



**SELECTORR<sup>®</sup> Claw Compressor Models:  
CA3 / CA5 / CA7L / CA7 / CA10 / CA15**

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**Installation and Operation Manual**



# **INSTALLATION & OPERATING MANUAL**

Please read the manual before operating the compressor.

<b>TABLE OF CONTENTS</b>	<b>Page</b>
<b>1.0 INSTALLATION</b>	<b>03</b>
1.1 General description	03
1.2 Unpacking	03
1.3 Location	03
1.4 Power Requirements	04
1.5 Pressure Connections	05
1.6 Oil Filling on Gear box	05
<b>2.0 SAFETY</b>	<b>06</b>
2.1 General Notices	06
2.2 Warning Label and Explanation	06
2.3 Location of Labels	06
<b>3.0 OPERATION</b>	<b>07</b>
3.1 Start-up	07
3.2 Stopping the compressor	07
3.3 Ambient operating conditions & limits	07
<b>4.0 MAINTENANCE</b>	<b>08</b>
4.1 Compressor Gear Lube Oil (level / type & quantity / change)	08
4.1.1 Gear Oil Level	08
4.1.2 Gear Oil Type & Quantity	08
4.1.3 Gear Oil Change	08
4.2 Inline (Inlet) Filter	08
4.3 Maintenance Schedule	09
<b>5.0 TROUBLESHOOTING</b>	<b>10</b>
5.1 Performance Issues (Problems) / Probable Causes / Remedies	10 & 11
<b>6.0 TECHNICAL DATA for [CA3 &amp; CA5] (Including Application Specs)</b>	<b>12-13</b>
Exploded View of CA3 CLAW Unit	14
CA3 Parts List	15
Exploded View of CA5 CLAW Unit	16
CA5 Parts List	17
Exploded View of CA7L / CA7 CLAW Unit	18
CA7L/CA7 Parts List	19
Exploded View of CA10 / CA15 CLAW Unit	20
CA10/CA15 Parts List	21
Assembly View Drawings CA3-7 THRU CA15-50	22-36

# INSTALLATION AND OPERATING MANUAL

This manual is written to cover the following contact-less claw compressors. The model number is stamped into the nameplate with serial number: CA3, CA5, CA7L, CA7, CA10, CA15

***Please identify the model number and serial number when ordering parts.***

## 1.0 INSTALLATION

### 1.1 General description

The claw compressor is a dry and contactless machine, enclosed in an acoustic sound shield and designed to have cooling air passed through the sound shield by a fan. The warm air is exhausted through the vent. The unit is constructed with modular construction, consisting of (2) two compartments: pumping and gear chambers separated by using labyrinth seals. In the pump chamber, as two rotary claws rotate in opposite directions, the air is sucked in and is compressed and discharged under pressure. In the gear chamber (box), two gears for synchronizing of claw rotation are lubricated. For reduction of noise, an inlet silencer is installed in the compressor inlet side. For overload protection, a pressure safety valve or regulating valve is installed in the exhaust. The compressors are direct driven by a flanged motor via a coupling.

### 1.2 Unpacking

Inspect the box and compressor carefully for any signs of damage incurred in transit. Since all compressors are ordinarily shipped F. O. B. from our factory or regional warehouse, such damage is normally the responsibility of the carrier and should be reported to them.

The compressor is bolted to the skid with studs that are connected through the rubber feet of the compressors. Remove the nuts from the underside of the crate and remove the compressor. Unscrew the studs from the rubber feet.

The inlet and exhaust of the compressor are covered with plastic caps to prevent dirt and other foreign substances from entering compressor. Leave these caps in place until you are ready to pipe the compressor to your equipment.

### 1.3 Location

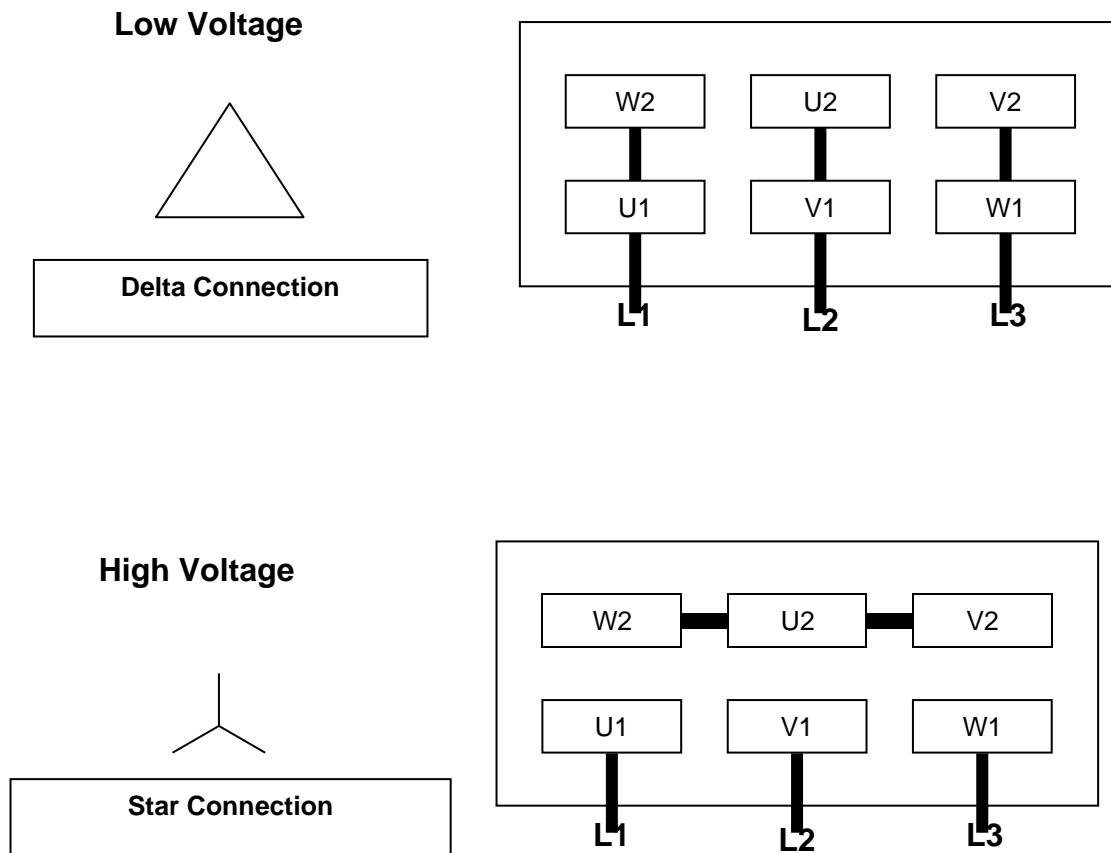
Install the compressor in a horizontal position on a level surface so that the pump can be evenly supported on its rubber feet. Leave 12" ~ 18" of access around the compressor to allow proper cooling. Also, adequate ventilation must be provided for proper cooling,

Allow access to the oil sight glass in order to inspect the oil level regularly, and the oil fill and oil drain port for easy service.

## 1.4 Power Requirements

A schematic diagram for the electrical motor terminal connections is in the junction box of the motor or on the motor nameplate. Typical wirings for Three Phase Motors are as below:

### Wiring Scheme- Three Phase Motor



The motor must be connected according to the electrical codes through a fused switch in order to protect the motor against electrical or mechanical overload conditions. The overload of the motor starter must be set at a level equal to the full load motor current listed on the motor nameplate.

If the compressor is supplied with a motor starter, it is preset at the factory according to customer specifications. It is advisable to check that these settings are in line with the voltage at your location. If the voltage is different, please contact Ohio Medical for motor and starter information.

Correct direction of rotation is marked by an arrow on the motor fan housing and is counterclockwise when looking at the motor from the motor's fan side.

***After electrical connections have been made, the rotation of the motor should be checked. If backward, reverse any two leads of the three at the power connection.***

## 1.5 Pressure Connections

Use a pipe size that is at least the size of the compressor inlet connections. Smaller lines result in reduced compressor capacity.

Compressors operating in parallel on a common main line should have a manual or automatic operated shut-off valve or positive action check valve, installed in the suction line adjacent to the pump suction flange. Remove the plastic protective cap from the discharge port prior to connection of compressor to the system.

Should process gas contain dust or other foreign particles, a suitable in line (inlet) filter should be connected to the inlet port. Contact Ohio Medical for recommendations.

The following thread sizes are standard on the compressors

<u>Model</u>	<u>Inlet Size</u>	<u>Exhaust Size</u>
CA3, CA5	G 1 ½"	G 1 ½"
CA7L, CA7	G 2"	G 2"
CA10, CA15	G 3"	G 3"

@ Inlet Silencer

@Exhaust Connection Housing

## 1.6 Oil Filling of Gear Box

The pump is shipped without oil in gear box. After level installation and correct rotation has been established, fill the pump with recommended gear oil through the oil fill port. Oil level should be over 3/4 position on the oil sight glass as shown on the label.



We recommend ISO VG150 gear oil or equivalent oils.

- **Ohio Medical 220 wt. synthetic oil—Part # 249227—Quart, 249225—Gallon**

The following table gives the approximate quantities of oil required for each model.

<u>Pump Model</u>	<u>Capacity (quart)</u>
CA3	.8
CA5	.5
CA7L, CA7	1.0
CA10, CA15	1.9

***Do not add fill oil with pump running! Do not overfill.***

## 2.0 SAFETY

Please read the following safety notices carefully before operating the compressor.

### 2.1 General Notices

- Understand this installation and operating manual before operation.
- Only authorized operators should operate the pump
- If the pump is not working properly, it should be stopped immediately.
- Ohio Medical shall not incur any liability and be held harmless for any accident or failure arising from non-compliance with instructions in this manual.

### 2.2 Warning labels and explanations

Following warning labels are shown and attached on the compressors.

#### 2.2.1 Read and Understand manual:

Read and understand operator's manual before using this machine

#### 2.2.2 Burn Hazard:

Hot surface. Do not touch.

#### 2.2.3 Loud noise Hazard

Loud noise hazard. Ear protection must be worn.

