

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

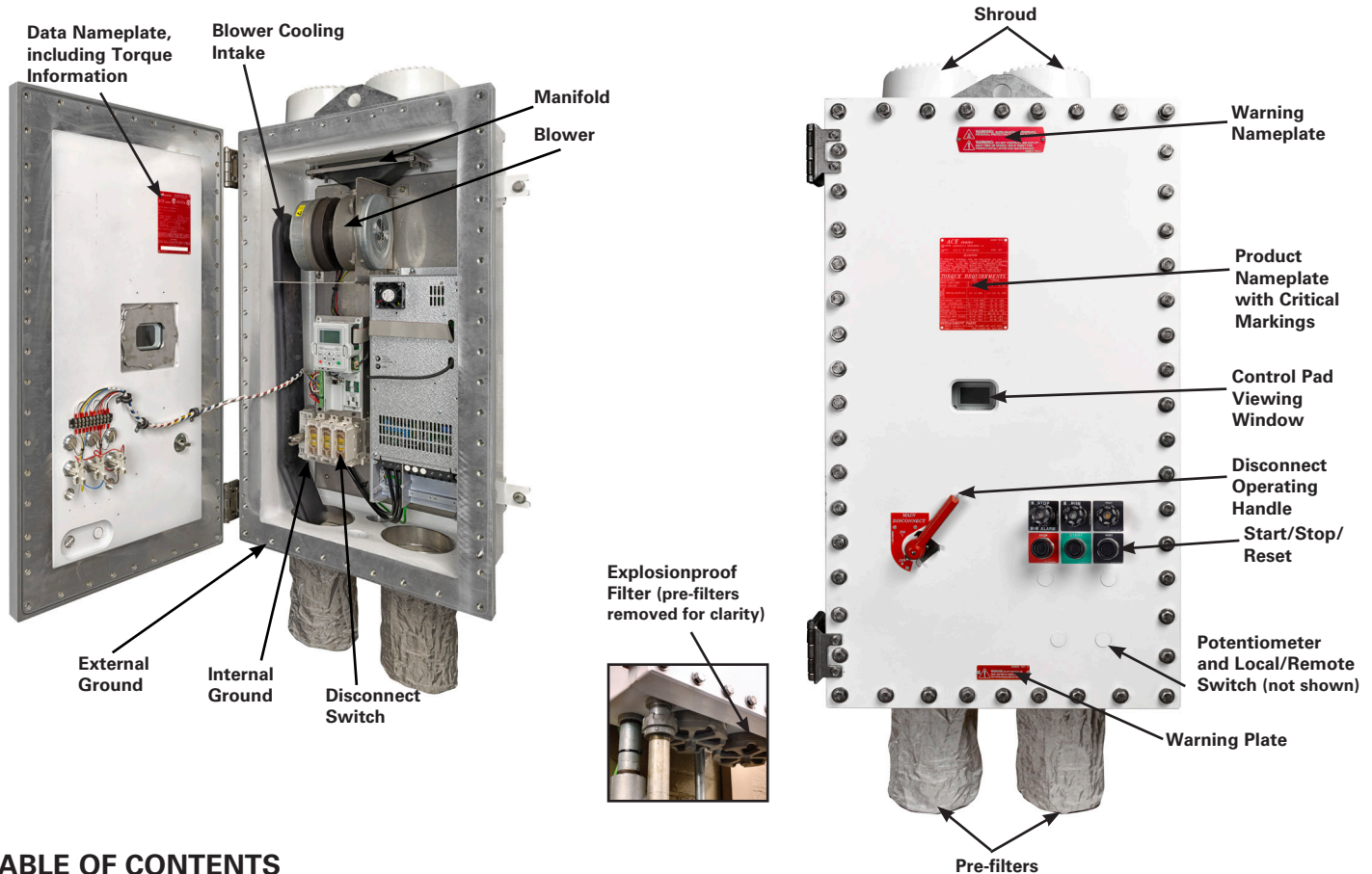


TABLE OF CONTENTS

1. Safety Instructions		5. Maintenance	
1.1 Application	Page 2	5.1 Drive Maintenance	Page 8
1.2 Electrical Safety	Page 2	5.2 Cooling System Maintenance	Page 9
1.3 Blower Safety	Page 2	5.3 Torque Verification	Page 9
1.4 Hot Surfaces	Page 2	5.4 Explosive event required maintenance	Page 9
1.5 Enclosure Safety	Page 2, 3		
2. Mechanical Installation		6. Technical Data	
2.1 Airflow Provisions	Page 3	6.1 Technical Data Chart	Page 9
2.2 Weights	Page 3	6.2 Power Loss (Heat Dissipation)	Page 10
2.3 Lifting	Page 3	6.3 De-rating Factors and Curves	Page 10
2.4 Dimensional Drawings	Page 4	7. Crouse-Hinds Drive Parameters	
2.5 Mounting	Page 5	7.1 Parameter Table	Page 10
2.6 Shroud Installation	Page 5		
2.7 Pre-filter Installation	Page 5	8. Replacement Parts	
3. Electrical Installation		8.1 Pre-filter Kit	Page 11
3.1 Enclosure Grounding - Internal/External	Page 5, 6	8.1.1 Pre-filter Installation Instructions	Page 11
3.2 Line Feed	Page 5, 6	8.2 Sintered Filter Kit	Page 11
3.3 Load Feed and Shield Grounding to Drive	Page 5, 6	8.2.1 Sintered Filter Installation Instructions	Page 11
3.4 Control Wire Routing	Page 7	8.3 Blower Kit	Page 11
3.5 Factory Wiring Schematic	Page 7	8.3.1 Blower Installation Instructions	Page 11
3.6 Communication and I/O modules	Page 7	8.4 Window Kit (ACE KIT 7, ACE KIT 8)	Page 12
4. General Operation		8.4.1 Window Kit Installation Instructions	Page 12
4.1 Control Pad Viewing Window	Page 7	8.5 Cast Filter Shroud Replacement Kit (ACE KIT 9)	Page 12
4.2 Disconnect and Lockout/Tagout	Page 8	8.5.1 Filter Shroud Installation Instructions	Page 12
4.3 Drive Controls and Status Indication	Page 8		
4.4 PT (Potentiometer) and LR (Local/Remote)	Page 8		

1. SAFETY INSTRUCTIONS

The ACE Explosionproof VFD should be installed, inspected and maintained by qualified and competent personnel.

1.1 APPLICATION

The ACE Explosionproof VFD is rated Class I, Divisions 1 and 2 for use in hazardous environments, and is designed to match the strict requirements of pumps, compressors, fans, separators and mixers in such process industries as:

- Oil and gas / refineries
- OEM skid builders
- Petrochemical
- Water / wastewater
- Pharmaceutical
- Food and beverage manufacturing

1.2 ELECTRICAL SAFETY

⚠ WARNING: HIGH VOLTAGE

Electrical power must be OFF before and during inspection or service. Ensure electrical supply to the enclosure is disconnected, locked out and tagged out. Personnel injury or damage to equipment can occur if all power upstream from the enclosure is not fully disconnected prior to opening.

