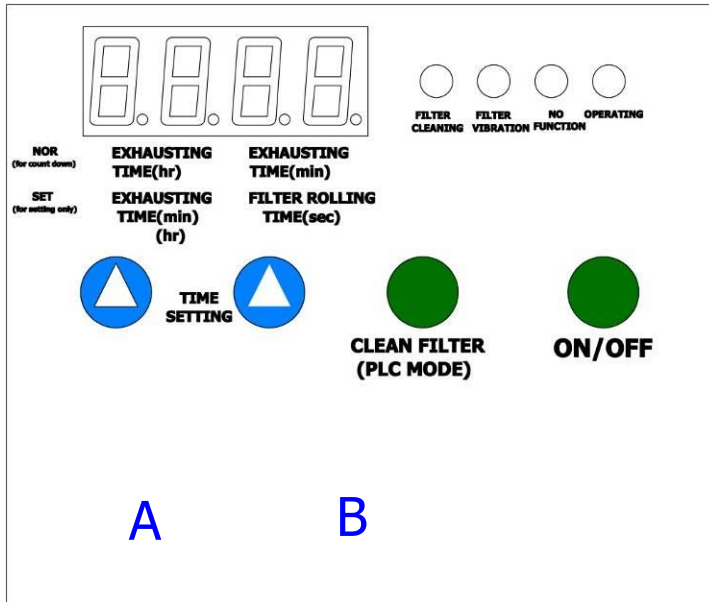
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## Control Panel

### Control Panel Operation Description



IC Panel works only in **NOR** position, if you would like to know present filter cleaning time, switch back to **SET** position.

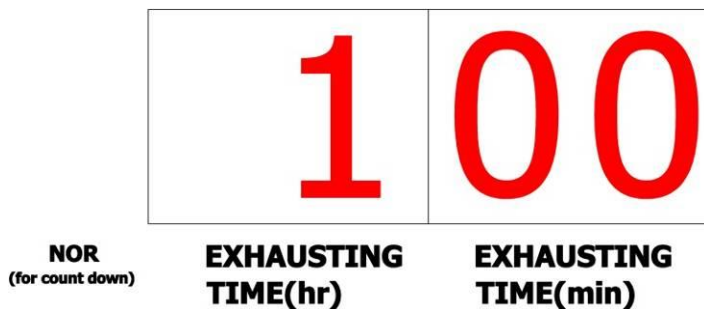
1. "ON/OFF": ON/OFF switch.
2. "CLEAN FILTER": Press this button to start the vibrating dust shaking down after stopping the machine.
3. "TIME SETTING"
  - Ⓢ Status **NOR**:
    - The machine operating value was preset in factory at "Dust-collecting Time" 1 hour and "Filter Bag Cleaning Time" 10 seconds, which means Dust Collector automatically operate and renew for every 1 hour of machine

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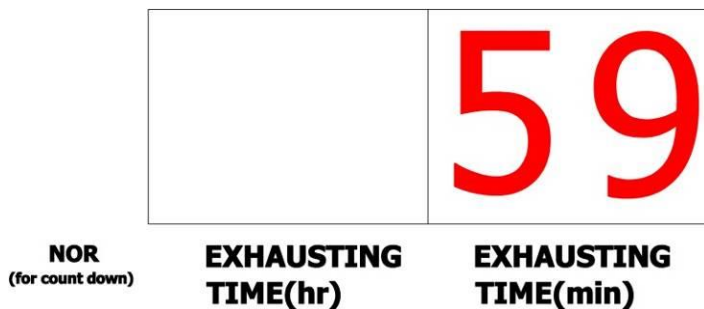
# AVANI Closed Bag-House Collector

operation and the filter bag cleaning per time shall be 10 seconds. If changes of settings are necessary, please follow the IC Panel Setting Procedure to proceed any adjustments.

- The vibration motor will be shaking to clean filter bag for 3 circulations after blower shut down four minutes. The parameter was preset in IC Panel.
- Turn on the machine, the IC Panel will show the preset operating time. When machine operates after one minute, it begins with count down.
- "EXHAUSTING TIME (hr)": Dust Collector automatically operate and renew for every 1 hour of machine operation.
- "EXHAUSTING TIME (min)": Filter Bag cleaning per time shall be 10 seconds.



The machine operation preset for 1 hour, and it also had count down function.



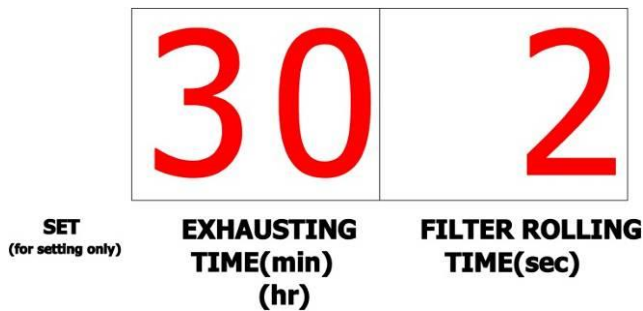
After one minute, it starts to count down.

- Ⓢ Set the dust-collecting cycle [only in SET position](#).

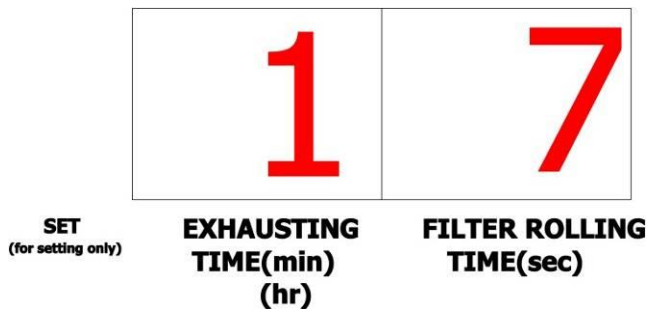
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- "A" Button: Control the "Dust Collecting Time" (by minute). The dust-collecting cycle after starting the machine can be set at 30min/ 45min/ 1H/ 2H/ 3H/ 4H of the dust-collecting interval respectively.
- "B" Button: Control the "Filter Bag Cleaning Time" (by second). The shaking time renewing for filter bag can be set at 2/ 5/ 7/ 10/ 12/ 15 seconds of turning duration.



Dust Collector operated after 30 mins, the shaking time for filter bag will be operated 2 secs.

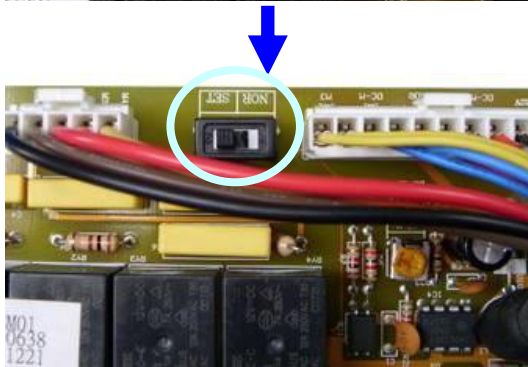


Dust Collector operated after 1 hour, the shaking time for filter bag will be operated 7 secs.

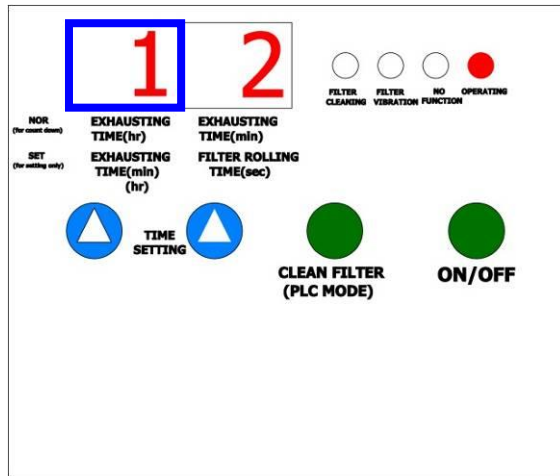
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## IC Panel Setting Procedure:



1. Adjust the bottom switch (at back) from NOR to SET to modify settings.



2. When IC Panel in SET position, press (figure 1) to set exhausting time, from 30 mins to 1 hour (figure 2)

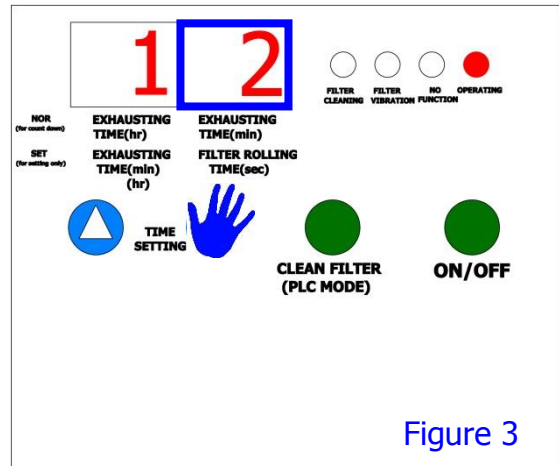


Figure 3

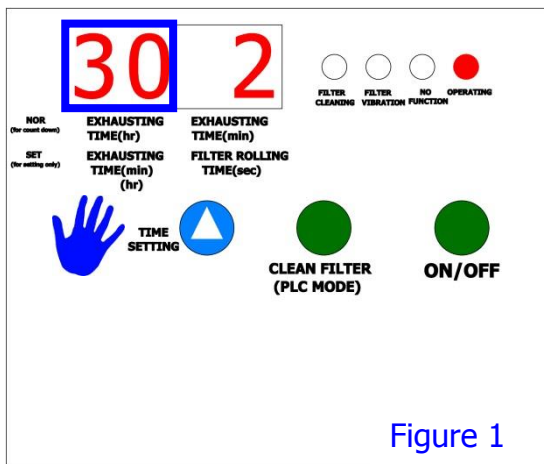


Figure 1

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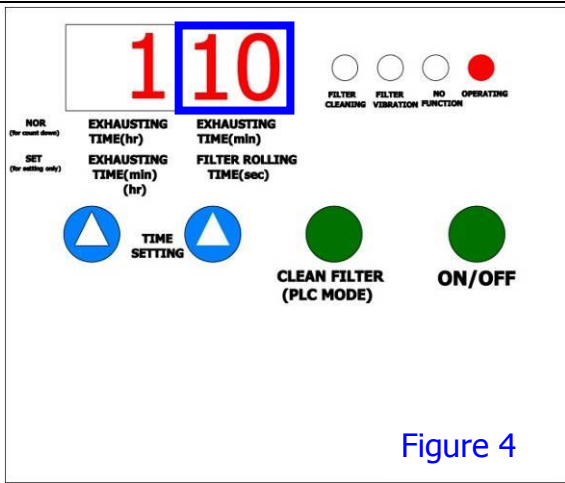