#### 2.2.4 Hazardous Voltage:

Disconnect power before opening. Contact causes severe electrical shock



### 2.3 Location of the labels

The labels of 2.2.1 Read and Understand a manual, 2.2.2 Burn Hazard, and 2.2.3 Loud noise Hazard shall be shown on the top of sound shield of compressor.

The label of 2.2.4 Hazardous Voltage shall be shown on the cover of motor's terminal box

### 3.0 OPERATION

#### 3.1 Start-up

Check rotation of the motor as described in paragraph 1.4 Power Requirements.

Fill the compressor with oil as described in paragraph 1.5 - Oil Filling

Start the compressor with the inlet closed. Run the compressors for a few minutes and then shut down.

Check the oil level again and make sure the oil level is 1/2 position of oil sight glass.

Add oil through oil fill port, if necessary. Pump oil should only be added when the pump is off

#### 3.2 Stopping the compressor

To stop the compressor, turn off the power.

#### 3.1 Ambient operating conditions & limits

These compressors are designed to run below set pressures according to the motor power for continuous operation. Operation over maximum pressure level may result in failure of and severe damage to the machine. Pressure Regulator installed in outlet flange is set at maximum allowable pressure (see the table for set of pressure) at factory.

***Caution: Any noncompliance may lead to severe injury to persons and damage to the compressor.***

The pressure can be adjusted by turning the stud of pressure regulating valve on the top of valve. The regulating valve or safety valve is set at the permissible operating pressure and will open to discharge if the compressor runs over the set pressure for a safety operation.

**Caution: Do not run the compressor without regulating valve or safety valve. Do not set the regulating valve or safety valve at over permissible pressure. The compressor may be damaged severely.**

The standard version is for use of dry air only and may not be used in hazardous areas. Handling of humid air or gases containing aggressive chemicals is possible only with specialized configured units. Consult Ohio Medical for assistance.

Also, it is recommended for operating personnel who are working near the compressor to wear ear protectors. If noise below the designed dBA is required, an external sound enclosure can be added to the system, provided adequate ventilation is provided

The ambient and suction air temperature must be between 41°F and 104°F deg

**Caution: Any noncompliance may lead to severe injury to persons and damage to the compressor**

## 4.0 MAINTENANCE

Ohio Medical compressors require very little maintenance. To ensure optimum performance, the following maintenance steps should be followed:

### 4.1 Compressor Lube Oil

#### 4.1.1 Gear Oil Level

Check the oil level on monthly basis. Under normal circumstances it should not be necessary to add oil between oil changes. A significant drop in oil level means there is an oil leak. Please check the O-rings, drain plug or oil sight glass.

Check the oil level only when the compressor is shut off. Replenish oil if it drops below the designated bottom position of the sight glass,

***Caution: Do not add oil while the compressor is running, since hot oil can escape from the oil fill port.***

#### 4.1.2 Gear Oil Type and Quantity

See section 1.5 - Oil Filling - for details on oil type and capacity.

#### 4.1.3 Oil Change

Under normal ambient conditions with proper Gear Oil, it is recommended to change the oil every 3,000 operating hours. It is necessary to make the first oil change between 500 ~1000 operating hours.

**Caution: If different brand oil is being filled, the old oil must be drained completely from the gear box.**

**Caution: Above interval of lubrication is based on ambient temperature of 68°F. At 104°F ambient operating temperatures, it may be shortened to half.**

### 4.2 Inline (Inlet) Filter

Check inline (inlet) element on a weekly basis. The filter cartridge should be cleaned or replaced when dirty. Contact a service agent for replacement element information.

**Check the oil level only when the compressor is shut off.** Replenish oil if it drops below the bottom position of the sight glass.

***Caution: Depending on the mounting position of the filter, be careful not to allow accumulated foreign material to fall in the pump suction inlet when removing the filter cartridge. Horizontal filter installation is recommended to prevent this.***



### 4.3 Maintenance Schedule:

**Weekly:** Check inline inlet filter element. More often if high particulates in inlet stream

**Monthly:** Check the oil level, Protective Mesh.

**Semi-Annually:** Check cooling fan and coupling

**Annually:** Check Bearings/ Shaft Seals, more frequently if operated at ambient temperature exceeding 68°F

**Every 3000 operating hours:**

Check the gear oil conditions, and if necessary, change the oil.

**Inspection hole with G1" plug:** Check the coupling and its insert, and fan through this hole regularly.

(The endoscope "Wire-Cam" can be used with Smart Phone software)



## 5.0 TROUBLESHOOTING

### 5.1 **Problem**

Compressor does not reach capacity.

➤ **Possible Cause**

Inlet screen (mesh) of the inlet filter clogged with debris.

+ Remedy: Check inlet filter element and clean screen (mesh) by compressed air or wash it.

➤ **Possible Cause**

Pipe work is too long or small.

+ Remedy: Use a bigger diameter pipe and shorten the lines length if possible.

### **Problem**

Compressor runs over set pressure.

➤ **Possible Cause**

Pressure Regulator or Safety Valve set over the set point or is out of order.

+ Remedy: Set the point again or replace it with new one.

### **Problem**

Compressor does not reach the set pressure.

➤ **Possible Cause**

Leak on the compressor or system.

+ Remedy: Check the leak on the compressor or system.

### **Problem**

Compressor runs very noisy.

➤ **Possible cause**

Contamination of the claws.

+ Remedy: Clean the pumping chamber and rotary claws.

➤ **Possible cause**

Coupling insert is worn.

+ Remedy: replace coupling insert in motor/pump coupling.

➤ **Possible cause**

Bearing noise

+ Remedy: replace bearings or call service agent for service or exchange program.

### **Problem**

Compressor will not start.

➤ **Possible cause**

Supply voltage is not proper or is overloaded. Motor starter overload settings are too low, or fuses are burned; wire size is too small or too long causing a voltage drop.

+ Remedy: check voltage supply; overload settings in motor starter for size and settings according to motor nameplate. Install proper size wire. If ambient temperature is high, use the next larger size overloads or adjust settings 5% above motor nameplate value.

+ Remedy: turn compressor fan by hand. If it will not turn, remove motor from compressor and check motor and compressor separately. Repair or replace if needed or call service agent for service or exchange program.

### **Problem**

Compressor is running too hot.

➤ **Possible Cause**

Not enough air ventilation to compressor

+ Remedy: Make certain enough fresh air is supplied to the compressor.

➤ **Possible Cause**

Dirty or Blocked Mesh

+ Remedy: Check the flow of cooling air and clean the metal mesh of any debris blocking the air as necessary.

### **Problem**

Compressor will not operate (seized up).

➤ **Possible cause**

Rotary Claws, Bearings or Gears stuck on.

+ Remedy: Call service agent for service or exchange program.

## 6.0 TECHNICAL DATA

SPECIFICATIONS						
Model		CA3			CA5	
CFM	60 HZ	71			106	
	50 HZ	59			88	
Pressure, Continuous, PSI	60 HZ	~	20	32	14.5	29
	50 HZ	12	20	32	14.5	29
HP	60 Hz	~	7.5	10	10	15
	50 HZ	5	5	7.5	7.5	10
RPM	60 Hz	3500 / 2850				
	50 HZ					
Voltage, Available	Volts (V)	208~230/460V, 220/380V, 230/400V, 400/690V			220~240/380~420V x 50/60Hz, 208~230/460V x 60Hz	
dB(A) Avg.	60Hz	83			82	
	50 HZ	79			80	
Oil Capacity (Gear Box)	Quarts (QT)	0.75			0.50	
Inlet/Outlet Connections	BSP(G)**	1½"			1½"	
L" x W x H (inches)	60Hz	See Note (A)" x 30.6" x 30.6"			35.6" x 17" x 25.3"	37" x 17" x 25.3"
	50 HZ	28.2" x 29.2" x 30.6"			35.6" x 17" x 25.3"	
Operating Temperature	Fahrenheit (°F)	41°~104°F			41°~104°F	
Approximate Weight (pounds)	60Hz	~	298	331	313	331
	50 HZ	238	265	309	306	313
Accessories	Vacuum Regulator, Safety Valve, Inlet Silencer, Inlet Filter					

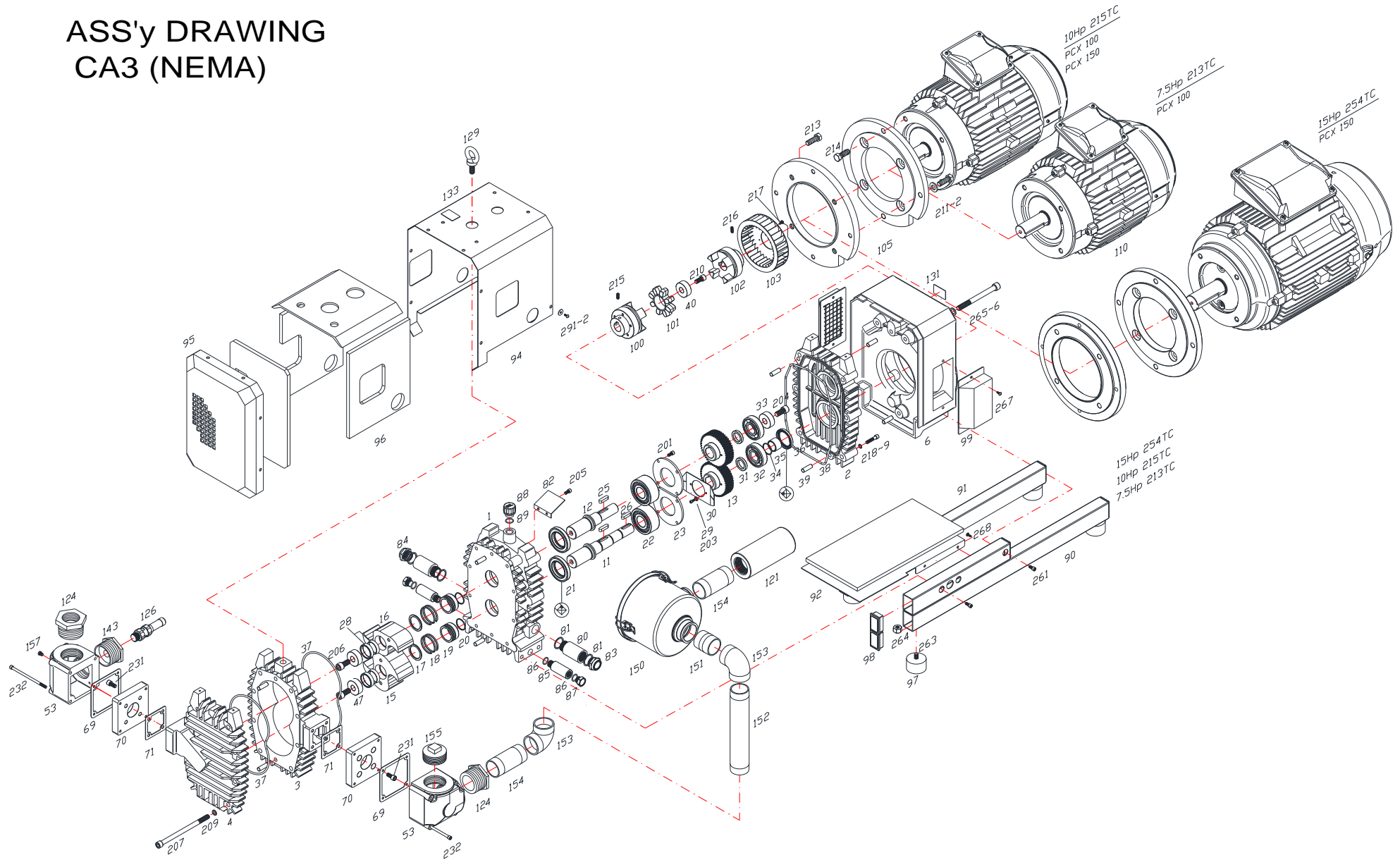
**NOTE (A): Motor Length varies per motor manufacturer**