Before commissioning the drive and putting it into service, make sure that the motor and all driven equipment are suitable for operation throughout the speed range provided by the drive. The drive can be adjusted to operate the motor at speeds above and below the speed provided by connecting the motor directly to the line power.

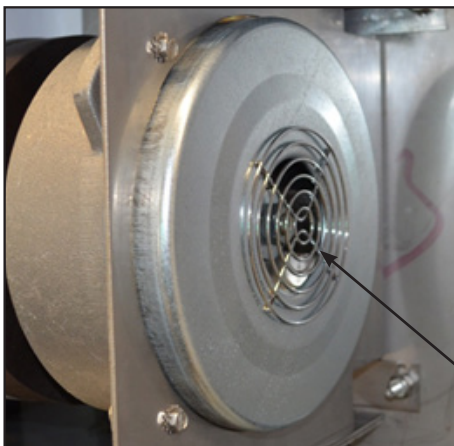
⚠ CAUTION

To ensure safety and VFD performance, grounding provisions for the enclosure, blower and VFD must be made before operating.

1.3 BLOWER SAFETY

⚠ WARNING

To avoid cooling system malfunction, cooling system failure and personnel injury, close and seal the enclosure before energizing.



Blower Intake

⚠ WARNING: HIGH SPEED

To avoid personnel injury, DO NOT handle the blower or service the enclosure while energized.



⚠ WARNING

To avoid cooling system malfunction, cooling system failure and personnel injury, remove all loose debris and deposits before energizing.

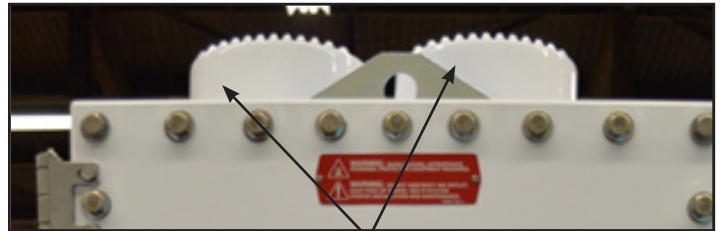
These blowers comply with EN 61800-5-1 safety standards.

The blower is non-serviceable. Refer to ACE KIT 3, Section 8.3, for replacement instructions.

⚠ WARNING: BURN HAZARD

To avoid personnel injury, use appropriate personnel protective equipment before handling and operating the device.

1.4 HOT SURFACES



Filter Shrouds

1.5 ENCLOSURE SAFETY

⚠ WARNING

To avoid personnel injury and property damage, clean dirt and debris from flat ground joint surfaces before the cover is closed. NEVER energize this equipment if the flat ground joint has been scratched or damaged.

All pipe threaded connections into the enclosure require a minimum of five (5) full threads of engagement. All straight threaded connections into the enclosure require a minimum of eight (8) full threads of engagement. Personnel injury or equipment damage can result from threaded joints containing less than the minimum thread engagement required.

All unused conduit openings must be plugged. UL Listed plug must engage a minimum of five (5) full threads and be a minimum of 1/8" thick.

Conduit sealing fittings MUST be installed in each attached conduit run (within eighteen (18) inches of the enclosure) to comply with the latest edition of the National Electrical Code® (NEC) plus any other applicable code.

The cover must be properly fastened to the body with all cover bolts torqued to 40-45 ft.-lbs. (19.2-21.5 N-m). Personnel injury or equipment damage can result if the flat joint flame path is not properly fastened.

⚠ WARNING

To avoid cooling system malfunction and personnel injury, be sure to torque the first eight (8) cover screws sequentially per Figure 1 before torquing the remaining screws.

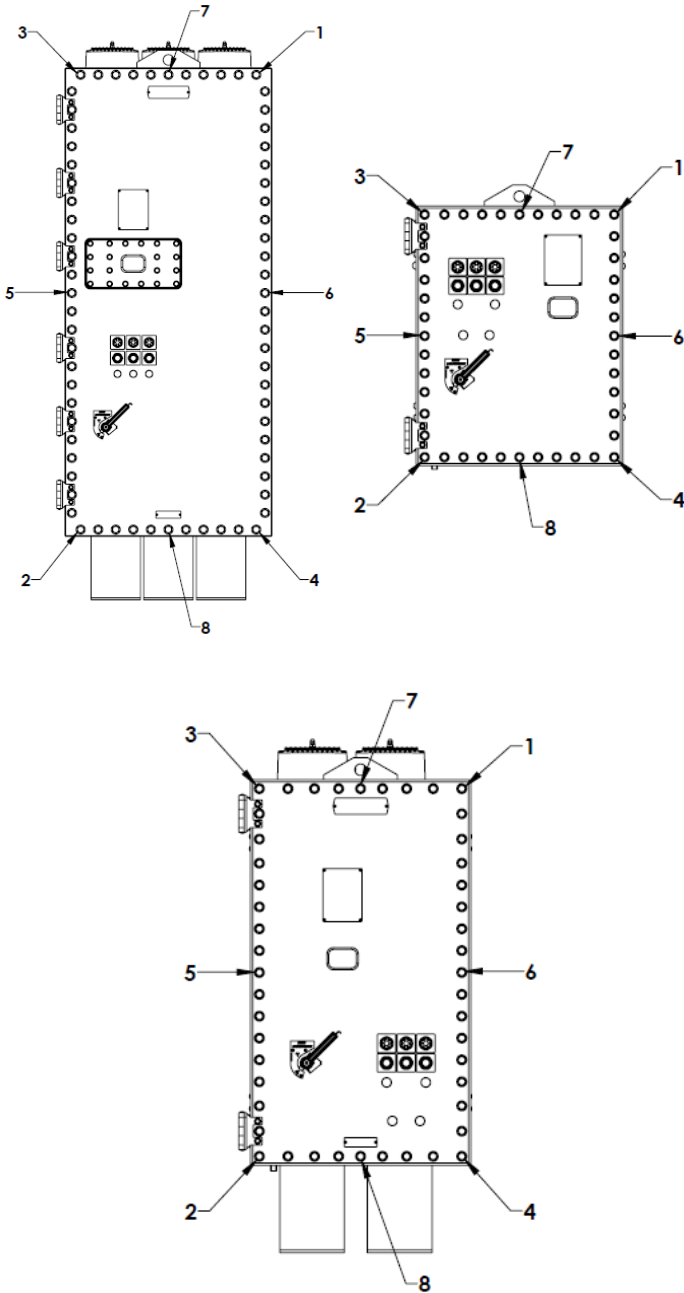


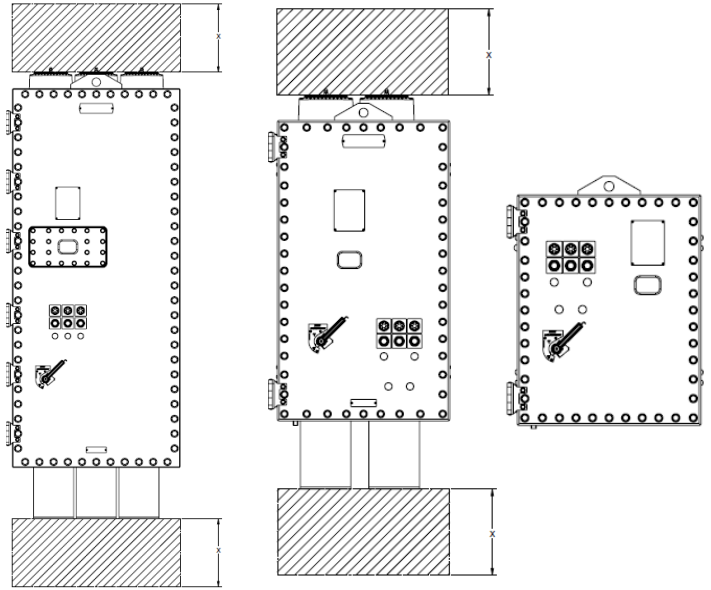
Figure 1

⚠ WARNING

To avoid personnel injury and property damage, DO NOT remove or modify the control pad viewing window.