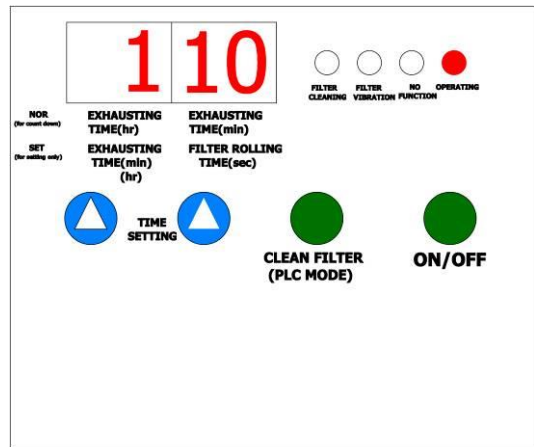
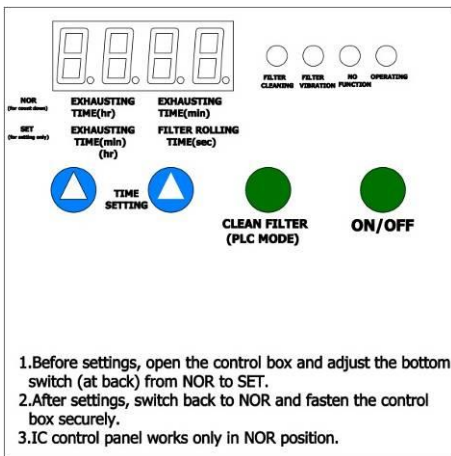
Figure 4

Left Blue Button Press Frequency	Left Screen Display	Right Blue Button Press Frequency	Right Screen Display
1	30	1	2
2	45	2	5
3	1H	3	7
4	2H	4	10
5	3H	5	12
6	4H	6	15

- When IC Panel in SET position, press ▲ (figure 3) to set filter bag cleaning time, from 2 secs to 10 secs (figure 4)
- After setting, switch back to NOR and fasten the control box securely. IC control panels works only in NOR position.

Indicator Description:

- OPERATING: Illuminates after starting the operation.



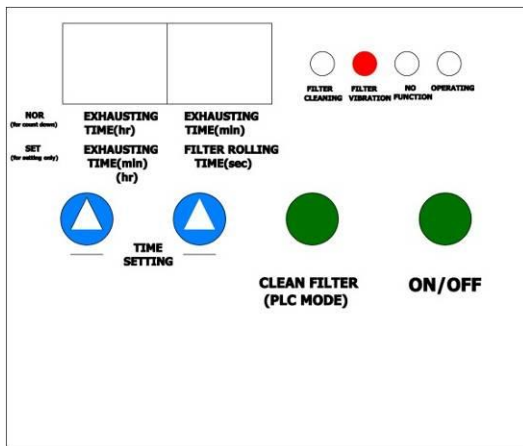
- NO FUNCTION
- FILTER VIBRATION: Illuminates motor vibration to shake down dusts adhered to filter bags. Press "CLEAN

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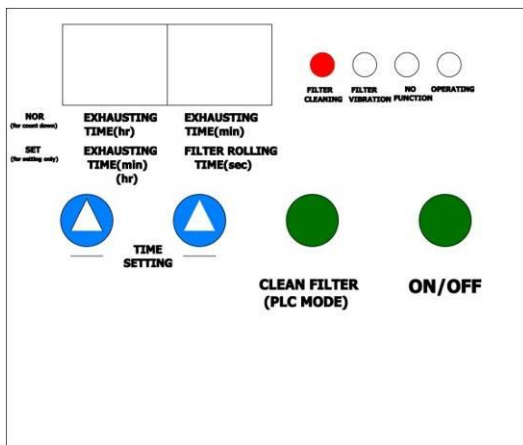


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FILTER" this button to start the vibrating dust shaking down after stopping the machine.



- (4) FILTER CLEANING: Illuminates during motor vibration to shake down dust adhered to filter bags.





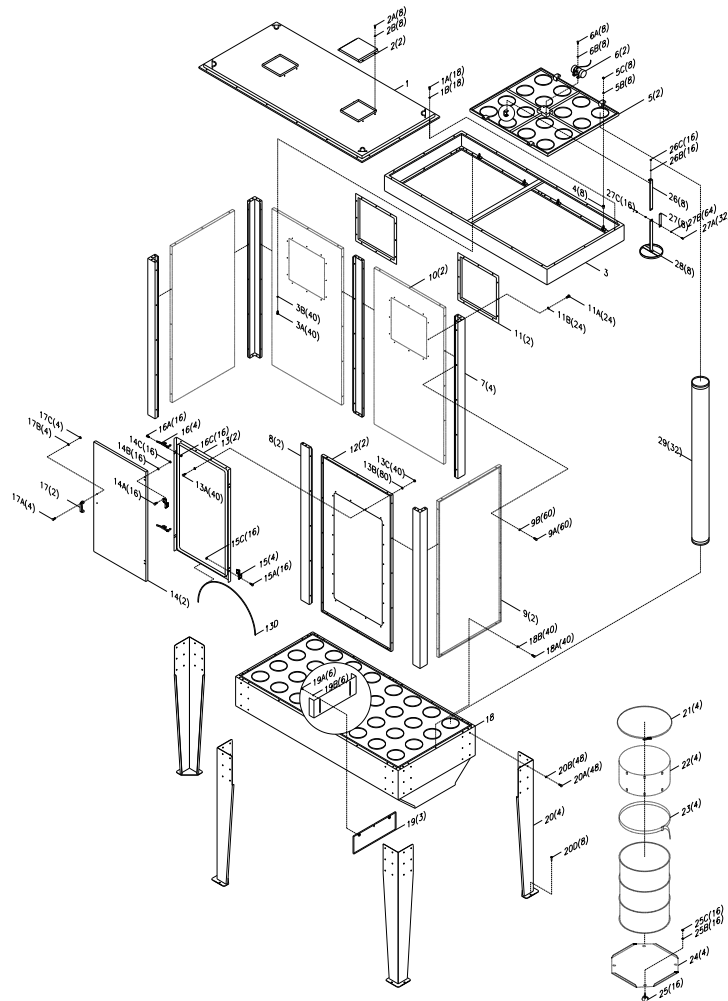
# AVANI Closed Bag-House Collector

## Collector Repair Parts Illustration and Repair Parts List For Repair Parts, call +1-919-570-2862

24 hours a day – 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list



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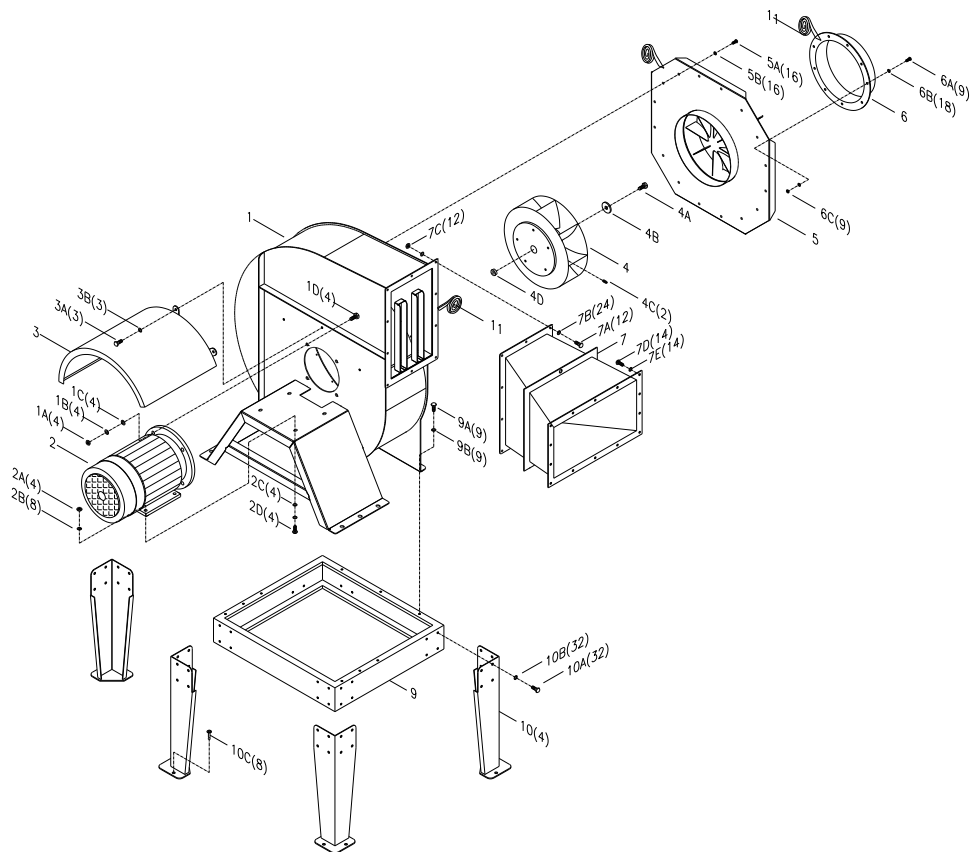
SMT-20140624

# AVANI Closed Bag-House Collector

## Blower Repair Parts Illustration and Repair Parts List For Repair Parts, call +1-919-570-2862 24 hours a day – 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list



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# AVANI Closed Bag-House Collector