## SPECIFICATIONS

Model:	Hz:	CA7L:				CA7:			CA10:				CA15:			
CFM	60Hz	177				212			283				353			
	50Hz	147				177			235				294			
Pressure, Continuous PSI	60Hz	~	20.0	~	32.0	~	17.0	32.0	9.0	17.0	23.0	29.0	12.0	~	23	29
	50Hz	15.0		29.0	~	9.0	20.0	32.0	12.0	20.0	26.0	29.0	12.0	17.0	23.0	29.0
HP	60Hz	~	15.0	~	20.0	~	20.0	25.0	20.0	25.0	30.0	40.0	25.0	~	40.0	50.0
	50Hz	10.0	~	15.0	~	10.0	15.0	20.0	15.0	20.0	25.0	30.0	20.0	25.0	30.0	40.0
RPM - 60/50 Hz	RPM	3500 / 2850														
Voltage, Available	V	208~230/460V, 220~240/380~420V, 400~/690V														
dB(A), Average	60Hz	82.0				82.0			83.0				83.0			
	50Hz	79.0				80.0			81.0				82.0			
Oil Capacity (Gear Box)	QT.	1.0							1.9							
Inlet / Outlet Conn.	**BSP(G)	2"							3"							
W x H (inches)	N/A	22.6 x 29.8"				22.6 x 29.8"			26.5" x 39.5"				26.5" x 39.5"			
L* (inches)	60Hz	39.4"	46.1"	46.1"	46.1"	~	46.6"	46.6"	50.2"	50.2"	52.8"	54.9"	50.7"	~	55.5"	55.5"
	50Hz	37.8"	~	46.1"	~	38.3"	46.6"	46.6"	50.2"	50.2"	50.2"	52.8"	50.7"	50.7"	53.3"	55.5"
Ambient Operating Temp.		41° ~ 104°														
Accessories	Pressure Regulator, Safety Valve, Inlet Silencer and Inlet Filter.															

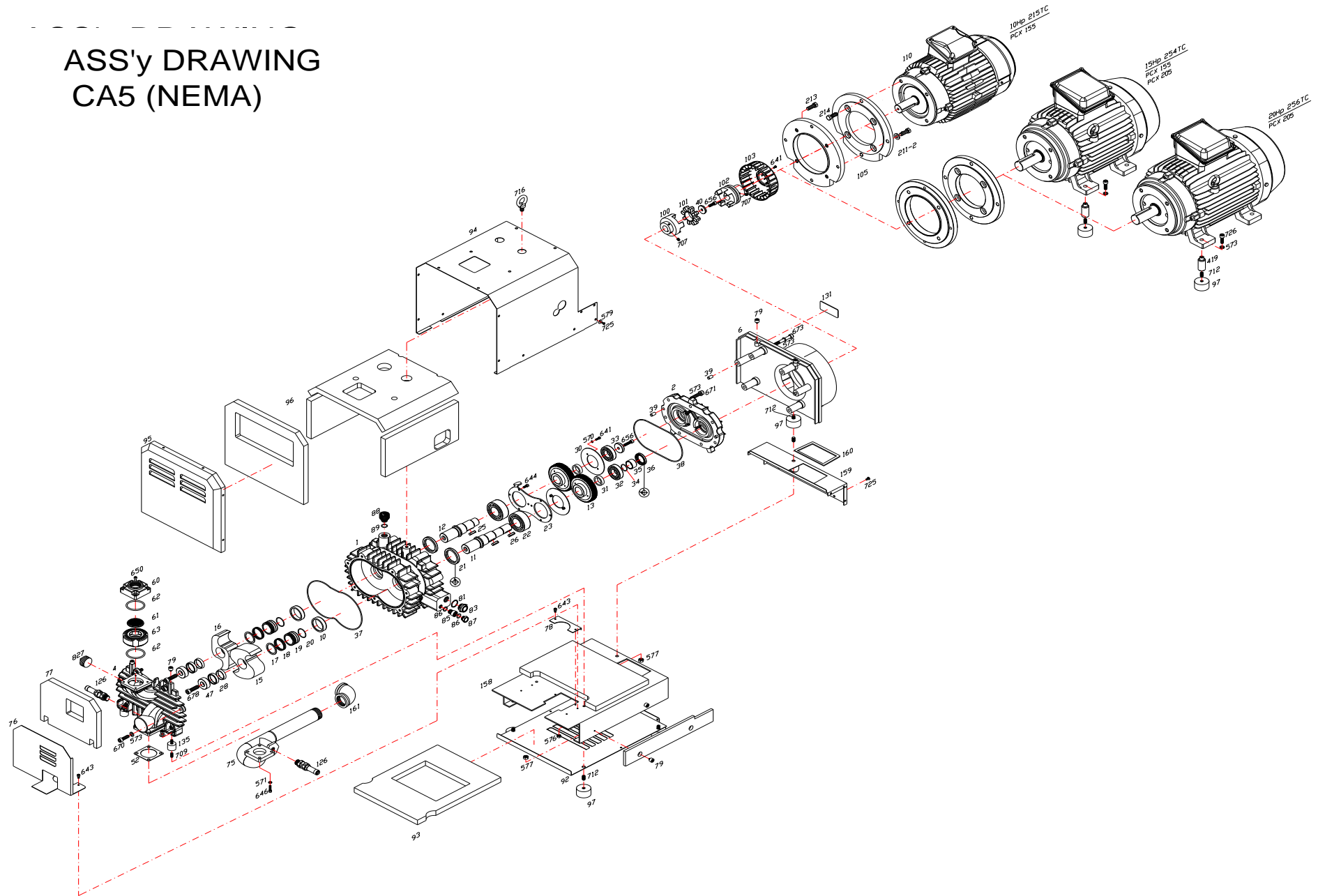
NOTE: Ultimate Continuous pressure operation will be possible with ambient operating temperature between 41° ~ 104°.

# ASS'y DRAWING CA3 (NEMA)



CA3 PARTS LIST											
POS #	Description	Q'ty	POS #	Description	Q'ty	POS #	Description	Q'ty	POS #	Description	Q'ty
1	Gear Box Housing	1	69	Gasket, Inlet Connection Housing	2	131	Name Plate	1	267	Round Head Bolt / M5 x 10	4
2	Gear Box Cover (rear)	1	70	Flange Adapter, Inlet	2	133	Label, Read Manual	1	268	Round Head Bolt / M5 x 10	4
3	Pump Housing	1	71	Gasket, Flange	2	143	Bushing 2" x 1-1/2"	1	291	Round Head Bolt / M5 x 10	12
4	Pump Housing Cover 1 (End Plate)	1	80	Pipe, for Oil Sight Glass	2	150	Inlet Filter	1	292	Washer, Flat, 5mm	12
6	Fan Housing	1	81	Gasket, for Oil Sight Glass	4	151	Pipe, Extension, Short, Inlet 1 1/2 "	1			
11	Shaft 1	1	82	Plate	1	152	Pipe, Extension, Inlet 1 1/2 "	1			
12	Shaft 2	1	83	Oil Sight Glass	1	153	Elbow, inlet 1 1/2"	2			
13	Gear 1	1	84	Plug, for Oil Sight Glass	1	154	Pipe, Extension, Inlet 1 1/2 "	2			
15	Rotor 1	1	85	Pipe, for Drain Plug	2	155	Plug 1 1/2"	1			
16	Rotor 2	1	86	O-ring, Drain Plug	4	157	Plug 1/8"	1			
17	Spacer	2	87	Drain Plug	2	201	Hex. Socket Head Cap Screw / M6 x 15	8			
18	Piston Ring	4	88	Oil filler Breather, Plastic	1	203	Hex. Socket Head Cap Screw / M4 x 12	2			
19	Sleeve	2	89	O-Ring for Oil filler	1	204	Hex. Socket Head Cap Screw / M8 x 25	1			
20	O-Ring	2	90	Foot Mount, Right	1	205	Hex. Socket Head Cap Screw / M5 x 8	2			
21	Shaft Seal,	2	91	Foot Mount, Left	1	206	Hex. Socket Head Cap Screw / M12 x 30	2			
22	Bearing,	2	92	Shield Cover, Bottom	1	207	Hex. Socket Head Cap Screw / M10 x 100(100), 120 (150)	8			
23	Bearing cover	2	93	Acoustic Mat for Shield Cover, Bottom	1	209	Washer, Spring Lock, 10mm	8			
25	Key, for Gear	2	94	Shield Cover, Side, with MAT (new GB)	1	210	Hex. Socket Head Cap Screw / M6 x 10	1			
26	Key, for Coupling	1	95	Shield Cover, Front, with MAT	1	211	Hexagon Bolt / M12 x 35	4			
28	Power Lock	2	96	Acoustic Mat for Shield Cover, front & side	1	212	Washer, Spring Lock, 12mm	4			
29	Washer-Spring-Lock; 6mm	2	97	Foot Rubber, 30x20xM8 / 50x30xM10	4	213	Hexagon Bolt / M12 x 25	4			
30	Flinger	2	98	Cover, Plastic Foot Mount PC (high)	4 (6)	214	Hexagon Bolt (NEMA only)	4			
31	Sleeve	2	99	Grill for Fan	2	215	Set Screw / M8 x 10	2			
32	Bearing	2	100	Coupling, Pump Side	1	216	Set Screw / M8 x 10	2			
33	Locking Disk-Shaft 2	1	101	Insert, Coupling	1	217	Round Head Bolt / M5 x 12	5			
34	O-Ring	1	102	Coupling, Motor side	1	218	Hex. Socket Head Cap Screw / M10 x 60	6			
35	Sleeve	1	103	Fan, New, Plastic	1	219	Washer, Spring Lock, 10mm	6			
36	Shaft Seal,	1	105	Flange Adapter	1	231	Hex. Socket Head Cap Screw / M8 x 20	8			
37	O-Ring, Compressor cover,	2	110	Motor	1	233	Hex. Socket Head Cap Screw / M6 x 65	4			
38	O-Ring, Gear Box cover,	1	121	Silencer Inlet	1	261	Hex. Socket Head Cap Screw / M10 x 15	6			
39	Dowel Pin	8	124	Bushing 2" x 1 1/2"	2	263	Set Screw / M8 x 20, M10 x 20	4			
40	Locking Disk, Coupling	1	126	Press Regulator (relief valve)	1	264	Hex Nut / M8, M10	4			
47	Locking Disk, Power Lock	2	129	Eye Bolt	1	265	Hex. Socket Head Cap Screw / M10 x 110	2			
53	Connection Housing	2	130	Label, Direction Arrow	1	266	Washer, Spring Lock, 10mm	2			