2. MECHANICAL INSTALLATION

2.1 AIRFLOW PROVISIONS - INSTALLATION DRAWING



It is imperative that the enclosure be well ventilated to ensure reliable performance. Adequate space around the intake and exhaust of the enclosure MUST be accommodated. Eaton's Crouse-Hinds Division recommends 'x' be a minimum of 12 inches (0.3 meters).

2.2 WEIGHTS

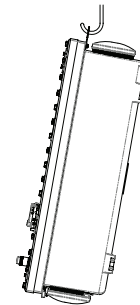
Enclosure	Weight (Approx.)
Size 1 (1-5 HP)	350
Size 2 (7-30 HP)	550
Size 3 (40-100 HP)	1200

2.3 LIFTING

1. Remove top and sides from shipping crate.
2. Remove lag bolts from enclosure mounting feet

⚠ CAUTION

Do not attach shrouds or pre-filters until after enclosure is mounted.



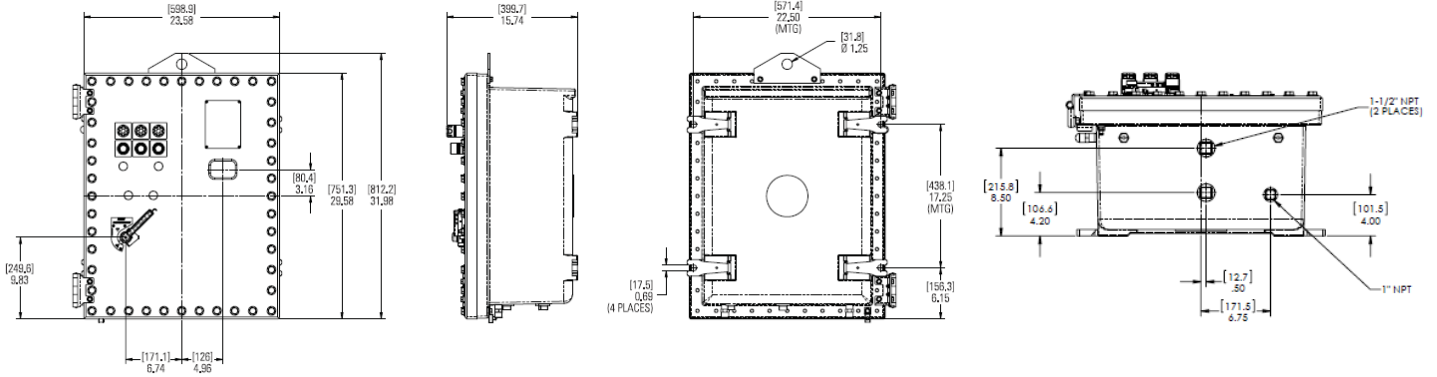
⚠ CAUTION: UNBALANCED LOAD

To avoid personnel injury, utilize the dedicated lifting eye and handle appropriately to ensure safe installation.

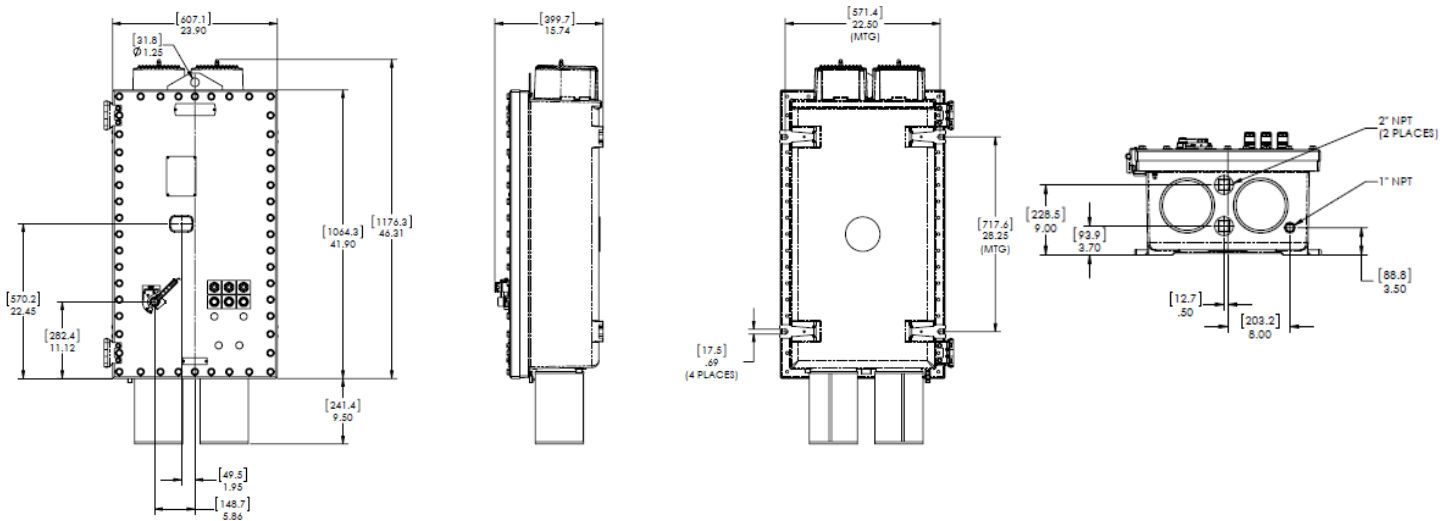
3. Use the dedicated lifting eye to mount enclosure on suitable mounting surface. Select a mounting location that will provide suitable strength and rigidity for supporting the enclosure and all components.