## Repair Parts List

### Repair Parts List for Closed Bag-House Collector

Reference Number	Description	Part Number	Quantity
1	Upper Cover Board	A02-01-AC-C-600V-D-V-1	1
1A	Hex Screw: 5/16" x 3/4"	A02-01-AC-C-600V-D-V-1A	18
1B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-1B	18
2	Service Door	A02-01-AC-C-600V-D-V-2	2
2A	Hex Screw: 5/16" x 3/4"	A02-01-AC-C-600V-D-V-2A	8
2B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-2B	8
3	Machine Upper Frame	A02-01-AC-C-600V-D-V-3	1
3A	Hex Screw: 5/16" x 3/4"	A02-01-AC-C-600V-D-V-3A	40
3B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-3B	40
4	Shockproof Cushion	A02-01-AC-C-600V-D-V-4	8
5	Filter Bag Fixing Plate-Upper	A02-01-AC-C-600V-D-V-5	2
5B	Flat Washer: 3/8" x OD23 x 2T	A02-01-AC-C-600V-D-V-5B	8
5C	Nylon Lock Nut: 3/8"	A02-01-AC-C-600V-D-V-5C	8
6	Vibration Motor	A02-01-AC-C-600V-D-V-6	2
6A	Hex Screw: 3/8" x 1"	A02-01-AC-C-600V-D-V-6A	8
6B	Flat Washer: 3/8" x OD23 x 2T	A02-01-AC-C-600V-D-V-6B	8
7	Filter Bag Frame Pillar-1	A02-01-AC-C-600V-D-V-7	4
8	Filter Bag Frame Pillar-2	A02-01-AC-C-600V-D-V-8	2
9	Side Panel to Filter Bag Frame (Right/Left)	A02-01-AC-C-600V-D-V-9	2
9A	Hex Screw: 5/16" x 3/4"	A02-01-AC-C-600V-D-V-9A	60
9B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-9B	60
10	Front Panel to Filter Bag Frame	A02-01-AC-C-600V-D-V-10	2

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Reference Number	Description	Part Number	Quantity
11	Flanged For Rear Panel Pipe	A02-01-AC-C-600V-D-V-11	2
11A	Hex Screw: 5/16" x 3/4"	A02-01-AC-C-600V-D-V-11A	24
11B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-11B	24
12	Rear Panel to Filter Bag Frame	A02-01-AC-C-600V-D-V-12	2
13	Door Frame	A02-01-AC-C-600V-D-V-13	2
13A	Hex Screw: 5/16" x 3/4"	A02-01-AC-C-600V-D-V-13A	40
13B	Flat Washer: 5/16" x OD18 x 2T	A02-01-AC-C-600V-D-V-13B	80
13C	Nylon Lock Nut: 5/16"	A02-01-AC-C-600V-D-V-13C	40
13D	Seal	A02-01-AC-C-600V-D-V-13D	1
14	Filter Bag Cleaning Door	A02-01-AC-C-600V-D-V-14	2
14A	Countersunk Inner Hex Screw: 1/4" x 5/8"	A02-01-AC-C-600V-D-V-14A	16
14B	Flat Washer: 1/4" x OD16 x 1.5T	A02-01-AC-C-600V-D-V-14B	16
14C	Hex Nut: 1/4"	A02-01-AC-C-600V-D-V-14C	16
15	Flange	A02-01-AC-C-600V-D-V-15	4
15A	Countersunk Philips Head Screw	A02-01-AC-C-600V-D-V-15A	16
15C	Nylon Lock Nut	A02-01-AC-C-600V-D-V-15C	16
16	Clamp	A02-01-AC-C-600V-D-V-16	4
16A	Countersunk Inner Hex Screw: 1/4" x 5/8"	A02-01-AC-C-600V-D-V-16A	16
16C	Hex Nut: 1/4"	A02-01-AC-C-600V-D-V-16C	16
17	Handle	A02-01-AC-C-600V-D-V-17	2
17A	Cap Screw: 5/16" x 1"	A02-01-AC-C-600V-D-V-17A	4
17B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-17B	4
17C	Nylon Lock Nut: 5/16"	A02-01-AC-C-600V-D-V-17C	4
18	Machine Lower Chamber	A02-01-AC-C-600V-D-V-18	1

## AVANI Closed Bag-House Collector

Reference Number	Description	Part Number	Quantity
18A	Hex Screw: 5/16" x 3/4"	A02-01-AC-C-600V-D-V-18A	40
18B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-18B	40
19	Striler Plate	A02-01-AC-C-600V-D-V-19	3
19A	Hex Screw: 3/8" x 1"	A02-01-AC-C-600V-D-V-19A	6
19B	Flat Washer: 3/8" x OD23 x 2T	A02-01-AC-C-600V-D-V-19B	6
20	Machine Support	A02-01-AC-C-600V-D-V-20	4
20A	Hex Screw: 3/8" x 1"	A02-01-AC-C-600V-D-V-20A	48
20B	Flat Washer: 3/8" x OD23 x 2T	A02-01-AC-C-600V-D-V-20B	48
20D	Sleeve Anchor: 3/8" x 2"	A02-01-AC-C-600V-D-V-20D	8
21	Bag Clamp: Ø24"	A02-01-AC-C-600V-D-V-21	4
22	Canvas	A02-01-AC-C-600V-D-V-22	4
23	Bag Clamp	A02-01-AC-C-600V-D-V-23	4
24	Trolley	A02-01-AC-C-600V-D-V-24	4
25	Wheel	A02-01-AC-C-600V-D-V-25	16
25B	Flat Washer: 3/8" x OD23 x 2T	A02-01-AC-C-600V-D-V-25B	16
25C	Hex Nut: 3/8"	A02-01-AC-C-600V-D-V-25C	16
26	Vibration Fixing Base-Upper	A02-01-AC-C-600V-D-V-26	8
26B	Flat Washer: 5/16" x OD23 x 2T	A02-01-AC-C-600V-D-V-26B	16
26C	Hex Nut: 5/16"	A02-01-AC-C-600V-D-V-26C	16
27	Steel Sheet	A02-01-AC-C-600V-D-V-27	8
27A	Hex Screw: 1/4" x 3/4"	A02-01-AC-C-600V-D-V-27A	32
27B	Flat Washer: 1/4" x OD13 x 3T	A02-01-AC-C-600V-D-V-27B	64
27C	Nylon Lock Nut: 1/4"	A02-01-AC-C-600V-D-V-27C	32
28	Vibration Fixing Base-lower	A02-01-AC-C-600V-D-V-28	8
29	Filter Bag: Ø8" x 2.2M	A02-01-AC-C-600V-D-V-29	32

# AVANI Closed Bag-House Collector

## Repair Parts List

### Repair Parts List for Blower (DBN-200)

Reference Number	Description	Part Number	Quantity
1	Blower	A02-01-DBN-150-1	1
1A	Hex Nut: 5/8"	A02-01-DBN-150-1A	4
1B	Lock Washer: 5/8"	A02-01-DBN-150-1B	4
1C	Flat Washer: 5/8" x OD40 x 2.5T	A02-01-DBN-150-1C	4
1D	Hex Screw: 5/8" x 2"	A02-01-DBN-150-1D	4
2	Motor	A02-01-DBN-150-2	1
2A	Hex Nut: 1/2"	A02-01-DBN-150-2A	4
2B	Lock Washer: 1/2"	A02-01-DBN-150-2B	4
2C	Flat Washer: 1/2"xOD34x2.5T	A02-01-DBN-150-2C	8
2D	Hex Screw: 1/2" x 2"	A02-01-DBN-150-2D	4
3	Motor Cover	A02-01-DBN-150-3	1
3A	Hex Screw: 3/8" x 3/4"	A02-01-DBN-150-3A	3
3B	Flat Washer: 3/8" x OD23 x 2T	A02-01-DBN-150-3B	3
4	Impeller	A02-01-DBN-150-4	1
4A	Motor Screw: M16 x 30mm	A02-01-DBN-150-4A	1
4B	Impeller Washer	A02-01-DBN-150-4B	1
4C	countersunk screws: 3/8" x 1/2"	A02-01-DBN-150-4C	2
4D	Bearing Cover	A02-01-DBN-150-4D	1
5	Blower Inlet Cover	A02-01-DBN-150-5	1
5A	Hex Screw: 3/8" x 3/4"	A02-01-DBN-150-5A	16
5B	Flat Washer: 3/8" x OD23 x 2T	A02-01-DBN-150-5B	16
6	Flange	A02-01-DBN-150-6	1