# ASS'y DRAWING CA5 (NEMA)

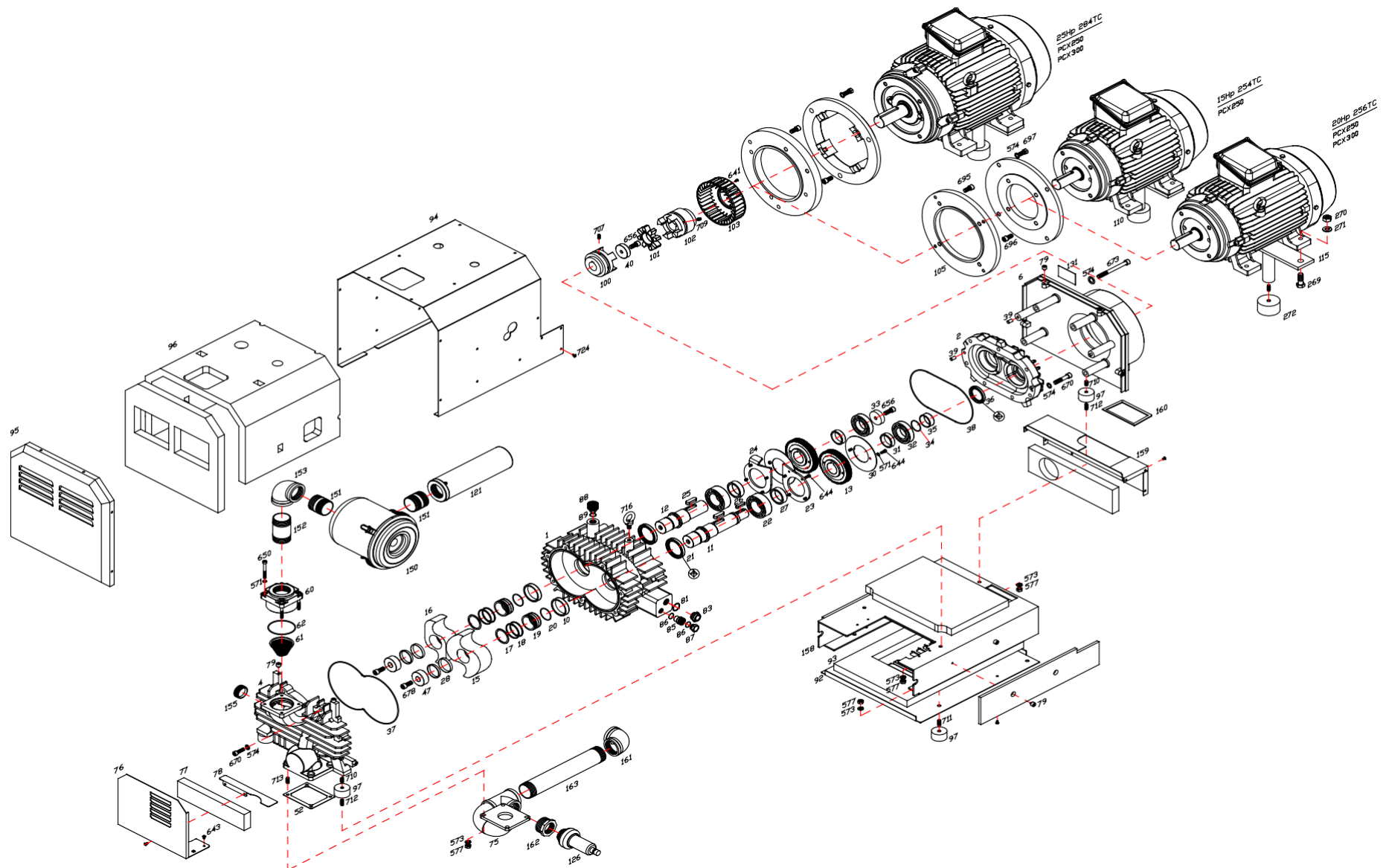




CA5 PARTS LIST								
POS #	Description	Q'ty	POS #	Description	Q'ty	POS #	Description	Q'ty
1		1	61	Inlet Screen (Conical)	1	419	Spacer for Foot, for IEC motor PCX (High)	2
2	Gear Box Cover (rear)	1	62	O-Ring, Inlet Flange, Low & Upper Part	2	570	Washer, Spring Lock, 5mm	4
4	Pump Housing Cover 1 (End Plate)	1	63	Inlet Flange, Lower Housing	1	571	Washer, Spring Lock, 8mm	6
6	Fan Housing	1	75	Bracket with Elbow	1	573	Washer, Spring Lock, 10mm	18
10	Sleeve	2	76	Plate (Vertical)	1	574	Washer, Spring Lock, 12mm	4
11	Shaft 1	1	77	Acoustic Mat	1	576	Hex Nut / M8	2
12	Shaft 2	1	79	Support Isolator	8	577	Hex Nut / M10	5
13	Gear 1	2	81	Gasket, Oil Sight Glass	1	641	Hex. Socket Head Cap Screw / M5 x 15	9
15	Rotor 1	1	83	Oil Sight Glass	1	643	Hex. Socket Head Cap Screw / M6 x 10	6
16	Rotor 2	1	85	Pipe, for drain plug	1	644	Hex. Socket Head Cap Screw / M6x 15	8
17	Spacer	2	86	O-Ring, Drain Plug	2	646	Hex. Socket Head Cap Screw / M8x 25	4
18	Piston Ring	4	87	Drain Plug	1	650	Hex. Socket Head Cap Screw / M6x 65	4
19	Sleeve	2	88	Oil filler Breather, Plastic	1	656	Hex. Socket Head Cap Screw / M8x 25	2
20	O-Ring	2	89	O-Ring for Oil filler	1	670	Hex. Socket Head Cap Screw / M10x 35	7
21	Shaft Seal,	2	92	Shield Cover, Bottom	1	671	Hex. Socket Head Cap Screw / M10 x 50	7
22	Bearing,	2	93	Acoustic Mat for Shield Cover, Bottom	1	673	Hex. Socket Head Cap Screw / M10x 85	4
23	Bearing cover	2	94	Shield Cover, Side	1	678	Hex. Socket Head Cap Screw / M12x 85	2
25	Key, for Gear 8x7x30	2	95	Shield Cover, Front	1	695	Hexagon Bolt / M12 x 25	4
26	Key, for Coupling8x7x30	1	96	Acoustic Mat for Shield Cover, front & side	1	697	Hexagon Bolt / M12 x 35	4
28	Power Lock	2	97	Foot, Rubber, 50x30xM10	5	707	Set Screw / M8 x 15	4
30	Flinger	2	100	Coupling, Pump Side	1	709	Set Screw / M8 x 20	4
31	Sleeve	2	101	Insert, Coupling	1	712	Set Screw / M10 x 25	6
32	Bearing	2	102	Coupling, Motor side	1	716	Eye Bolt M12	1
33	Locking Disk-Shaft 2	1	103	Fan, New, Plastic	1	725	Round Head Bolt, M5 x M10	24
34	O-Ring	1	105	Flange Adapter	1	726	Hex. Socket Head Cap Screw / M10 x 25 PCX (high)	2
35	Sleeve	1	110	Motor	1	827	Plug 1 1/2"	1
36	Shaft Seal,	1	126	Safety Valve	1			
37	O-Ring, Compressor cover,	1	130	Label, Direction Arrow	1			
38	O-Ring, Gear Box cover,	1	131	Name Plate	1			
39	Dowel Pin	4	135	Foot, Rubber, 30x20xm8	2			
40	Locking Disk, Shaft 1	1	158	Base	1			
47	Locking Disk, Side Rotor	2	159	Cover, Exhaust	1			
52	Gasket, Exhaust Silencer	1	160	Seal	1			
60	Inlet Flange, Upper Housing	1	161	Elbow, Exhaust 1 1/2"	1			