2.4 DIMENSIONAL DRAWINGS

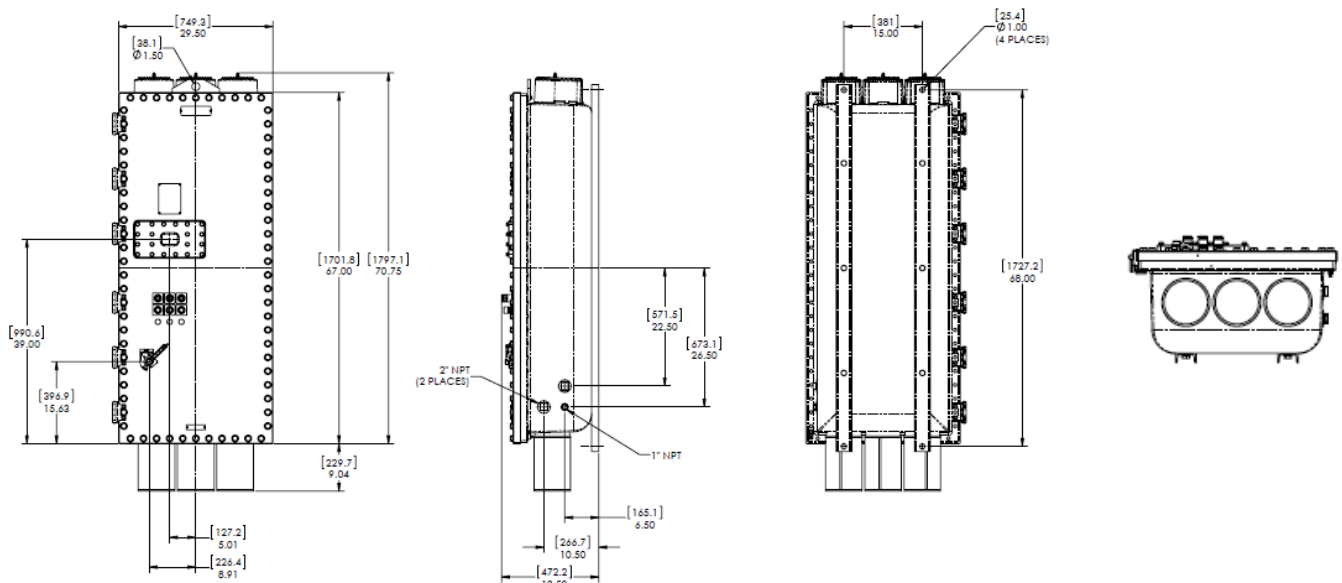
ACE Size 1



ACE Size 2



ACE Size 3



2.5 MOUNTING

1. Select a mounting location that will provide suitable strength, rigidity and space (per Section 2.1) for supporting the ACE Series system and all contained wiring.

⚠ CAUTION

To avoid cooling system malfunction, cooling system failure and personnel injury, be sure to mount the enclosure as depicted in Section 2.1.

⚠ CAUTION

To avoid cooling system malfunction, cooling system failure and personnel injury, be sure to mount the enclosure in a shaded area to avoid direct sunlight.

2. Refer to Section 2.2 for approximate weights and Section 2.4 for dimensions.
3. For enclosure sizes 1 & 2, install two (2) 5/8" on the left side. For enclosure size 3, install four (4) 7/8" bolts through mounting rails, then proceed to Step 8.
4. Tap each of the four (4) mounting feet with a mallet to ensure tight assembly.
5. Align enclosure with the two (2) left side mounting feet engaged with the mounting bolts on selected mounting surface.
6. Tighten two (2) bolts on left side.
7. Install two (2) 7/8" bolts on right side and tighten.
8. After enclosure is positioned and secured in its permanent location, pull wires into the ACE Series system, making sure that they are long enough to make the required connections.

2.6 SHROUD INSTALLATION

1. Remove rubber caps from explosionproof filters.
2. Insert threaded rods into the explosionproof filters. Leave 3-5/8 of threaded rod exposed.
3. Place shroud over explosionproof filters and threaded rod, with shroud opening facing back of enclosure. See Figure 2.
4. Insert washer and nuts onto end of threaded rod and tighten securely until shroud is firmly contacting the top wall of the enclosure. See Figure 3.

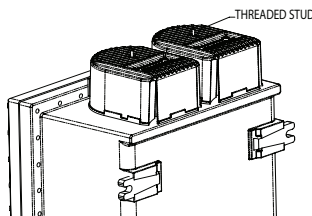


Figure 2

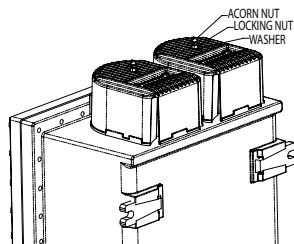
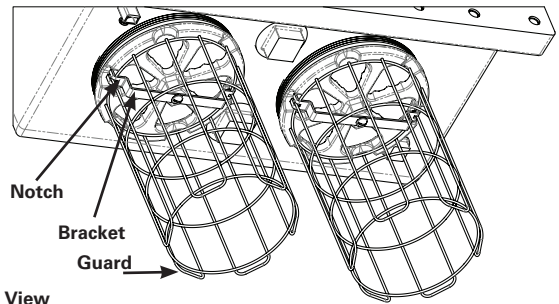


Figure 3

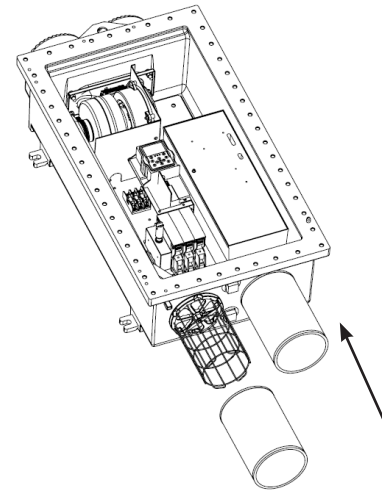
2.7 PRE-FILTER INSTALLATION

1. Remove rubber caps from explosionproof filters.
2. Install wire guard using the bracket, screw and lock washer provided to the bottom filter(s).
3. Align guard with notches within the bracket as shown.

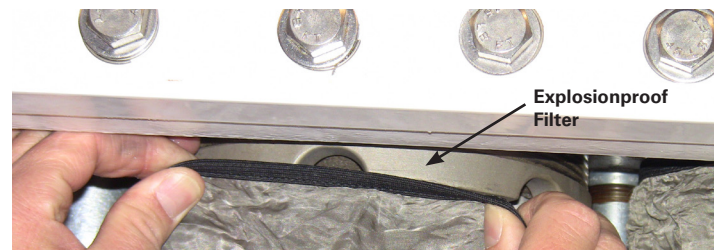


Detail View

4. Tighten screw.
5. Slip pre-filter mesh over guard.



6. Be sure to stretch pre-filter elastic band completely around the explosionproof filter and seat the elastic band on the filter's threads. This will ensure all air flow to the bottom filters passes through the pre-filters.



3. ELECTRICAL INSTALLATION

3.1 ENCLOSURE GROUNDING - INTERNAL/EXTERNAL

Grounding and bonding of the conduit and equipment is required by the National Electrical Code®. A grounding conductor must be connected to the grounding lugs furnished.

Determine the type of distribution systems to be used that will comply with NEC requirements and ensure grounding continuity.

All conductive equipment that enclose the electrical conductors or attached equipment or forming part of such equipment must be grounded. A permanent connection must be made between all such equipment and the earth. Refer to Section 5.3 for the torque requirements of all terminations within this device.

3.2 LINE FEED



This equipment is designed for line connection directly to the integral disconnect switch. Factory wiring transmits power to the variable frequency drive.