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



# AVANI Closed Bag-House Collector

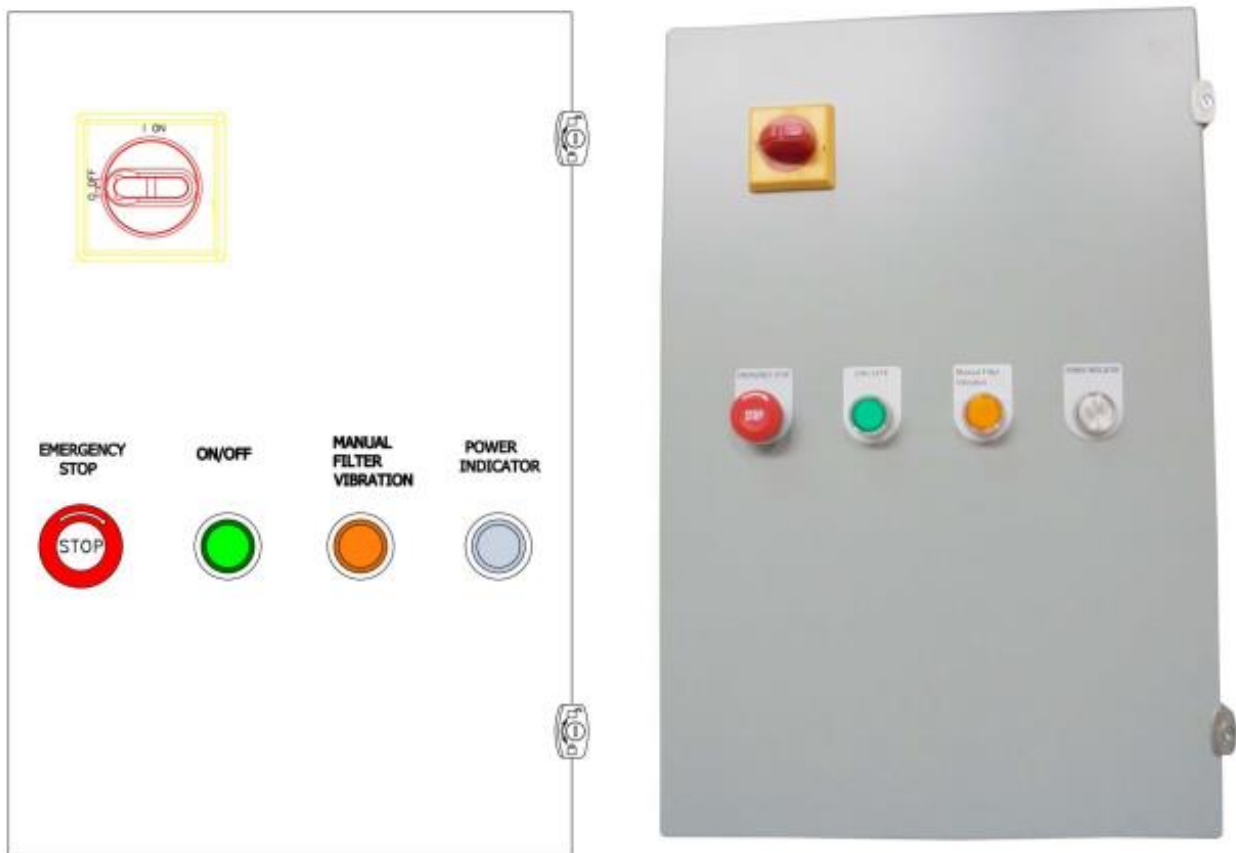
Reference Number	Description	Part Number	Quantity
6A	Hex Screw :3/8" x 1"	A02-01-DBN-150-6A	9
6B	Flat Washer: 3/8" x OD23 x 2T	A02-01-DBN-150-6B	18
6C	Hex Nut: 3/8"	A02-01-DBN-150-6C	9
7	Outlet Connector	A02-01-DBN-150-7	1
7A	Hex Screw: 3/8" x 1"	A02-01-DBN-150-7A	12
7B	Flat Washer: 3/8" x OD23 x 2T	A02-01-DBN-150-7B	24
7C	Hex Nut: 3/8"	A02-01-DBN-150-7C	12
7D	Hex Screw: 3/8" x 1"	A02-01-DBN-150-7D	14
7E	Flat Washer: 3/8" x OD23 x 2T	A02-01-DBN-150-7E	14
9	Blower Base	A02-01-DBN-150-9	1
9A	Hex Screw: 3/8" x 3/4"	A02-01-DBN-150-9A	9
9B	Flat Washer: 3/8" x OD23 x 2T	A02-01-DBN-150-34	9
10	Blower Support Stand	A02-01-DBN-150-10	4
10A	Hex Screw: 3/8" x 3/4"	A02-01-DBN-150-10A	32
10B	Flat Washer: 3/8" x OD23 x 2T	A02-01-DBN-150-10B	32
10C	Sleeve Anchor: 3/8" x 3"	A02-01-DBN-150-10C	8
11	Foam Tap	A02-01-DBN-150-11	2

# AVANI Closed Bag-House Collector

## Control Panel Explanation

Individual UL Certified Control Box

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

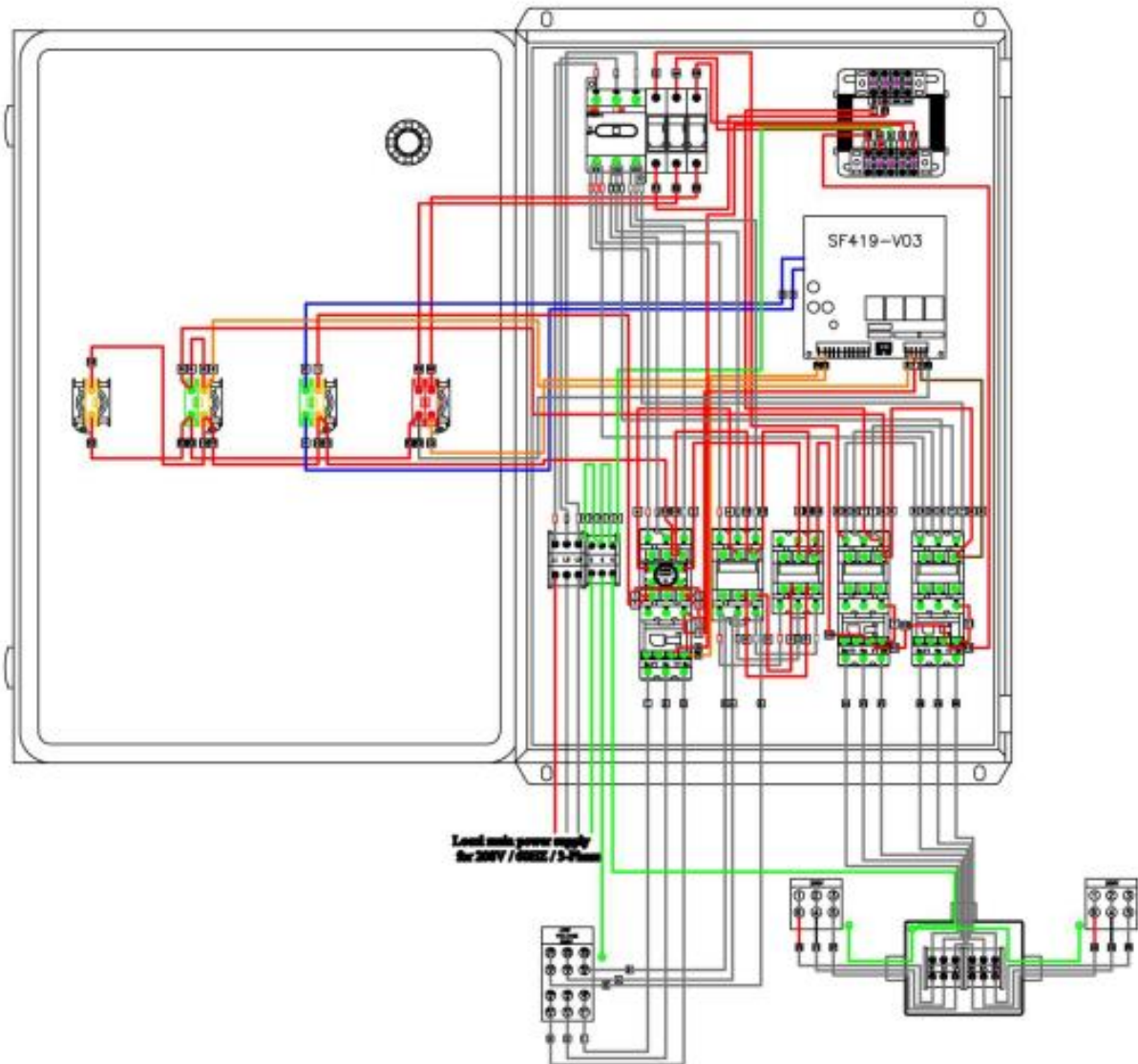


Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain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



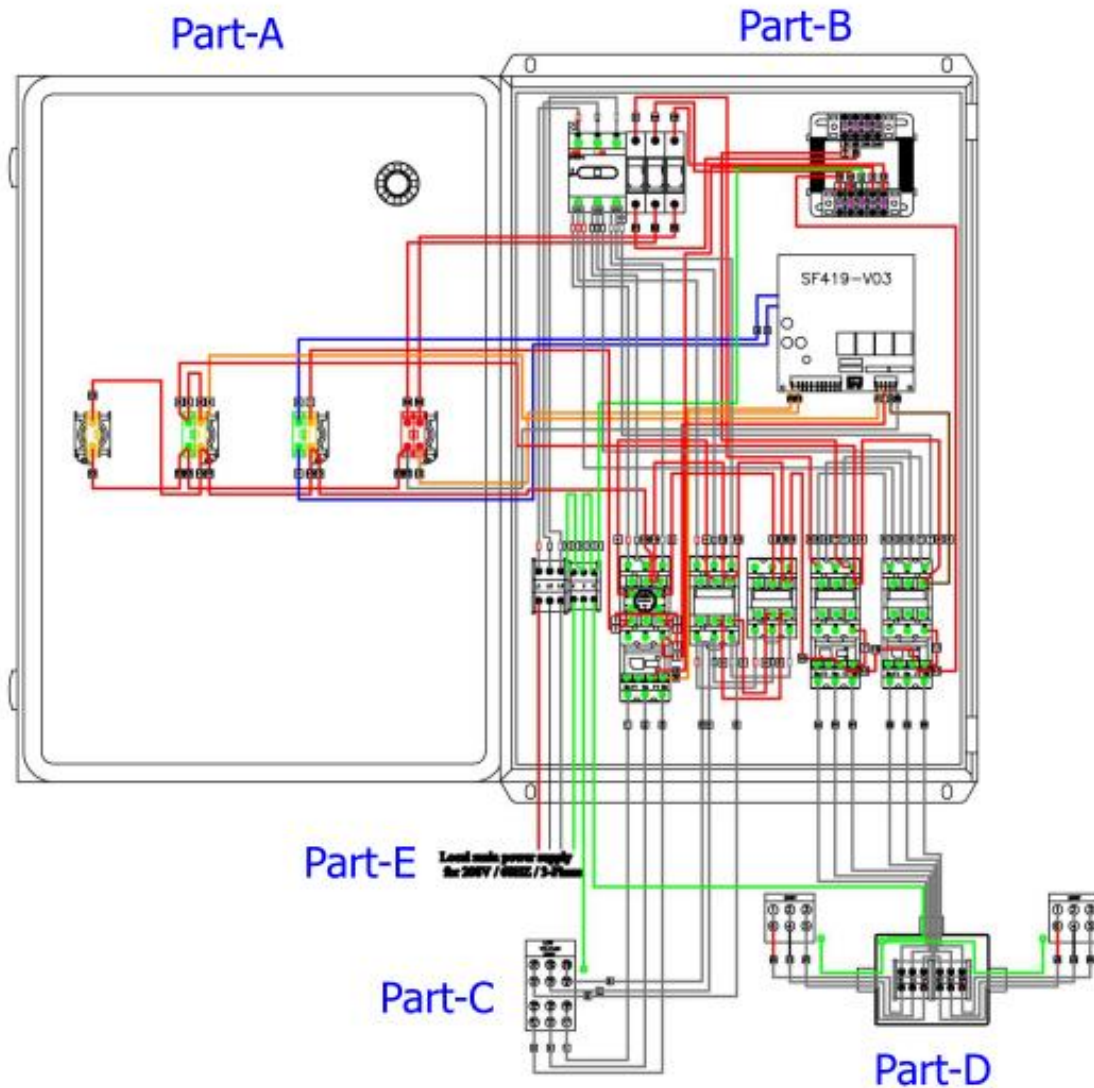
# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V