**NOTE: Ultimate Continuous pressure operation will be possible with ambient operating temperature between 41° ~ 104°.**

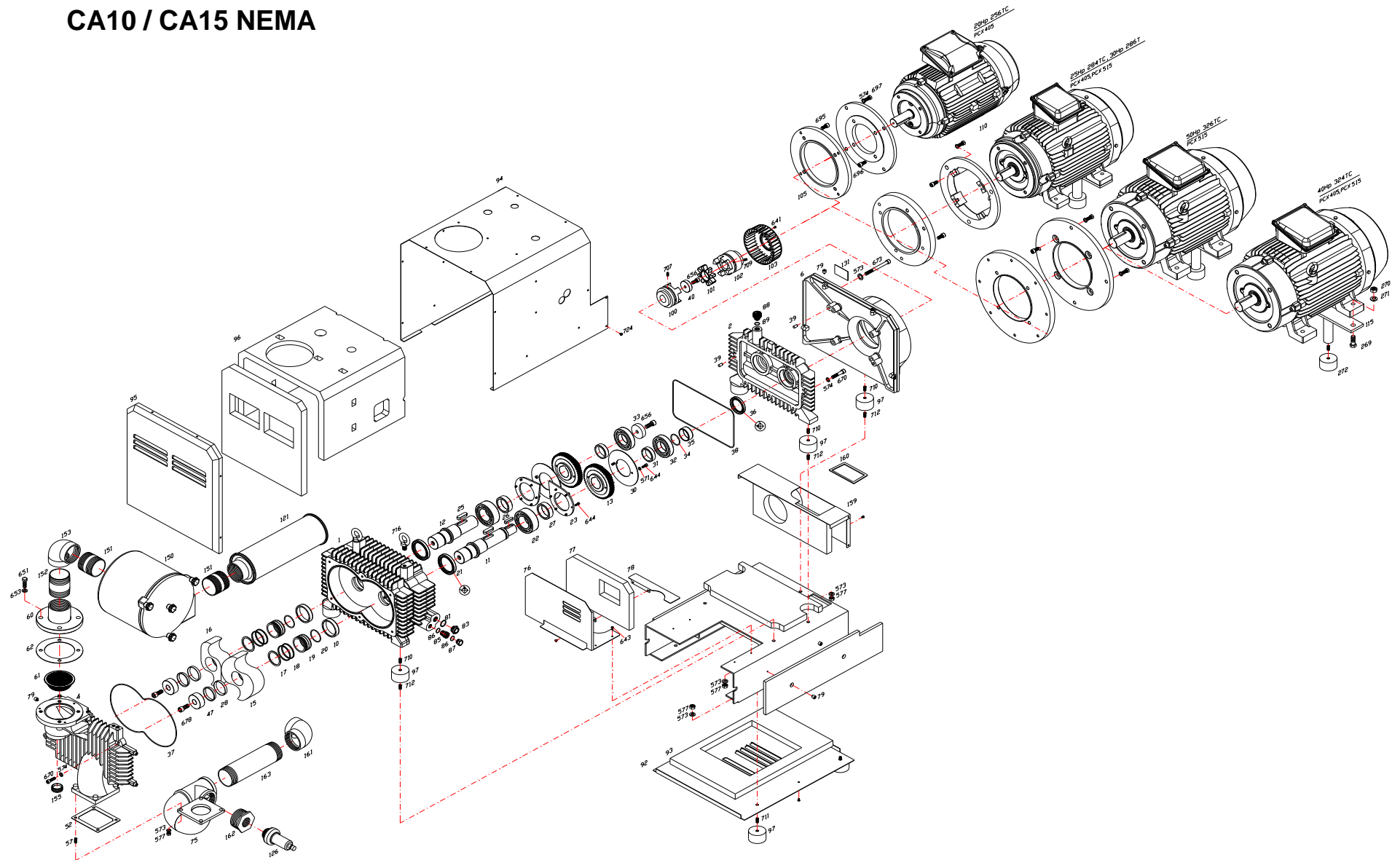
# ASS'y DRAWING CA7L / CA7 (NEMA)



### CA7L / CA7 PARTS LIST

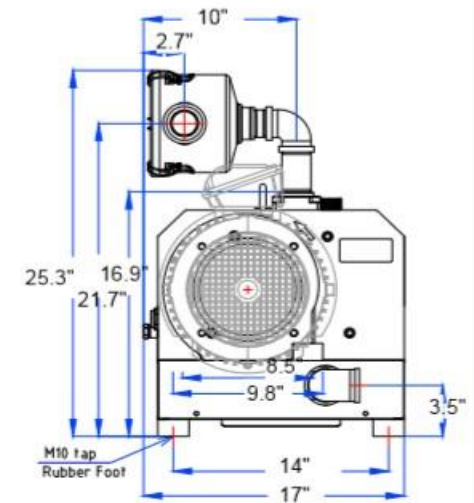
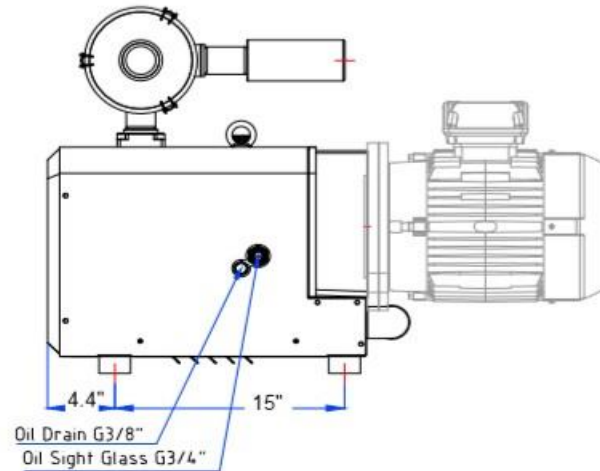
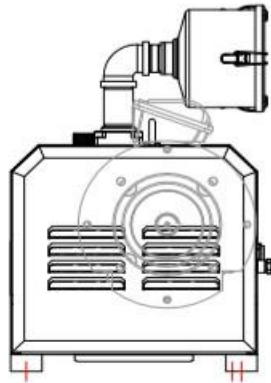
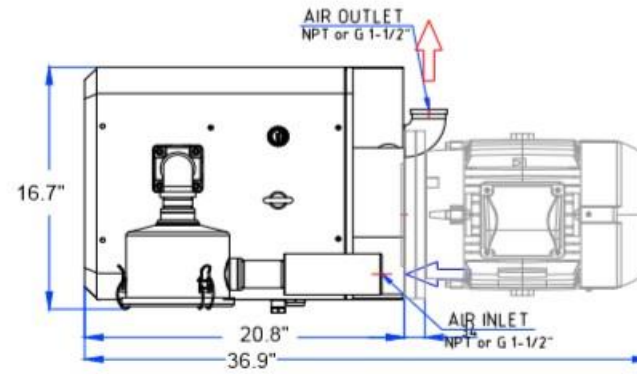
POS#	Description	Qty	POS#	Description	Qty	POS#	Description	Qty
1	Gear Box Housing	1	60	Inlet flange, Upper Housing, G 2"	1	153	Elbow, inlet 2"	1
2	Gear Box Cover (rear)	1	61	Inlet screen (Conical)	1	155	Plug 1-1/2"	1
4	Pump Housing Cover 1 (End Plate)	1	62	O-Ring, Inlet Flange, upper part	1	158	Base	1
6	Fan Housing	1	75	Bracket with Elbow	1	159	Cover, Exhaust	1
10	Sleeve	2	76	Plate (vertical)	1	160	Seal	1
11	Shaft 1	1	77	Acoustic mat	1	161	Elbow, Exhaust 2"	1
12	Shaft 2	1	78	Plate (horizontal)	1	162	Bushing 2" x 1-1/2"	1
13	Gear 1	2	79	Support isolator	12	163	Pipe, extension, Exhaust	1
15	Rotor 1	1	81	Gasket, Oil Sight Glass	1	269	Bolt / M12 x 40	2
16	Rotor 2	1	83	Oil Sight Glass	1	270	Hexagon Nut / M12	2
17	Spacer	2	85	Pipe, for Drain Plug	1	271	Washer, Spring Lock / M12	2
18	Piston Ring	4	86	O-ring, Drain Plug	2	272	Foot, Rubber for Motor M10	1
19	Sleeve	2	87	Drain Plug	1	571	Washer, Spring Lock, 6mm	8
20	O-Ring	2	88	Oil filler Breather, Plastic	1	573	Washer, Spring Lock, 10mm	11
21	Shaft Seal,	2	89	O-Ring for Oil filler	1	574	Washer, Spring Lock, 12mm	22
22	Bearing,	2	92	Shield Cover, Bottom	1	577	Hexagon Nut M10	11
23	Bearing cover (Plate)	1	93	Acoustic Mat for Shield Cover, Bottom	1	641	Hex. Socket Head Cap Screw / M5 x 15	5
24	Bearing cover	1	94	Shield Cover, Side	1	643	Hex. Socket Head Cap Screw / M6 x 10	4
25	Key, for Gear	2	95	Shield Cover, Front	1	644	Hex. Socket Head Cap Screw / M6 x 15	12
26	Key, for Coupling	1	96	Acoustic Mat for Shield Cover, front and Side	1	650	Hex. Socket Head Cap Screw / M6 x 65	4
27	Sleeve	2	97	Foot, Rubber	7	656	Hex. Socket Head Cap Screw / M12 x 25	2
28	Power Lock (PCX 305)	2(4)	100	Coupling, Pump Side	1	670	Hex. Socket Head Cap Screw / M12 x 50	14
30	Flinger	2	101	Insert, Coupling	1	673	Hex. Socket Head Cap Screw / M12 x 110	4
31	Sleeve	2	102	Coupling, Motor Side	1	678	Hex. Socket Head Cap Screw / M12 x 25	2
32	Bearing,	2	103	Fan, new, Plastic	1	695	Hexagon Bolt / M12 x 25	4
33	Locking Disk	1	105	Flange Adapter	1	696	Hexagon Bolt (NEMA only)	4
34	O-Ring	1	110	Motor	1	697	Hexagon Bolt / M12 x 35	4
35	Sleeve	1	115	Base W/Bolt, Nut for Motor	1	707	Set Screw / M8 x 15	2
36	Shaft Seal,	1	121	Silencer, Inlet	1	709	Set Screw / M8 x 10	2
37	O-Ring, Compressor cover,	1	126	Safety Valve	1	710	Set Screw / M10 x 15	3
38	O-Ring, Gear Box cover,	1	130	Label, Direction Arrow	1	711	Set Screw / M10 x 20	4
39	Dowel Pin	4	131	Name Plate	1	712	Set Screw / M10 x 25	3
40	Locking Disk	1	150	Inlet Filter IF-230	1	713	Set Screw / M10 x 35	4
47	Locking Disk, side Rotor	2	151	Pipe, extension, Short, inlet 2"	2	716	Eye Bolt M12	1
52	Gasket, Exhaust Silencer, Steel Silencer	1	152	Pipe, extension, inlet	1	724	Bottom Flange Bolt M5x8	44