1. Size line wiring according to drive manufacturer's specifications.
2. Attach line conductors with phase A on the left, B center and C to the right (see torque table in Section 5.3).

3.3 LOAD FEED AND SHIELD GROUNDING TO DRIVE

This equipment is designed for load connection directly from the variable frequency drive, although, in the case of an oversized VFD for the given motor, use the VFD and motor manufacturer's recommendations for proper motor overload protection. In certain cases, it is required to include additional motor overload protection between the VFD and the motor for proper motor overload protection. Always be sure to shield load wiring from line and control wiring to reduce noise. Refer to the drive manufacturer's manual for further details.

1. Attach load conductors with phase A to U, B to V, and C to W (see torque table in Section 5.3).
2. Attach motor cable shielding to VFD ground (see recommendations by drive manufacturer).
3. Refer to the drive manufacturer's manual for further information regarding drive installation.

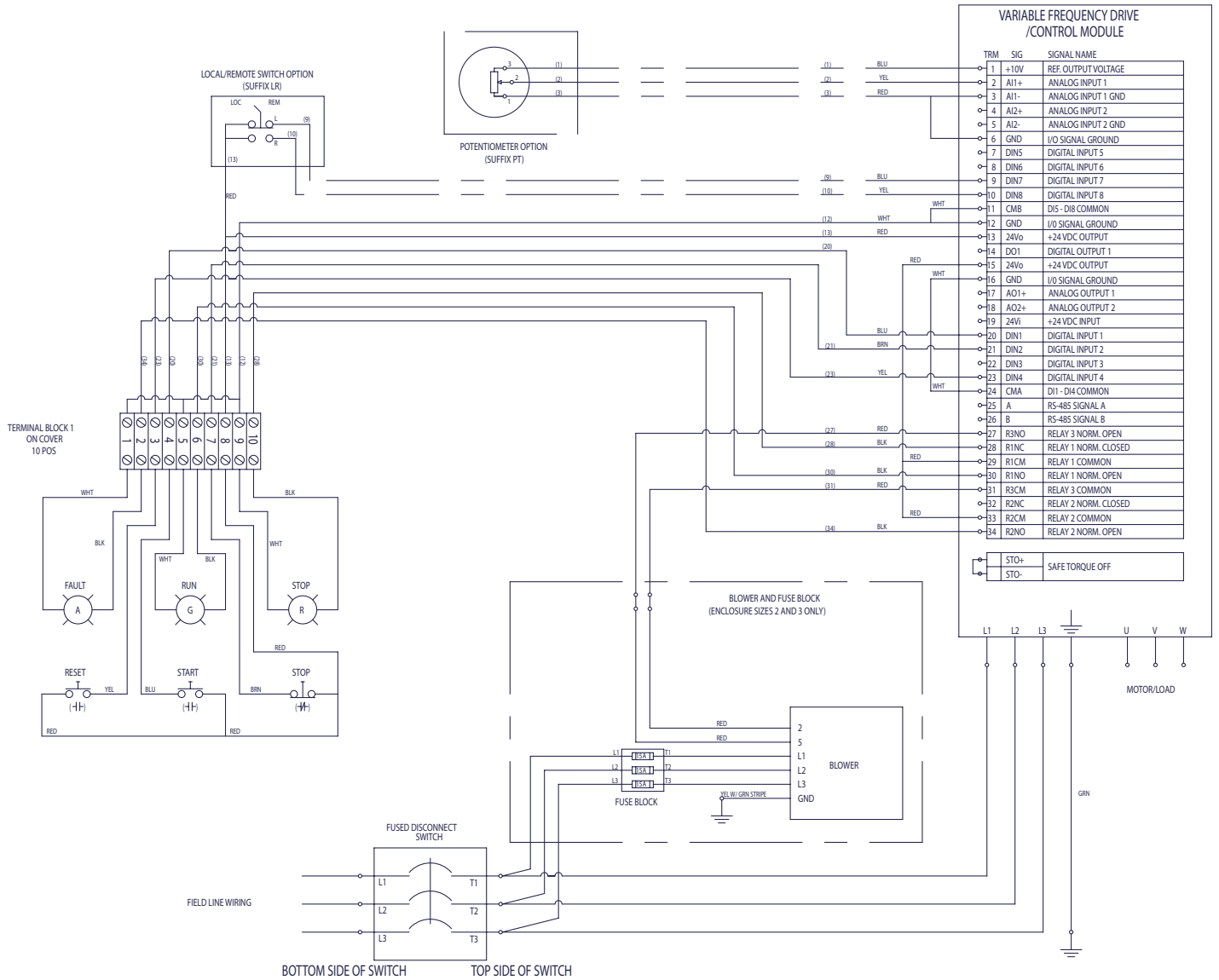
3.4 CONTROL WIRE ROUTING

To avoid the transmission of noise to/from the blower, control system and/or the variable frequency drive load conductors, be sure to bundle all field control wiring and shield as necessary.

⚠ CAUTION

Failure to add additional motor overload protection between the VFD and motor when required can cause motor failure and equipment damage.

3.5 FACTORY WIRING SCHEMATIC



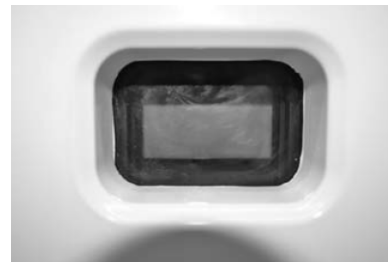
3.6 COMMUNICATION AND I/O MODULES

All communication and I/O modules are shipped uninstalled in the drive. It is the installers responsibility to install and configure the module and associated field wiring (refer to drive manufacturers installation manual).

Catalog Number Suffix	Description
CC	CANOpen
CD	DeviceNet
CL	LonWorks
CP	Profibus
CS	SmartWire
DI	240 VAC Input
DIO	3x DI, 3x DO, 24 VDC
RO	Relay Output

4. GENERAL OPERATION

4.1 CONTROL PAD VIEWING WINDOW



The control pad viewing window shows the control pad display containing such information as drive status and operating data. Refer to the drive manufacturer's manual for information regarding the control pad display.

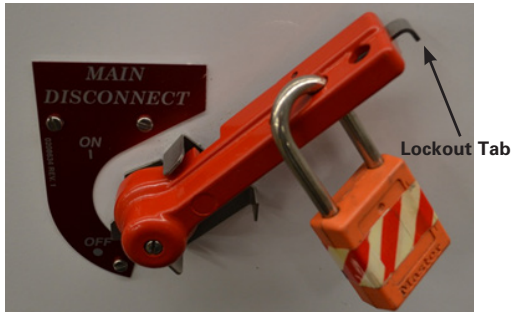
4.2 DISCONNECT AND LOCKOUT/TAGOUT

The disconnect handle is furnished with three (3) holes for lockout/tagout purposes.

1. Turn handle to the 'off' position.
2. Depress lockout tab at the end of the handle.
3. Install OSHA approved lock or tag.
4. Release lockout tab.