# AVANI Closed Bag-House Collector

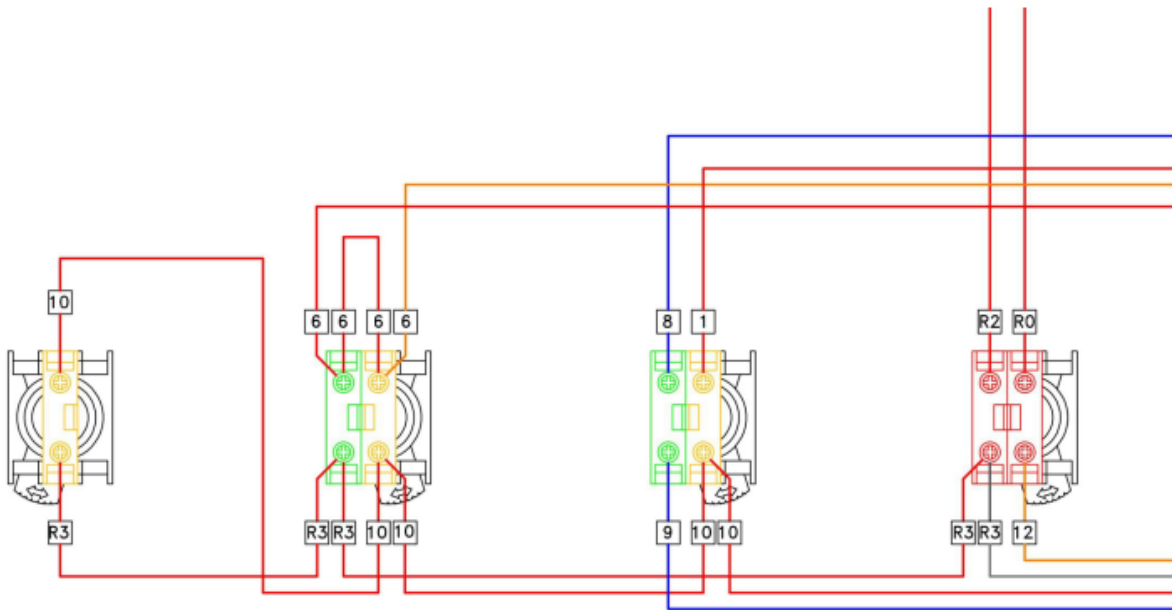
## Main Electrical Box Wiring Diagram for AC-C-600V-D-V



# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

### Part-A



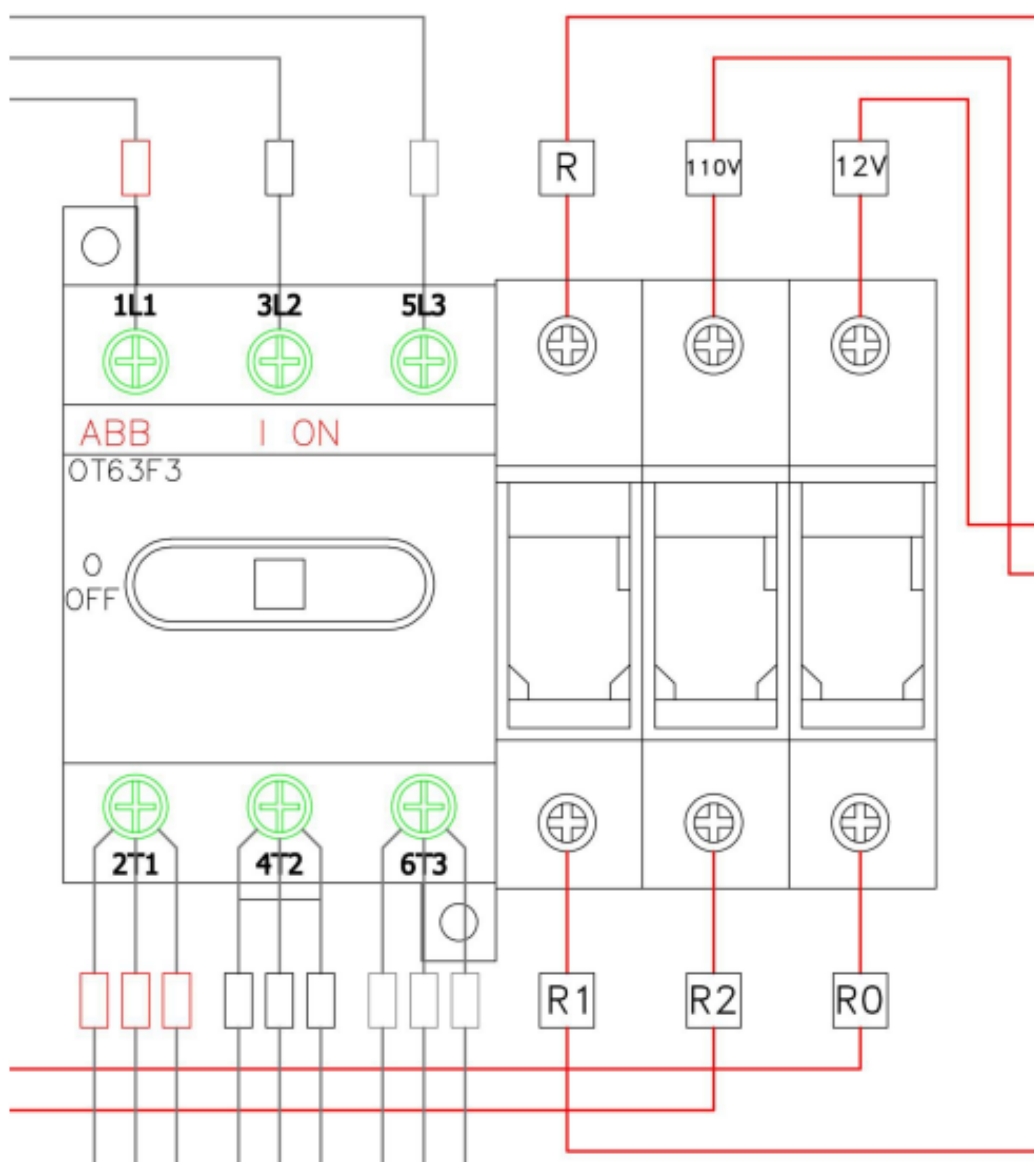
# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

### Part-B-1:

#### Panel disconnect switch.

#### Fuse Holder

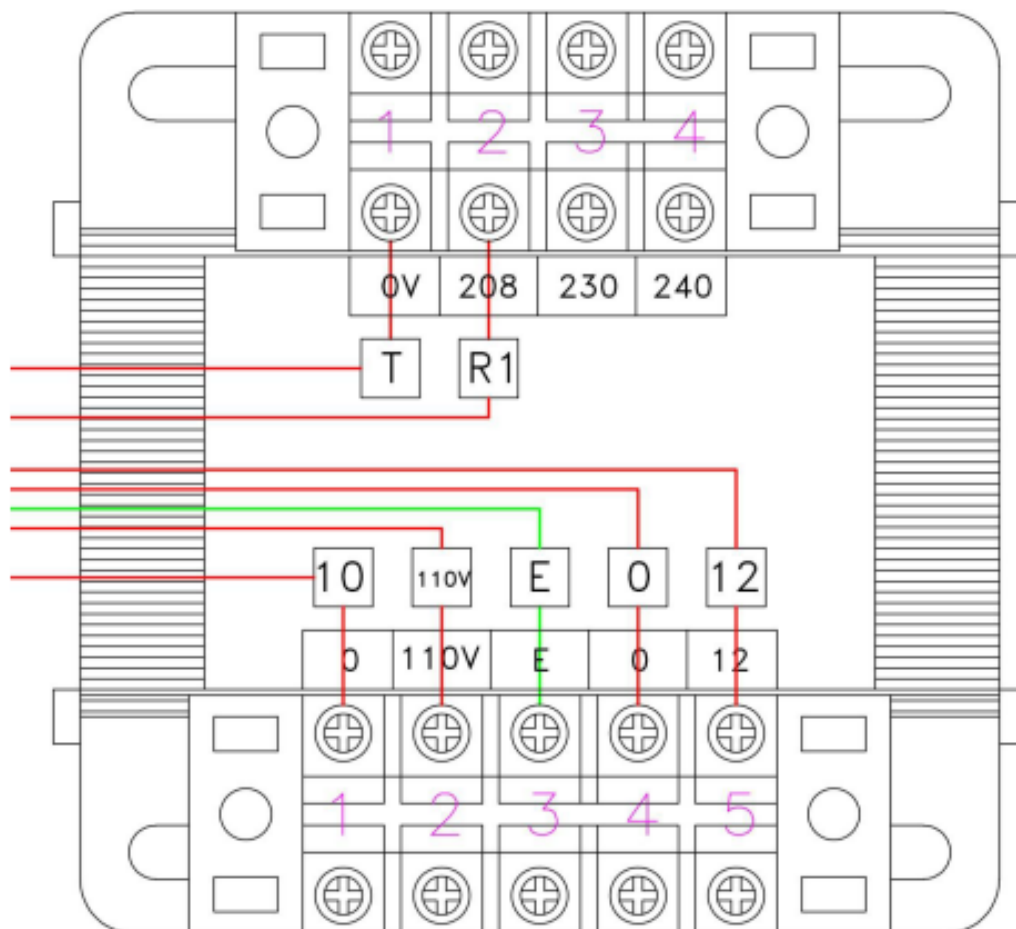


# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

### Part-B-2:

### Transformer for 208V



# AVANI Closed Bag-House Collector

## Main Electrical Box Components for AC-C-600V-D-V



Part-B-2

◆ Transformer.



◆ Panel disconnect switch.



Part-B-1

◆ Fuse holder.