# CA10 / CA15 NEMA

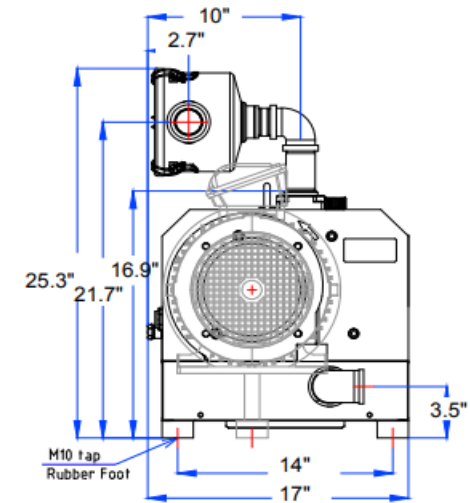
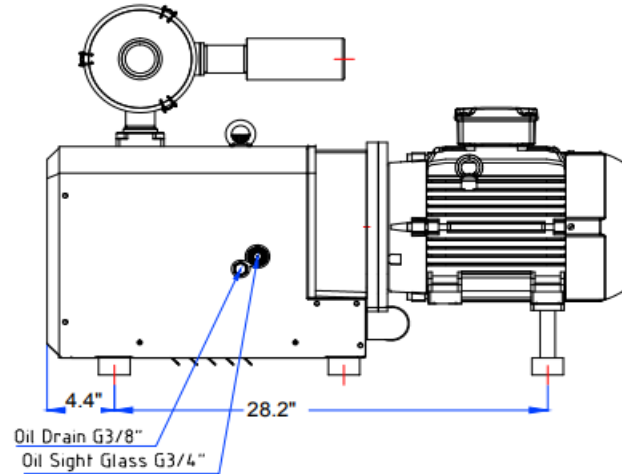
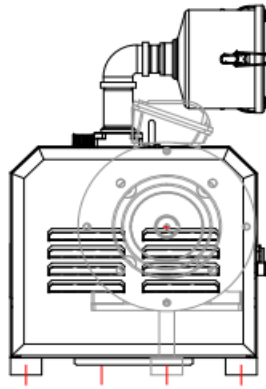
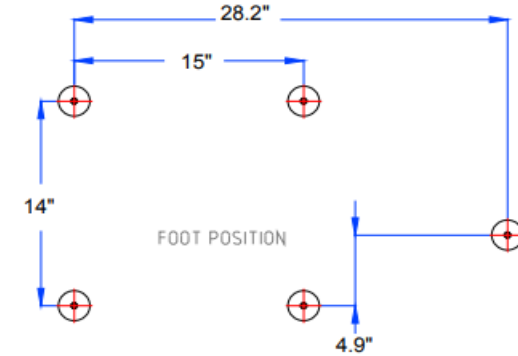
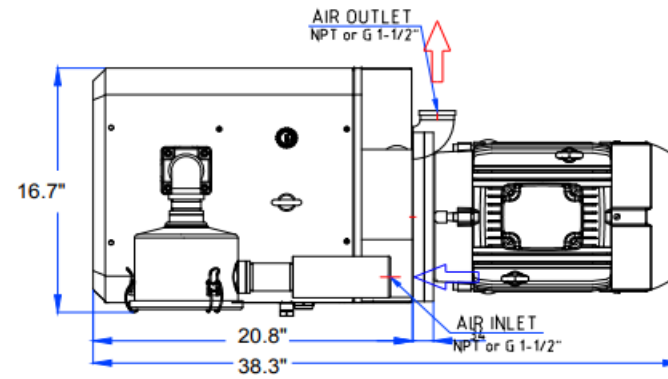


## CA10 / CA15 Parts List

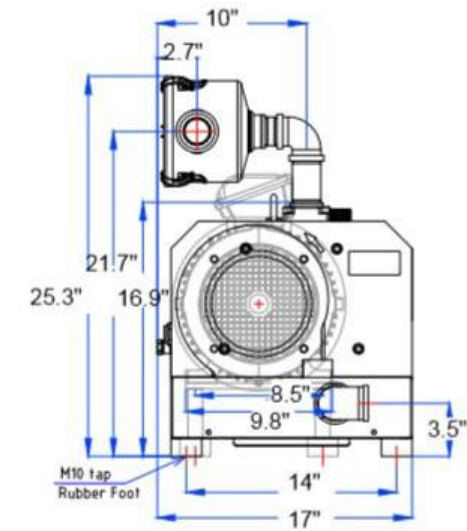
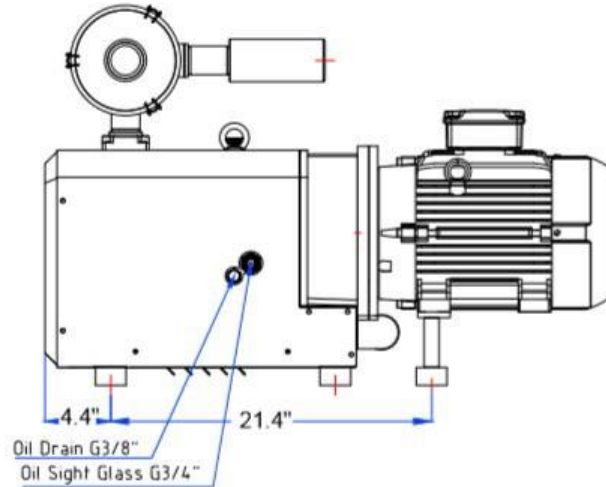
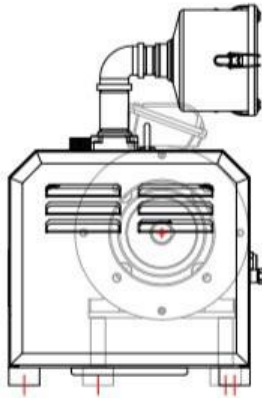
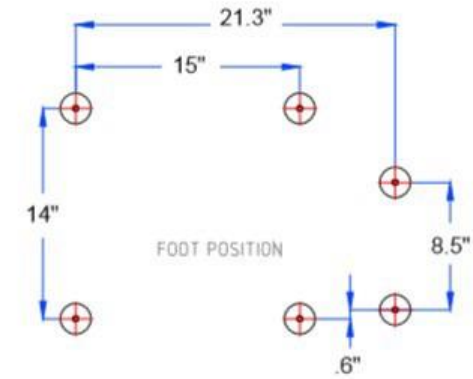
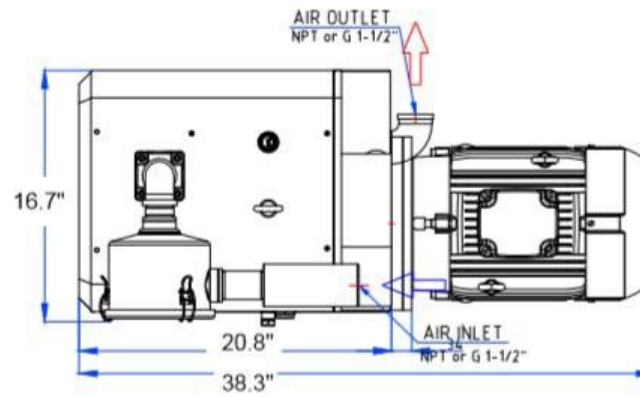
POS#	Description	Q'ty	POS#	Description	Q'ty	POS#	Description	Q'ty
1	Gear Box Housing	1	60	Inlet Flange	1	153	Elbow, inlet 2"	1
2	Gear Box Cover (rear)	1	61	Inlet screen (Conical)	1	155	plug 1-1/2"	1
4	Pump Housing Cover (End Plate)	1	62	Gasket, Inlet Flange	1	158	Base	1
6	Fan Housing	1	75	Bracket with Elbow	1	159	Cover, Exhaust	1
10	Sleeve	2	76	Plate (vertical)	1	160	Seal	1
11	Shaft 1	1	77	Acoustic mat	1	161	Elbow, Exhaust 2"	1
12	Shaft 2	1	78	Plate (horizontal)	1	162	Bushing 3" x 1-1/2"	1
13	Gear	2	79	Support isolator	15	163	Pipe, extension, Exhaust	1
15	Rotor 1	1	81	Gasket, Oil Sight Glass	1	269	Bolt / M14	2
16	Rotor 2	1	83	Oil Sight Glass	1	270	Hexagon Nut / M14	2
17	Spacer	2	85	Pipe, for Drain Plug	1	271	Washer, Spring Lock / M14	2
18	Piston Ring	4	86	O-ring, Drain Plug	2	272	Foot, Rubber for Motor M12	1
19	Sleeve	2	87	Drain Plug	1	571	Washer, Spring Lock, 6mm	16
20	O-Ring	2	88	Oil filler Breather, Plastic	1	573	Washer, Spring Lock, 12mm	17
21	Shaft Seal	2	89	O-Ring for Oil filler	1	574	Washer, Spring Lock, 10mm	14
22	Bearing,	2	92	Shield Cover, Bottom	1	577	Hexagon Nut M12	13
23	Bearing cover	2	93	Acoustic Mat for Shield Cover, Bottom	1	641	Hex. Socket Head Cap Screw / M5	5
25	Key, for Gear	2	94	Shield Cover, Side	1	643	Hex. Socket Head Cap Screw / M5	4
26	Key, for Coupling	1	95	Shield Cover, Front	1	644	Hex. Socket Head Cap Screw / M6	16
27	Sleeve	2	96	Acoustic Mat for Shield Cover, front and Side	1	651	Hex. Socket Head Cap Screw / M16	4
28	Power Lock (PCX-515)	2(4)	97	Foot, Rubber	9	653	Washer, Spring Lock, 16mm	4
30	Flinger	2	100	Coupling, Pump Side	1	656	Hex. Socket Head Cap Screw / M12	2
31	Sleeve,	2	101	Insert, Coupling	1	670	Hex. Socket Head Cap Screw / M10	14
32	Bearing	2	102	Coupling, Motor Side	1	673	Hex. Socket Head Cap Screw / M10	4
33	Locking Disk	1	103	Fan, new, Plastic	1	678	Hex. Socket Head Cap Screw / M16	2
34	O-Ring	1	105	Flange Adapter	1	695	Hexagon Bolt / M12	4
35	Sleeve,	1	110	Motor	1	696	Hexagon Bolt (NEMA only)	4
36	Shaft Seal	1	115	Base W/Bolt, Nut for Motor	1	697	Hexagon Bolt / M12	4
37	O-Ring, Compressor cover,	1	121	Silencer, Inlet	1	707	Set Screw / M8	2
38	O-Ring, Gear Box cover,	1	126	Safety Valve	1	709	Set Screw / M8	2
39	Dowel Pin	4	130	Label, Direction Arrow	1	710	Set Screw / M12	5
40	Locking Disk	1	131	Name Plate	1	711	Set Screw / M12	4
47	Locking Disk, Front	2	150	Inlet Filter IF-230	1	712	Set Screw / M12	5
52	Gasket, Exhaust	1	151	Pipe, extension, Short, inlet 2"	2	716	Eye Bolt M16	2
57	Stud Bolt	4	152	Pipe, extension, inlet 2"	1	724	Bottom Flange Bolt M5	33