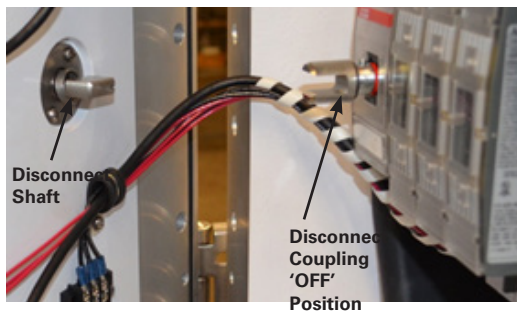
WARNING

To avoid ignition of explosive atmospheres, all circuits must be de-energized before opening cover.



CAUTION

To avoid damage to the integral disconnect operating mechanism, be sure the disconnect coupling is in the off position before closing cover.



4.3 DRIVE CONTROLS AND STATUS INDICATION



Three (3) momentary pushbutton operators control the START, STOP and [fault] RESET of the drive. They are wired to the drives digital inputs and are configured to be the "local control place."

Three (3) LED pilot lights indicate the drives status – Red = Stopped, Green = Running, Amber = Drive Fault. These are wired to the drive's relay outputs.

Note: As standard, speed control must either be programmed from the drive's keypad, by remote analog signal (customer supplied) or by using the on board or option card communications capabilities.

4.4 PT (POTENTIOMETER) AND LR (LOCAL/REMOTE)

- Suffix options PT and/or LR, when ordered, are wired to the drives I/O for additional user control.
- For suffix PT, a 10K-ohm potentiometer is connected to AI1, and is configured to be the local (primary) speed reference source.
- For suffix LR, a 2-position selector switch is connected to DI7 & 8, and is configured to switch between local and remote operation.
- Parameters for these options, shown in section 7.1, are set up at the factory. Refer to drive manufacturers manual for further information.

5. MAINTENANCE

5.1 DRIVE MAINTENANCE

Periodic cleaning of the drive fan and heat sink is recommended.

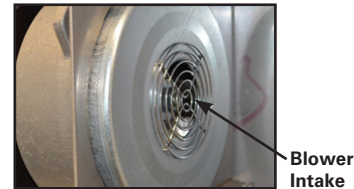
CAUTION

To avoid cooling system malfunction and cooling system failure, be sure to vacuum debris from the enclosure before energizing. NEVER use forced air for the removal of debris from this enclosure.

Removal of the drive from the enclosure is recommended to ensure debris does not obstruct the cooling system. Refer to the drive manufacturer's manual for additional maintenance recommendations and specific instructions.

5.2 COOLING SYSTEM MAINTENANCE

1. Clean pre-filter periodically. Remove pre-filter and rinse with water as needed.
2. Clean sintered filter as needed. Use of abrasives on the explosionproof filters may compromise the integrity of the cooling system.
3. Clean/inspect blower intake.



4. Perform visual, electrical and mechanical checks on all components on a regular maintenance schedule. NFPA 70B recommends maintenance intervals not exceeding 2 months.
5. Visually check for any damage to the filter assemblies, flat joints, threaded joints, journal joints and window.
6. Visually check for evidence of excessive heating within the enclosure.
7. Mechanically check that all parts are properly assembled and operating mechanisms are in proper working condition.
8. Verify airflow provisions are maintained per Section 2.1.

5.3 TORQUE VERIFICATION

WIRING								
BASIC CATALOG NO.	DRIVE LINE/LOAD TERMS.		DRIVE GROUND		I/O TERMINALS		DISCONNECT TERMS.	
	WIRE SIZE	TORQUE	WIRE SIZE	TORQUE	WIRE SIZE	TORQUE	WIRE SIZE	TORQUE
ACE-DG1-1 ... ACE-DG1-5	26-10 AWG	5.3 IN-LBS	18-10 AWG	10 IN-LBS	24-12 AWG	4.5 IN-LBS	14-6 AWG	31 IN-LBS
ACE-DG1-7 ... ACE-DG1-15	20-6 AWG	15.6 IN-LBS	12-6 AWG	10 IN-LBS			14-6 AWG	31 IN-LBS
ACE-DG1-20 ... ACE-DG1-25	6-2 AWG	40 IN-LBS	14-4 AWG	10 IN-LBS			14-6 AWG	31 IN-LBS
ACE-DG1-30	6-2 AWG	40 IN-LBS	14-4 AWG	10 IN-LBS			12-1 AWG	35.4 IN-LBS
ACE-DG1-40	6-1/0 AWG	95 IN-LBS	10-1/0 AWG	14 IN-LBS			12-1 AWG	35.4 IN-LBS
ACE-DG1-50 ... ACE-DG1-60	6-1/0 AWG	95 IN-LBS	10-1/0 AWG	14 IN-LBS			6-300 KCM	200 IN-LBS
ACE-DG1-75 ... ACE-DG1-100	1/0-350 KCM	354 IN-LBS	8-250 KCM	35 IN-LBS			6-300 KCM	200 IN-LBS
HARDWARE								
COVER BOLTS	MANIFOLT BKT STUDS		HOSE CLAMPS		GROUND LUGS			
	WIRE SIZE	TORQUE	WIRE SIZE	TORQUE	WIRE SIZE	TORQUE		
ACE-DG1-1 ... ACE-DG1-5	3/4" HEX	40-45 FT-LBS	N/A	N/A	N/A	N/A	14-2/0 AWG	120 IN-LBS
ACE-DG1-7 ... ACE-DG1-30	3/4" HEX		9/16" HEX	20 IN-LBS	5/16" HEX /SLOTTED	20 IN-LBS		
ACE-DG1-40 ... ACE-DG1-100	7/8" HEX							

5.4 EXPLOSIVE EVENT REQUIRED MAINTENANCE

In the event of an explosion within the enclosure, the filter assemblies and pre-filters must be replaced. Personnel injury or equipment damage may result from failure to replace the filters with new filters after an explosion occurs within the enclosure. Inspect all other components and verify that they are in proper operating condition. Consult Eaton's Crouse-Hinds Division for replacement parts as needed.

WARNING: BURN HAZARD

To avoid personnel injury, allow sufficient time for the enclosure to cool prior to servicing.

6. TECHNICAL DATA

6.1 TECHNICAL DATA CHART

Base part number	Nominal HP (KW)	Horsepower Rating						
		Max. disconnect rating (Amps)	Disconnect fuse rating	Enclosure size	460V input ratings (Amps)	Max. output rating (Amps)	Power loss (Watts)	Temperature rating
ACE-DG1-1	1.0 (.75)	30	10	1	2.0	2.2	48	T6
ACE-DG1-2	2.0 (1.5)	30	10	1	3.2	4.3	71	T6
ACE-DG1-3	3.0 (2.2)	30	10	1	4.5	5.6	82	T6
ACE-DG1-5	5.0 (3.0)	30	15	1	7.1	7.6	99	T6
ACE-DG1-7	7.5 (5.5)	30	20	2	10.2	12.0	483	T4A
ACE-DG1-10	10.0 (7.5)	30	30	2	13.0	16.0	539	T4A
ACE-DG1-15	15.0 (11.0)	60	35	2	19.5	23.0	598	T4A
ACE-DG1-20	20.0 (15.0)	60	50	2	25.1	31.0	719	T4A
ACE-DG1-25	25.0 (18.5)	60	60	2	31.6	38.0	764	T4A
ACE-DG1-30	30.0 (22.0)	100	80	2	37.2	46.0	821	T4A
ACE-DG1-40	40.0 (30.0)	100	100	3	48.3	61.0	909	T4A
ACE-DG1-50	50.0 (37.0)	200	110	3	60.4	72.0	1076	T4A
ACE-DG1-60	60.0 (45.0)	200	125	3	71.6	87.0	1222	T4A
ACE-DG1-75	75.0 (55.0)	200	175	3	89.2	105.0	1271	T4A
ACE-DG1-100	100.0 (75.0)	200	175	3	115.3	140.0	1482	T4A

Data shown is for standard catalog, 460VAC drives in CT/IH (Constant Torque with High Overload). Refer to drive manufacturers manual for all other voltage and performance specifications.