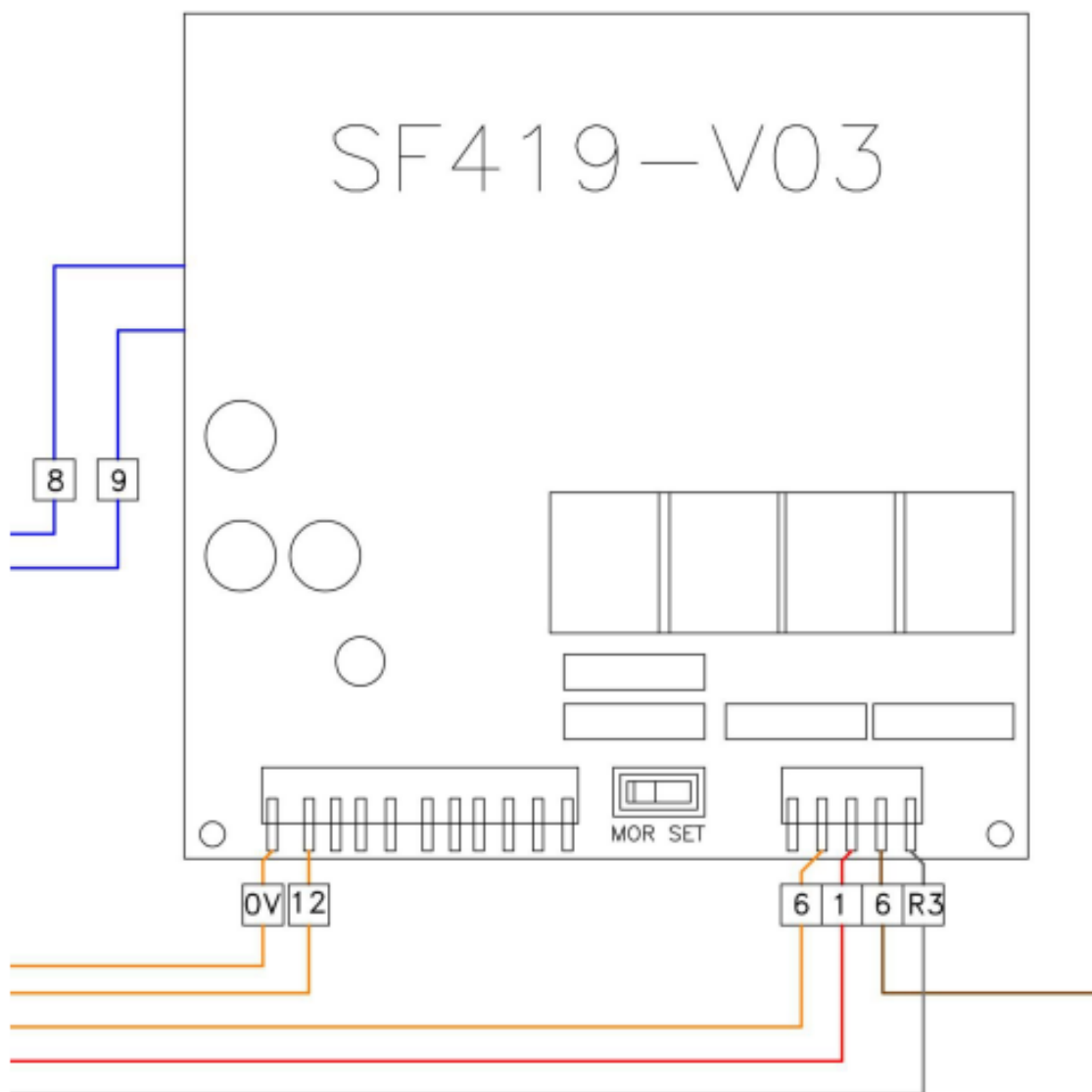
Part-B-1

# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

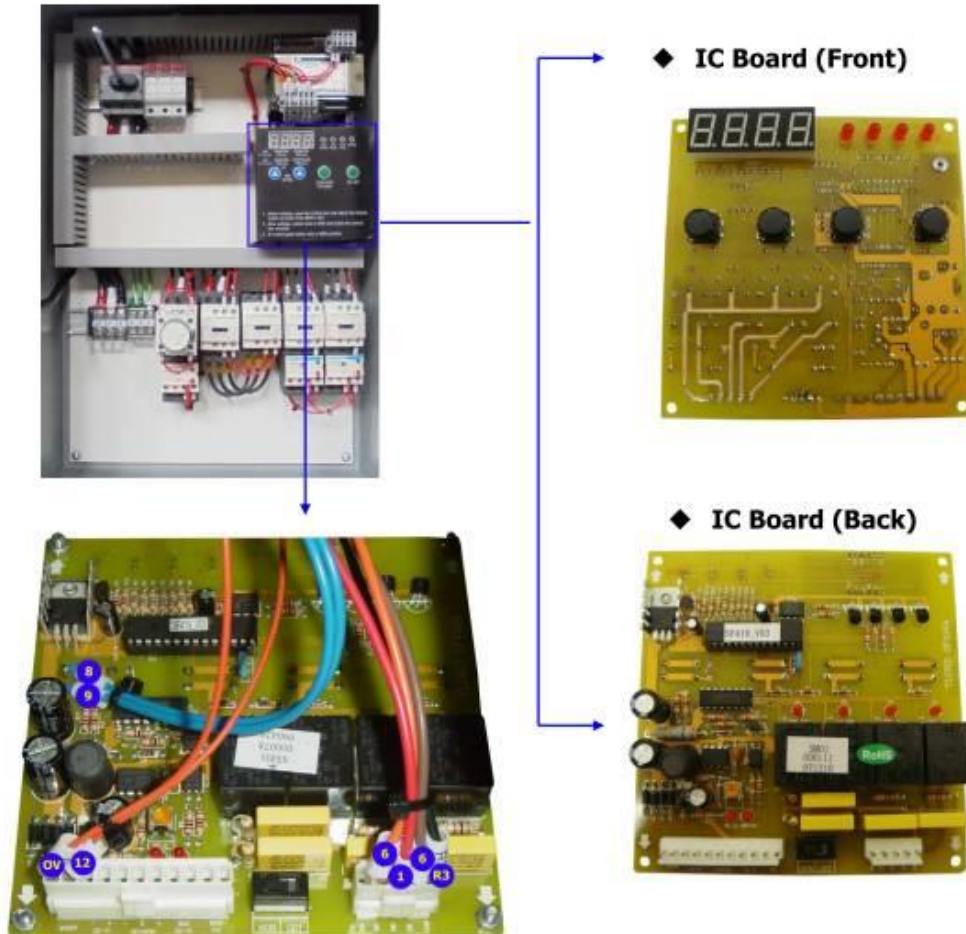
**Part-B-3:**

**IC Board.**



# AVANI Closed Bag-House Collector

## Main Electrical Box Components for AC-C-600V-D-V



- ◆ **OV & 12 : The main Power for IC board.**
- ◆ **6 : Ffilter Vibration (PLC Mode).**
- ◆ **1 : Blower on/off.**
- ◆ **6 : During motor vibration to shake down dusts adhered to filters.**
- ◆ **R3 : Common Point.**
- ◆ **8 & 9 : ON/OFF.**



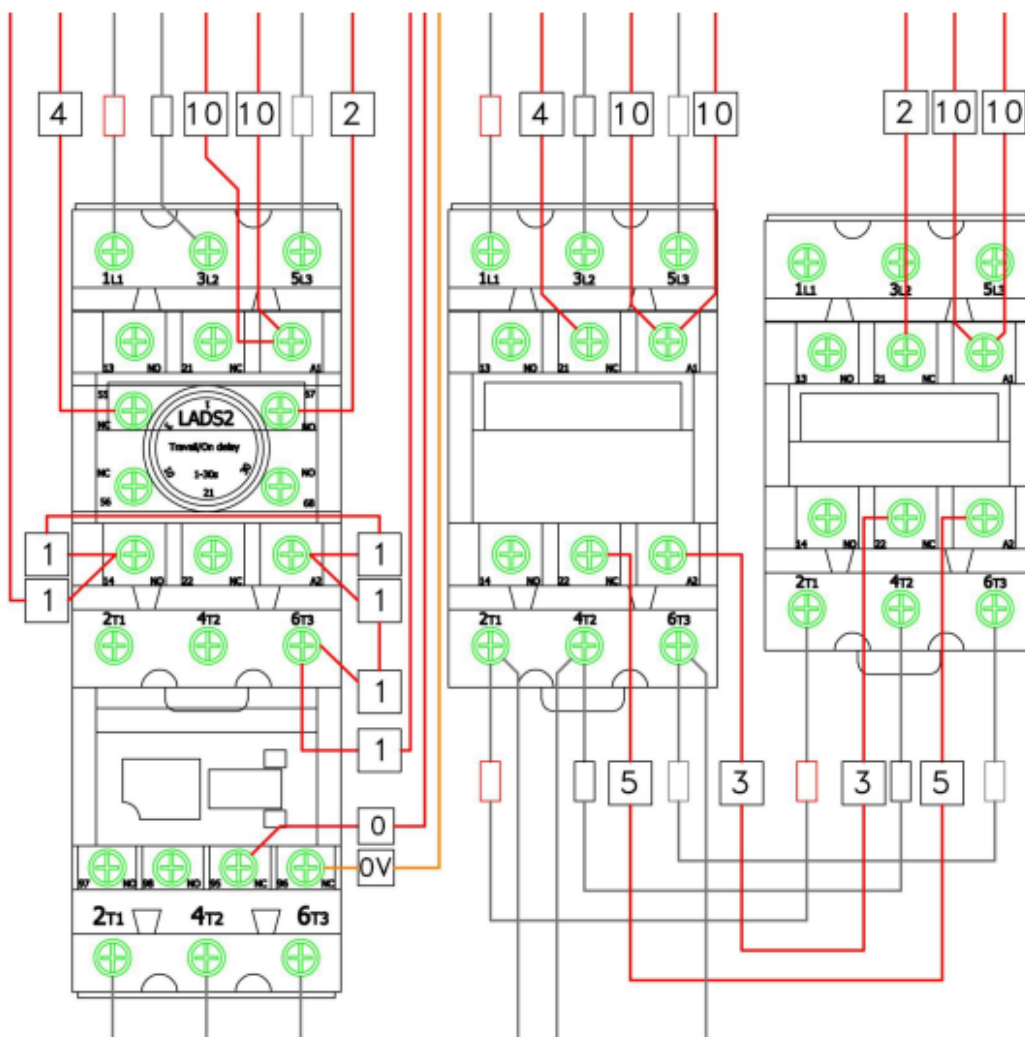
# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

**Part-B-4:**

**Magnetic Contactor.**

**Overload Relay.**



# AVANI Closed Bag-House Collector

## Main Electrical Box Components for AC-C-600V-D-V



◆ Magnetic contactor.