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			DWN. BY					
NO	REVISIONS	SIGNATURE	TRC. BY	DWG. NO 13-105.2.213-00				

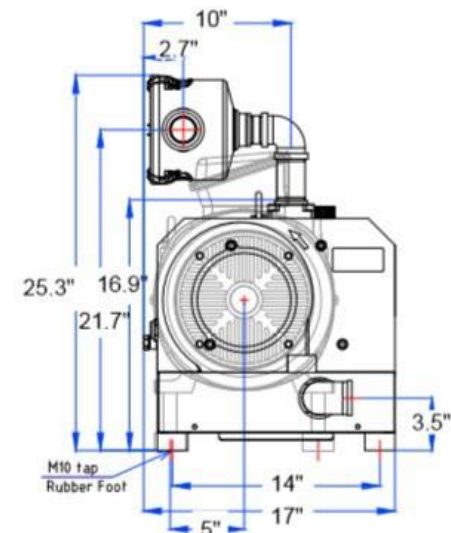
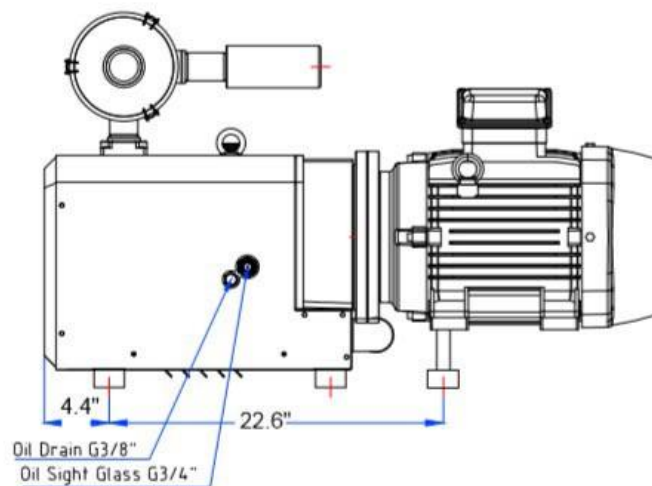
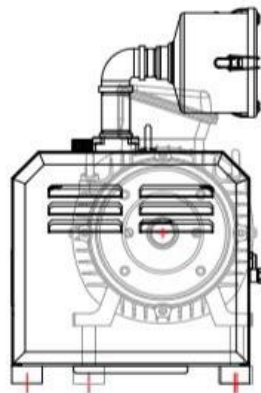
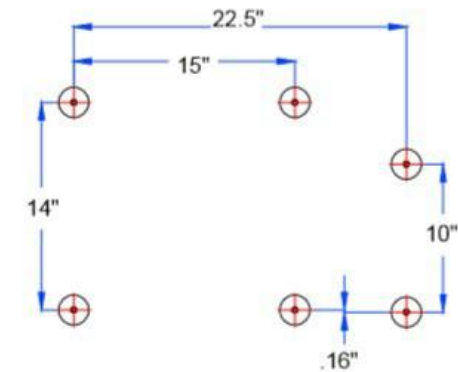
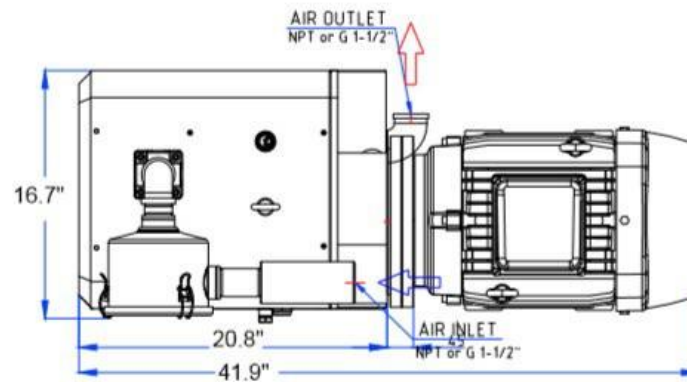


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NO	REVISIONS	SIGNATURE	TRC. BY					DWG. NO 13-105.2.215-00

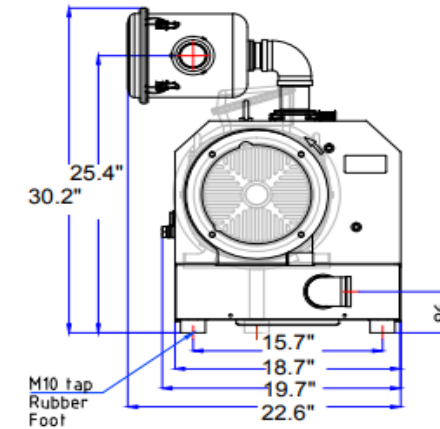
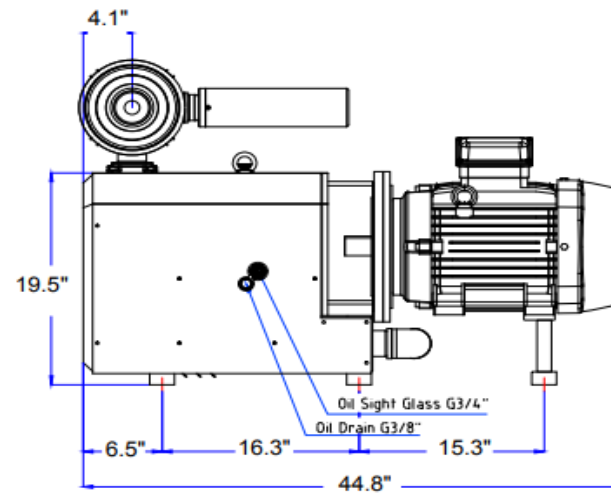
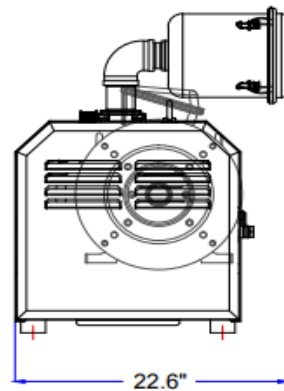
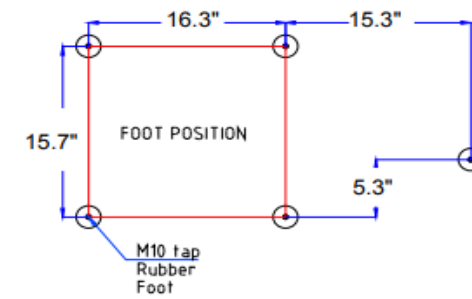
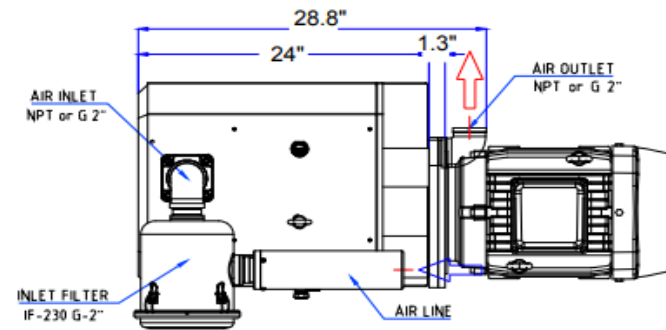


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NO	REVISIONS	SIGNATURE	TRC. BY					DWG. NO 13-155.2.215-00