6.2 POWER LOSS (HEAT DISSIPATION)

When the ACE Series enclosure is not installed in a well ventilated area, provisions must be made to account for heat generation and ensure proper operation of the device.

6.3 DE-RATING FACTORS

The final drive output rating is a multiplication of all applicable de-rating factors.

Factors are given as a percentage of rated output current.

6.3.1 AMBIENT TEMPERATURE DE-RATING

As standard, each drive is rated for its full output current in CT/IH (Constant Torque with High Overload) at 50°C ambient temperature*.

For ambient temperatures above 50°C and not exceeding 60°C, the de-rating is 5% per °C. *100HP is rated for full output current at 40°C.

6.3.2 ALTITUDE DE-RATING

At altitudes from 1,000m to 3,000m (3280ft to 9840ft) above sea level, the de-rating is 1% per 100m (328ft).

NOTE: If the installation site is higher than 2,000m (6,560ft) above sea level, connection of the drive to an ungrounded (IT) or corner-grounded delta network is not allowed.

6.3.2 SWITCHING FREQUENCY DE-RATING

To reduce motor noise, a higher switching frequency may be desired. Note that this will increase heat output from the drive.

For switching frequencies above the factory default, the de-rating is 6% per 1kHz.

7.1 CROUSE-HINDS DRIVE PARAMETERS

PARAMETER NUMBER	PARAMETER DESCRIPTION	VALUE	VALUE DESCRIPTION
BASIC PARAMETERS – P1			
P1.10	LOCAL/REMOTE SELECT	1	LOCAL CONTROL
P1.11	REMOTE 1 CONTROL PLACE	0	I/O TERMINAL
P1.12	LOCAL CONTROL PLACE	1	I/O TERMINAL
P1.13	LOCAL REFERENCE	6	KEYPAD
DIGITAL INPUT – P3			
P3.1	START/STOP LOGIC	3	START PULSE-STOP PULSE
P3.2	START SIGNAL 1	2	DigIN:1
P3.3	START SIGNAL 2	3	DigIN:2
P3.8	FAULT RESET	5	DigIN:4
DIGITAL OUTPUT – P5			
P5.2	RO1 FUNCTION	2	RUN
P5.3	RO2 FUNCTION	3	FAULT
P5.4	RO3 FUNCTION	41	TEMP LIMIT SUPERV
P5.15	TEMP LIMIT SUPV	2	HIGH LIMIT
P5.16	TEMP LIMIT SUPV VAL	40.0	DEG C
P5.35	RO3 OFF DELAY	30	SEC
MOTOR CONTROL – P8			
P8.10	SWITCHING FREQUENCY	4.0 (3.6 on 100HP model)	kHz
PROTECTIONS – P9			
P9.39	COLD WEATHER MODE	1	YES
POTENTIOMETER OPTION (SUFFIX PT) ONLY			
P1.13	LOCAL REFERENCE	0	AI1
P2.1	AI1 MODE	1	0-10V
P2.2	AI1 SIGNAL RANGE	0	0-100%
LOCAL/REMOTE SWITCH OPTION (SUFFIX LR) ONLY			
P3.21	REMOTE CONTROL	9	DigIN:8
P3.22	LOCAL CONTROL	8	DigIN:7
P3.42	EMERGENCY STOP	6	DigIN:5

Parameters are set at the factory and must be maintained to ensure proper operation of cooling system and controls. Refer to drive manufacturer's manual for additional parameter information.

8. REPLACEMENT PARTS

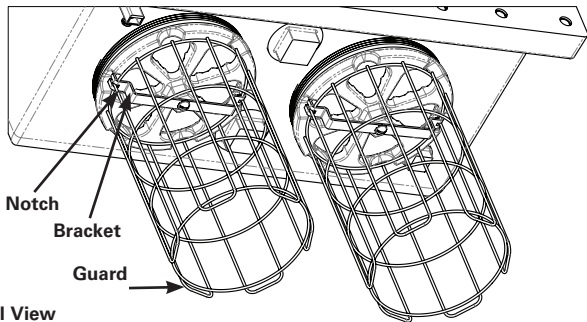
ACE Series systems are designed to provide years of reliable service. However, should the need for replacement parts arise, they are available through your Eaton's Crouse-Hinds Division Distributor. Assistance may also be obtained through your Sales Representative or the Eaton's Crouse-Hinds Division Customer Service Department.

8.1 PRE-FILTER KIT

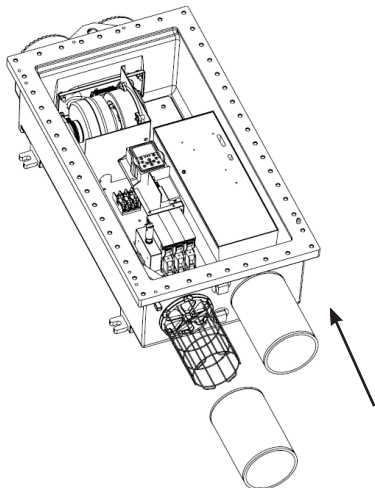
ACE KIT1: Pre-Filter and Hardware (1 pc.)

8.1.1 PRE-FILTER INSTALLATION INSTRUCTIONS

1. Remove rubber caps from explosionproof filters.
2. Install wire guard using the bracket, screw and lock washer provided to the bottom filter(s).
3. Align guard with notches within the bracket as shown.



4. Tighten screw.
5. Slip pre-filter mesh over guard.



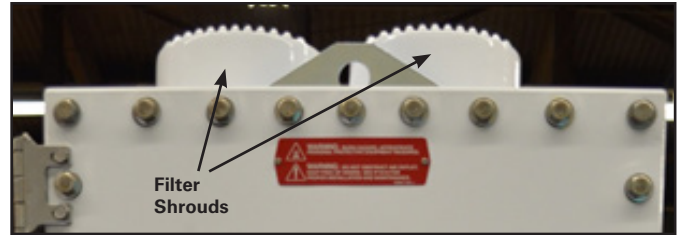
6. Be sure to stretch pre-filter elastic band completely around the explosionproof filter and seat the elastic band on the filter's threads. This will ensure all air flow to the bottom filters passes through the pre-filters.



8.2 SINTERED FILTER KIT

ACE KIT2: Filter Assembly (1 pc.)