◆ Timer relay.



◆ Overload relay for motor of 20HP.

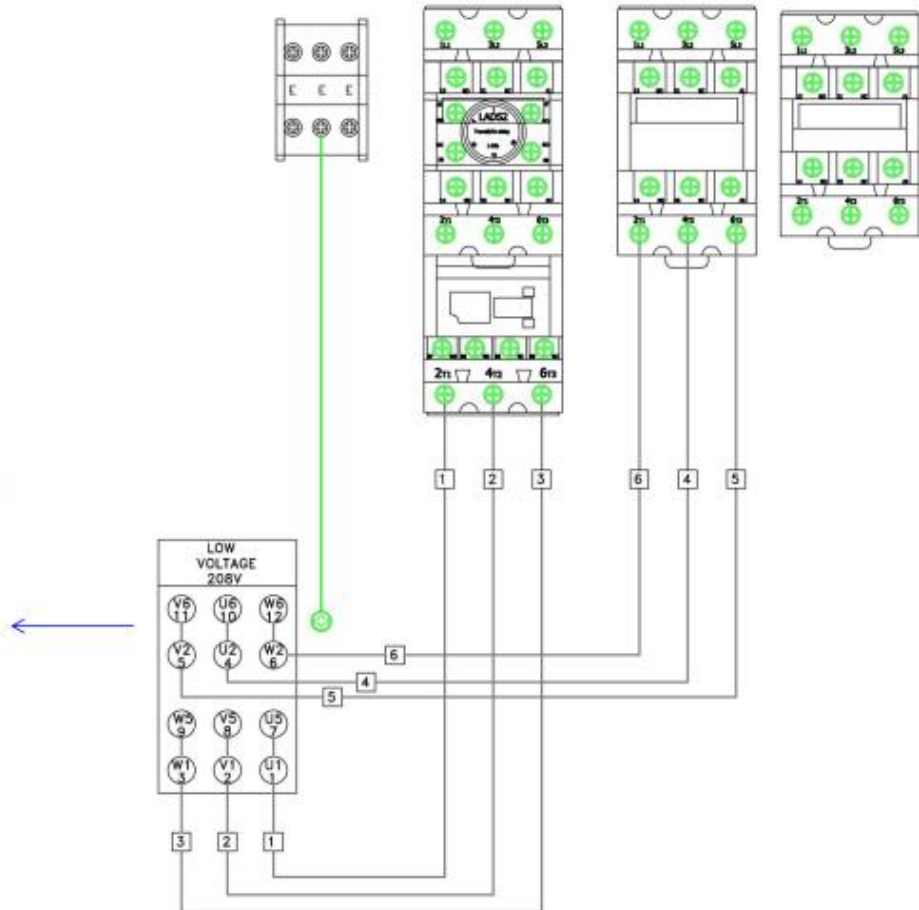


# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

Part-C

Connect to motor.



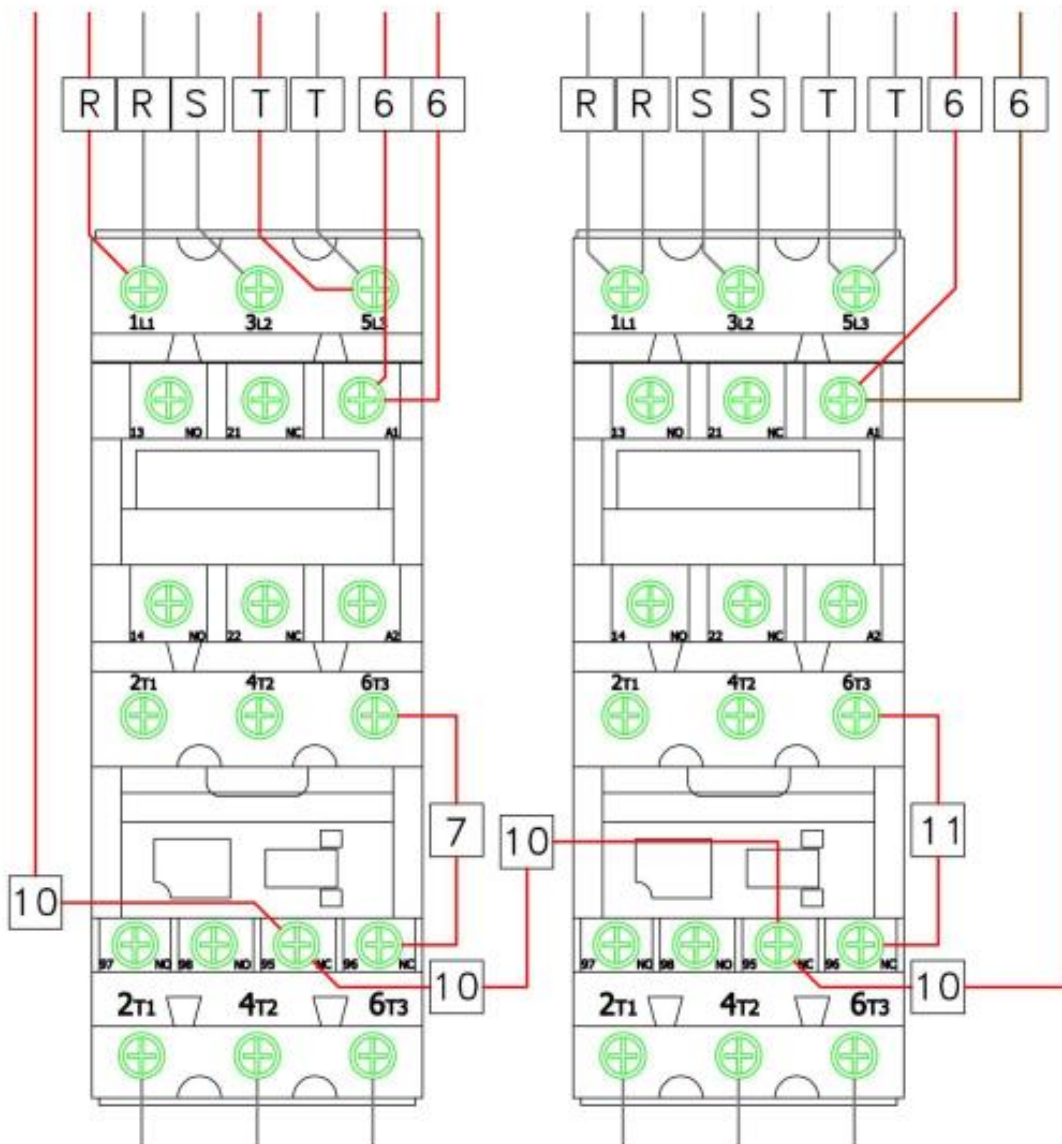
# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

### Part-D-1

### Magnetic Contactor.

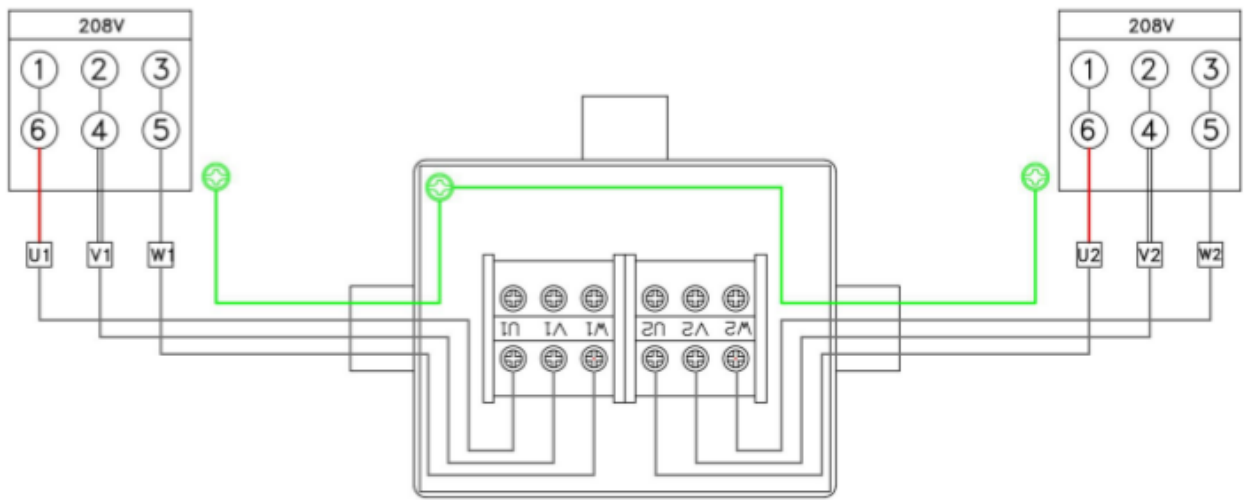
### Overload Relay.



# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

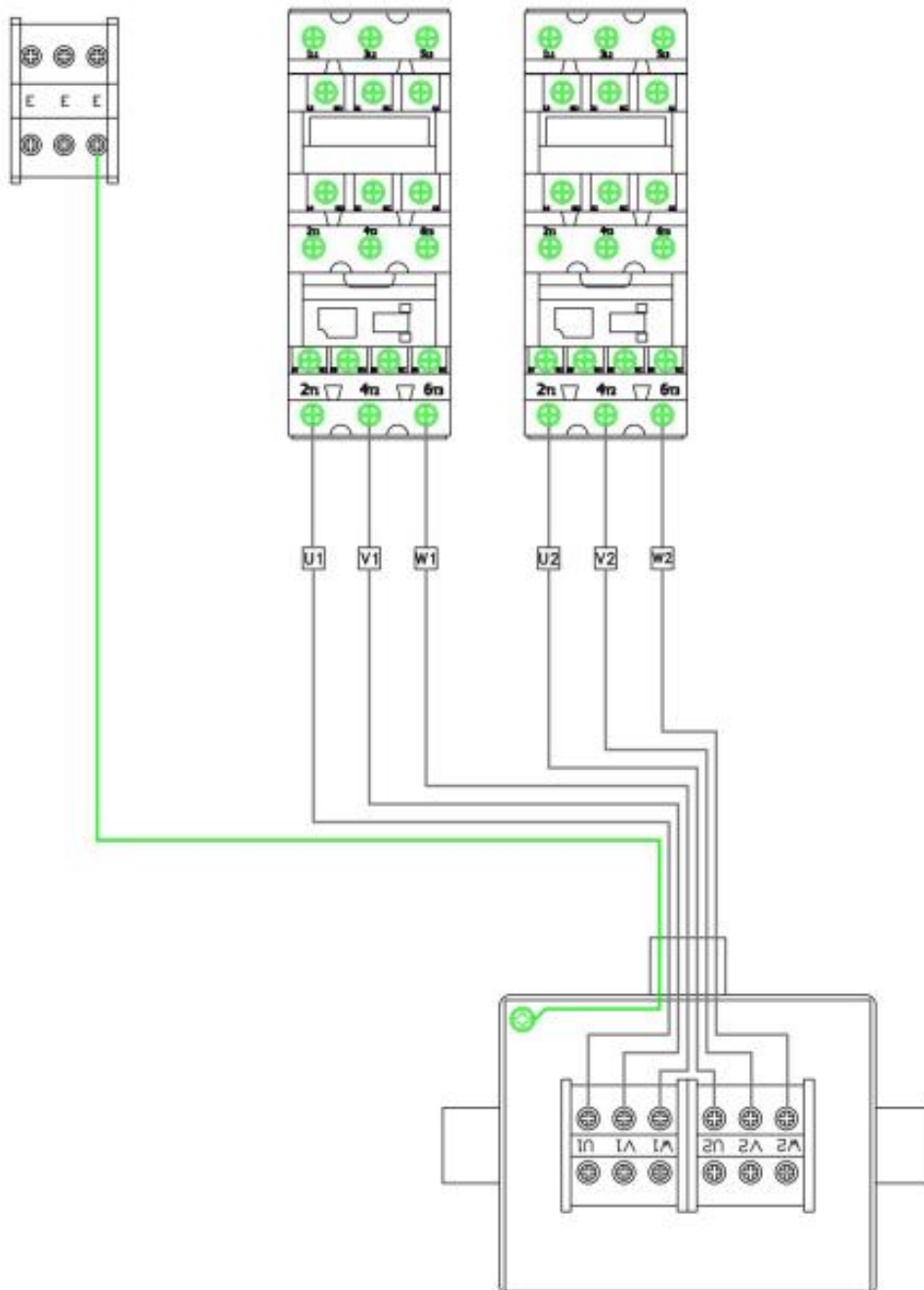
### Part-D-2



# AVANI Closed Bag-House Collector

## Main Electrical Box Wiring Diagram for AC-C-600V-D-V

### Part-D-3



# AVANI Closed Bag-House Collector

## Main Electrical Box Components for AC-C-600V-D-V



◆ Overload relay for motor 1/16HP

◆ Magnetic contactor.



# AVANI Closed Bag-House Collector

## Main Electrical Box Components for AC-C-600V-D-V



◆ Electrical junction box.



◆ Shaker : 1/16HP.

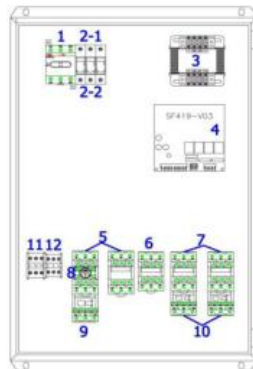




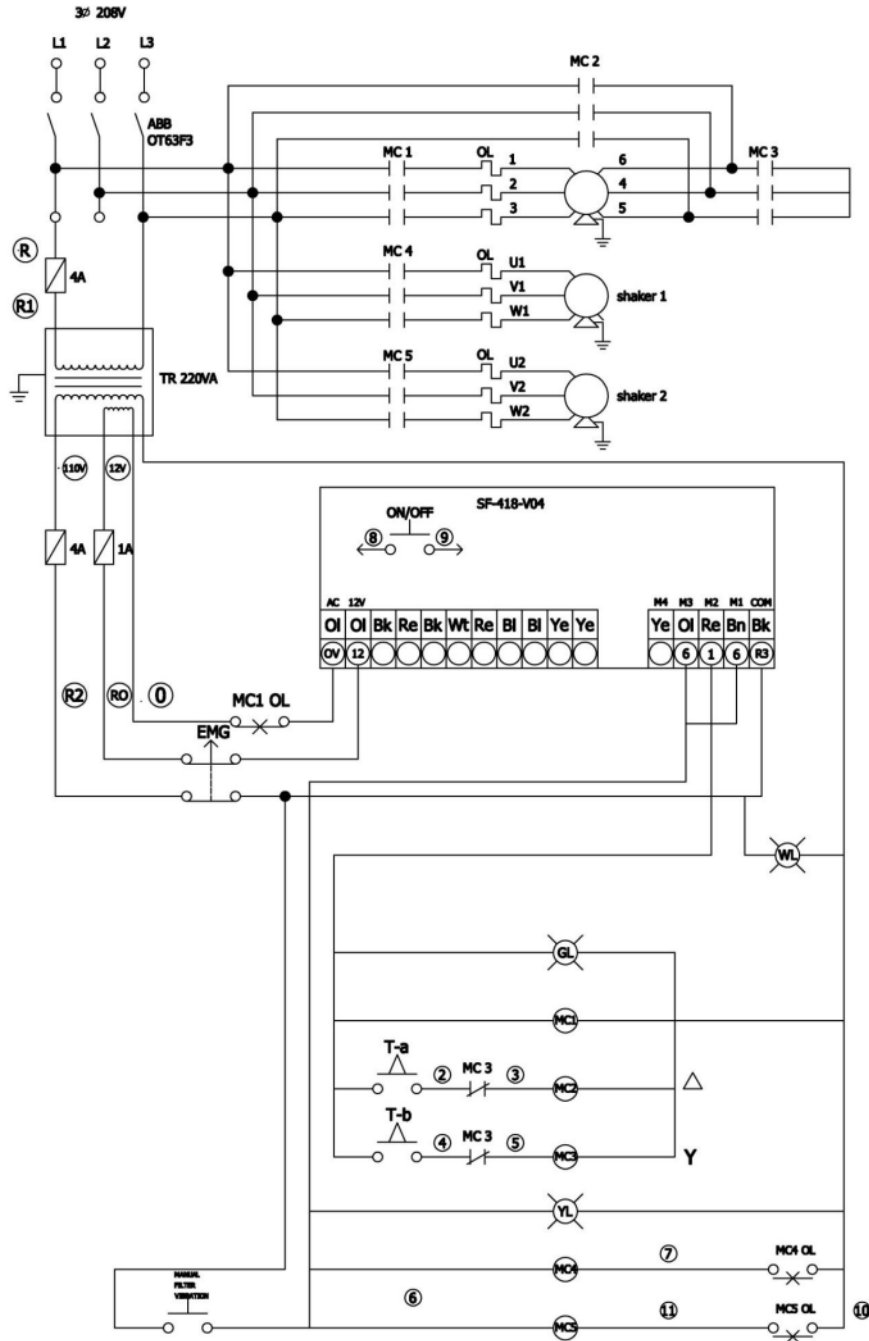
# AVANI Closed Bag-House Collector

Kearns High School SF-600V-D-V 20HP Control Box

Number #	Part Name	Description	Q'ty	Voltage	Brand	item #	Web
1	Switch-disconnector	OT63F3	1		ABB	1SCA105332R1001	<a href="http://www.abb.com">www.abb.com</a>
	Selector type handles	OHYS2AJ	1		ABB	1SCA105296R1001	<a href="http://www.abb.com">www.abb.com</a>
	Shafts	OXS6X180	1		ABB	1SCA101659R1001	<a href="http://www.abb.com">www.abb.com</a>
2-1	Fuse : KTK	4A	2	600VAC	Grainger	6F132	<a href="http://www.grainger.com">www.grainger.com</a>
					Bussmann	KTK-4	<a href="http://www.cooperindustries.com">http://www.cooperindustries.com</a>
	Fuse : KTK	1A	1	600VAC	Grainger	4XC37	<a href="http://www.grainger.com">www.grainger.com</a>
2-2	Fuse Holder	30A	3	600VAC	Bussmann	KTK-1	<a href="http://www.cooperindustries.com">http://www.cooperindustries.com</a>
					Grainger	13M221	<a href="http://www.grainger.com">www.grainger.com</a>
3	Transformer	220VA	1	15HP/208V	San Ford	San Ford	
		(0.208V.230V.240V/0.110V/0.12V)					
4	IC board		1	1		12VAC	San Ford
5	Contactor	110V	2	20HP/208V	Schneider-electric	LC1D32F7	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
6	Contactor	110V	1	20HP/208V	Schneider-electric	LC1D25F7	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
7	Contactor	110V	2	1/16HP/208V	Schneider-electric	LC1D09F7	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
8	Timer Relay	1~30s	1	600VAC	Schneider-electric	LRDS2	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
9	Overload Relay	30~37A	1	600VAC	Schneider-electric	LRD52	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
					Schneider-electric	LR3D52	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
					Grainger	3EA40	<a href="http://www.grainger.com">www.grainger.com</a>
10	Overload Relay	0.4~0.63A	1	600VAC	Schneider-electric	LRD04	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
					Schneider-electric	LR3D04	<a href="http://www.schneider-electric.com">www.schneider-electric.com</a>
					Grainger	5A675	<a href="http://www.grainger.com">www.grainger.com</a>
11	Power Distribution Blocks : 3 Pole	90A	1	600VAC	Grainger	5A675	<a href="http://www.grainger.com">www.grainger.com</a>
12	Terminal Strip : 3 Pole	30A	1	600VAC	Grainger	6ZEJ0	<a href="http://www.grainger.com">www.grainger.com</a>
Terminal Block Accessories	Mounting Channels	35mm x 1M	1		Grainger	5B357	<a href="http://www.grainger.com">www.grainger.com</a>
	Terminal Block End Barrier		2		Grainger	5B361	<a href="http://www.grainger.com">www.grainger.com</a>
	Screw On End Clamp		2		Grainger	5B373	<a href="http://www.grainger.com">www.grainger.com</a>



# AVANI Closed Bag-House Collector



# AVANI Closed Bag-House Collector

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## **Contact Information**

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