8.2.1 SINTERED FILTER INSTALLATION INSTRUCTIONS



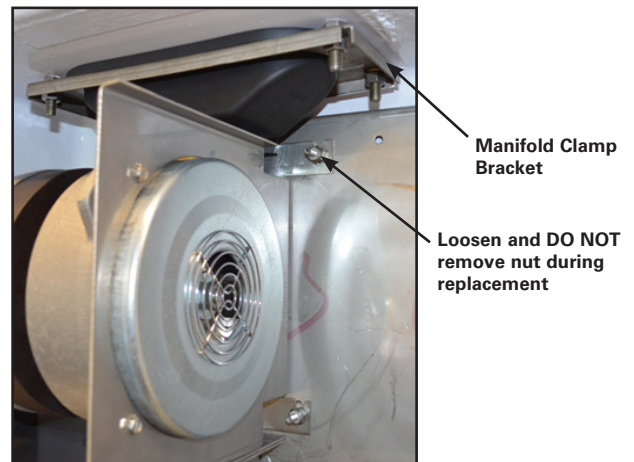
1. Remove shroud and pre-filters and place all parts in a secure area.
2. Using a 1" socket wrench, remove all filters from the enclosure (top and bottom).
3. Remove rubber caps from explosionproof filters.
4. Apply thread grease to threads of explosionproof filters.
5. Install new filters (top and bottom) and torque each to 133 ft.-lbs. (180 N-m).
6. Install pre-filters and shrouds; refer to Sections 2.6 and 2.7.

8.3 BLOWER KIT

ACE KIT3: Blower, Manifold and Hardware (1 pc.)

8.3.1 BLOWER INSTALLATION INSTRUCTIONS

1. Disconnect blower power, ground and control leads from fuse blocks (refer to wiring diagrams in Section 3.5).
2. Loosen five (5) nuts holding blower bracket and baffle to mounting plate. DO NOT remove.
3. Loosen and remove manifold clamp bracket nuts and lock washers. DO NOT remove jam nuts positioned behind the manifold clamp bracket.



4. Remove blower and brackets.
5. Remove manifold and manifold clamp bracket.
6. Remove blower cooling intake and hose clamp from old blower assembly and hold for re-assembly.
7. Loosen and remove three (3) screws and washers holding the baffle to the blower bracket. Remove baffle and hold for re-assembly.
8. Attach baffle to new blower bracket using the same three (3) screws and washers.
9. Align new manifold to enclosure wall.
10. Align new manifold clamp bracket to threaded studs. Be sure the manifold clamp bracket flanges point toward the interior of the enclosure.
11. Install four (4) lock washers and nuts on threaded studs hand tight before applying required torque. Tighten to 20 in.-lbs. DO NOT overtighten.

- Slide new blower/bracket assembly into place until fully seated, aligning to the threaded studs and the manifold.

CAUTION

To avoid system malfunction and electrical shock, be sure that all wires are aligned in the baffle's wire pass through.

- Tighten nuts wrench tight.
- Tighten manifold hose clamp, while compressing the manifold to the blower, to 20 in.-lbs.
- Re-attach blower cooling intake and tighten hose clamp to 20 in.-lbs. Be sure to align bottom of blower cooling intake to the explosionproof filter at the bottom of the enclosure.

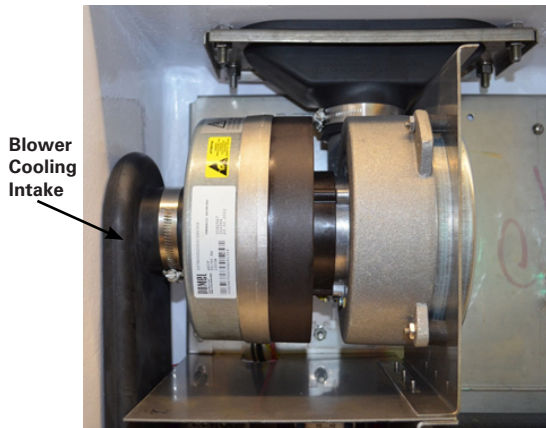


Image 1

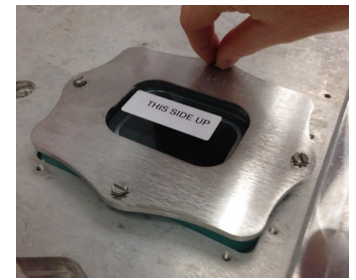


Image 2



Image 3

- Terminate the blower power wires to the appropriate fuse block connections (refer to wiring diagrams in Section 3.5).
- Perform a continuity check between each blower power terminal and each phase of the integral disconnect switch.
- Terminate the blower control wires to the appropriate terminal block connections (refer to wiring diagrams in Section 3.5).
- Perform a continuity check between each blower control terminal and the RO3 relay terminals on the drive (refer to wiring diagrams in Section 3.5).
- Terminate the blower ground wire to the appropriate nearest 1/4-20 stud and secure connection (refer to wiring diagrams in Section 3.5).
- Perform a continuity check between the ground terminal and the ground lug adjacent to the integral disconnect switch.

8.4 WINDOW KIT

- ACE KIT7 (ENCLOSURE SIZES 1 AND 2): 3/8" Window, Bracket, Hardware, and IF1706 (1 pc.)
- ACE KIT8 (ENCLOSURE SIZE 3): 5/8" Window, Bracket, Hardware, and IF1706 (1 pc.)

8.4.1 WINDOW KIT INSTALLATION INSTRUCTIONS

- Wipe down glass window with cleaner.
- Place glass over milled pocket of cover as shown in image 1 and exploded view drawing below.
- Place bracket over glass and attach with 4 x #10-24 screws and 4 x #10 lock washers as shown in image 2 and exploded view drawing below.
- Hand tighten screws first in pattern shown on image 3 below, then torque screws to 23 in.lbs. in approximately 5 in.lb. increments following the same sequence.
- Shim Gage window with .0015 Shim Stock to check that it is sealed.

8.5 CAST FILTER SHROUD REPLACEMENT KIT

ACE KIT 9: Cast shroud and hardware (1 pc.)

8.5.1 FILTER SHROUD INSTALLATION INSTRUCTIONS

- Remove rubber caps from explosionproof filters.
- Insert threaded rods into the explosionproof filters. Leave 3-5% of threaded rod exposed.
- Place shroud over explosionproof filters and threaded rod, with shroud opening facing back of enclosure. See Figure 2.
- Insert washer and nuts onto end of threaded rod and tighten securely until shroud is firmly contacting the top wall of the enclosure. See Figure 3.

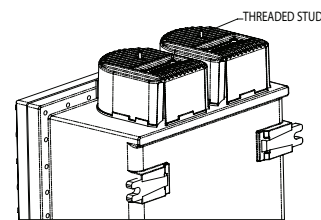


Figure 2

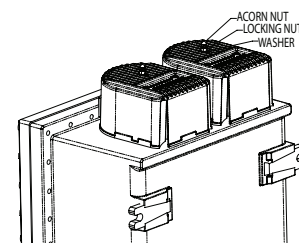


Figure 3

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