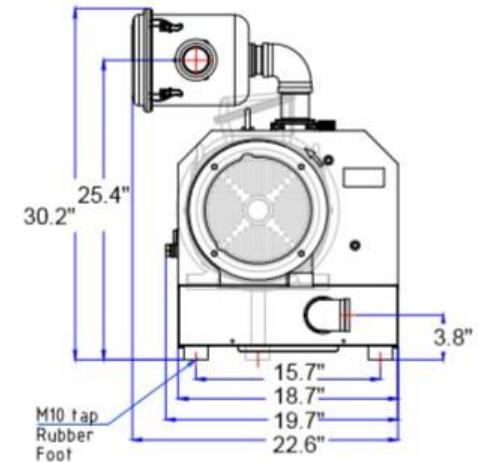
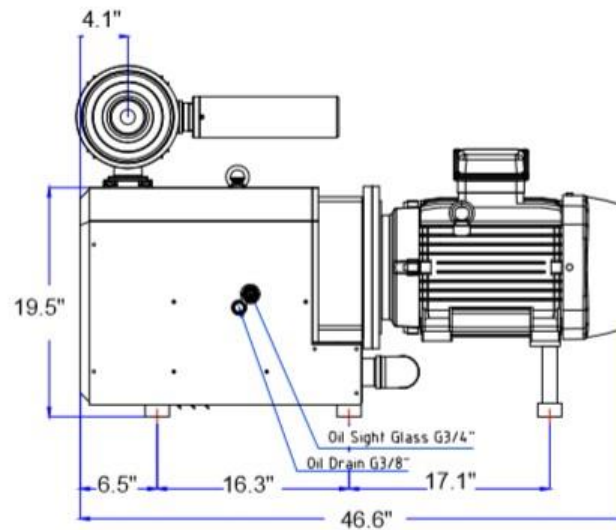
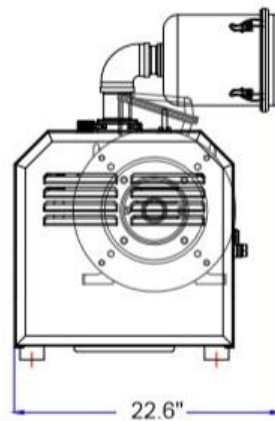
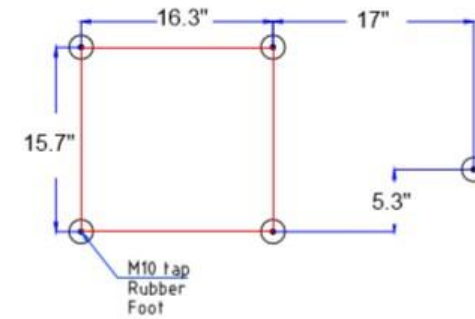
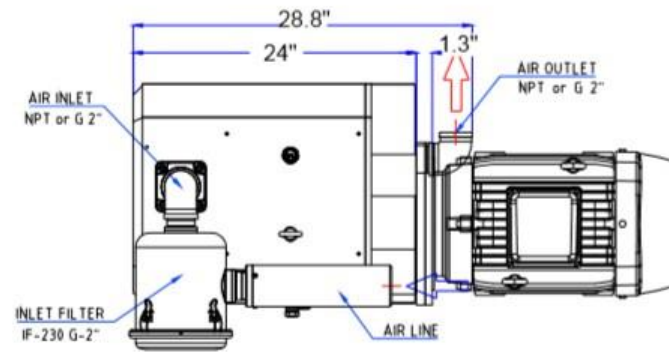




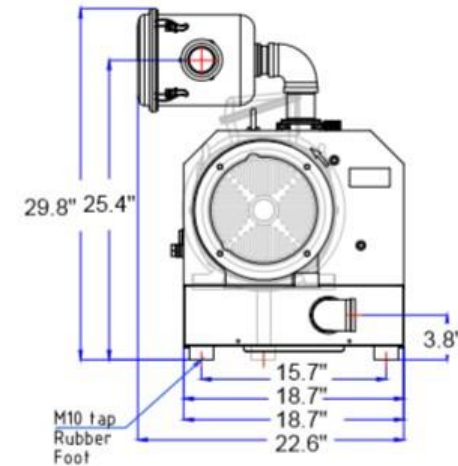
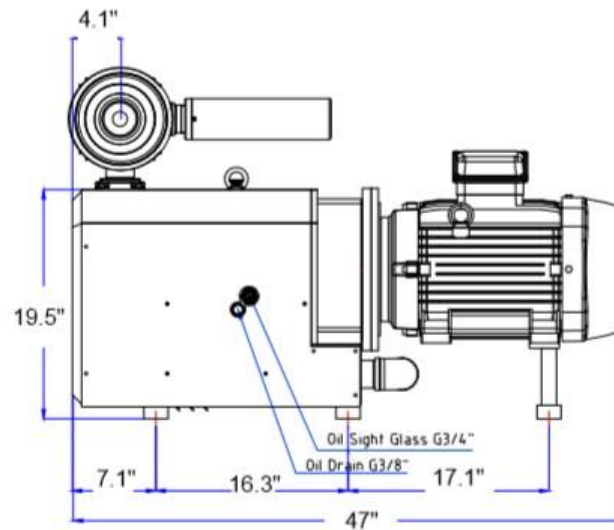
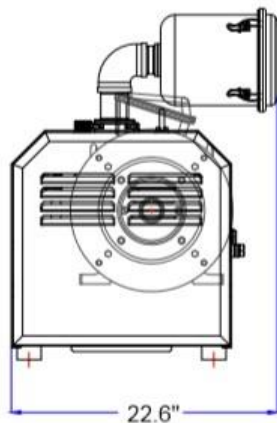
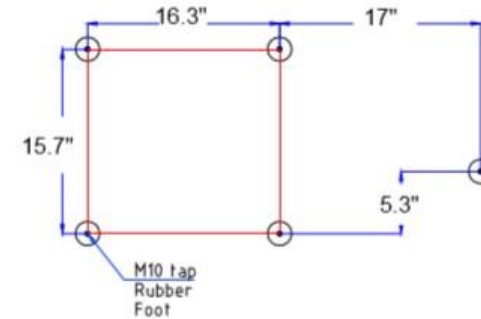
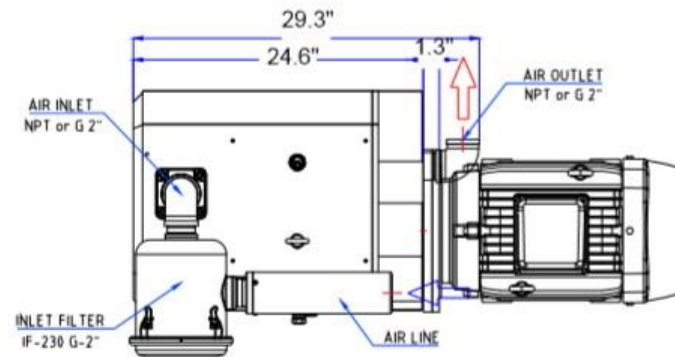
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△			DWN. BY					
NO	REVISIONS	SIGNATURE	TRC. BY					DWG. NO 13-155.2.254-00



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			DWN. BY K.H. Krok						
NO	REVISIONS	SIGNATURE	TRC. BY						
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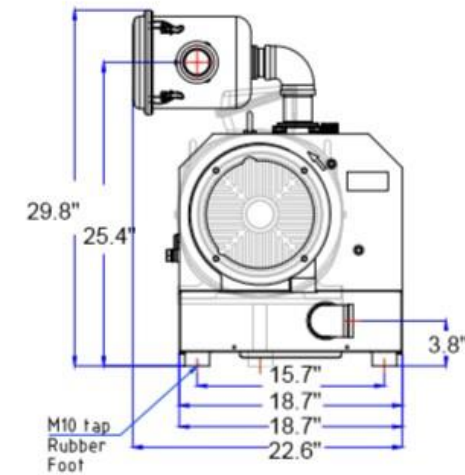
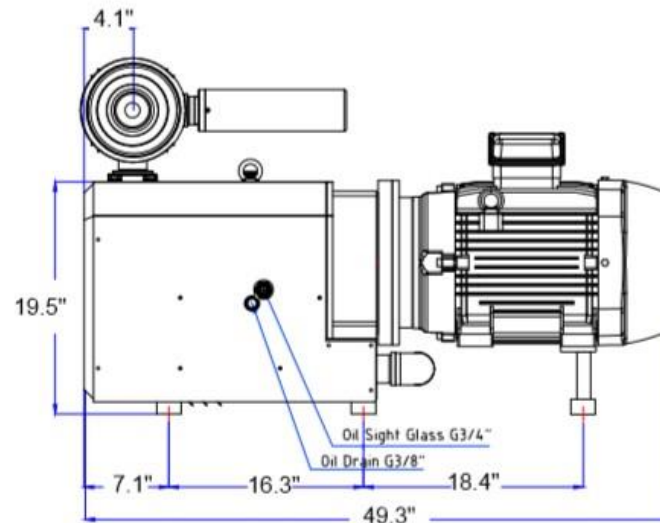
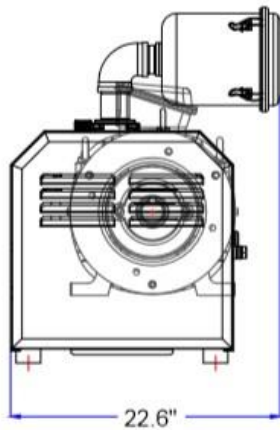
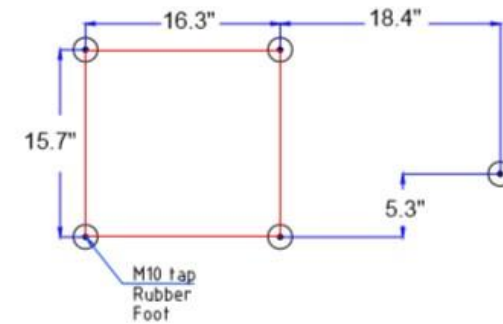
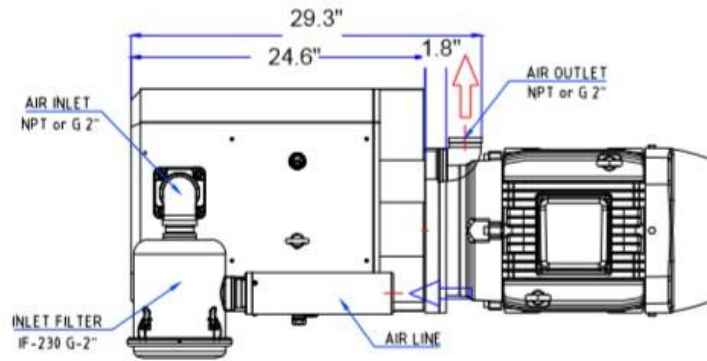


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NO	REVISIONS	SIGNATURE	TRC. BY	DWG. NO 13-255.2.256-00				

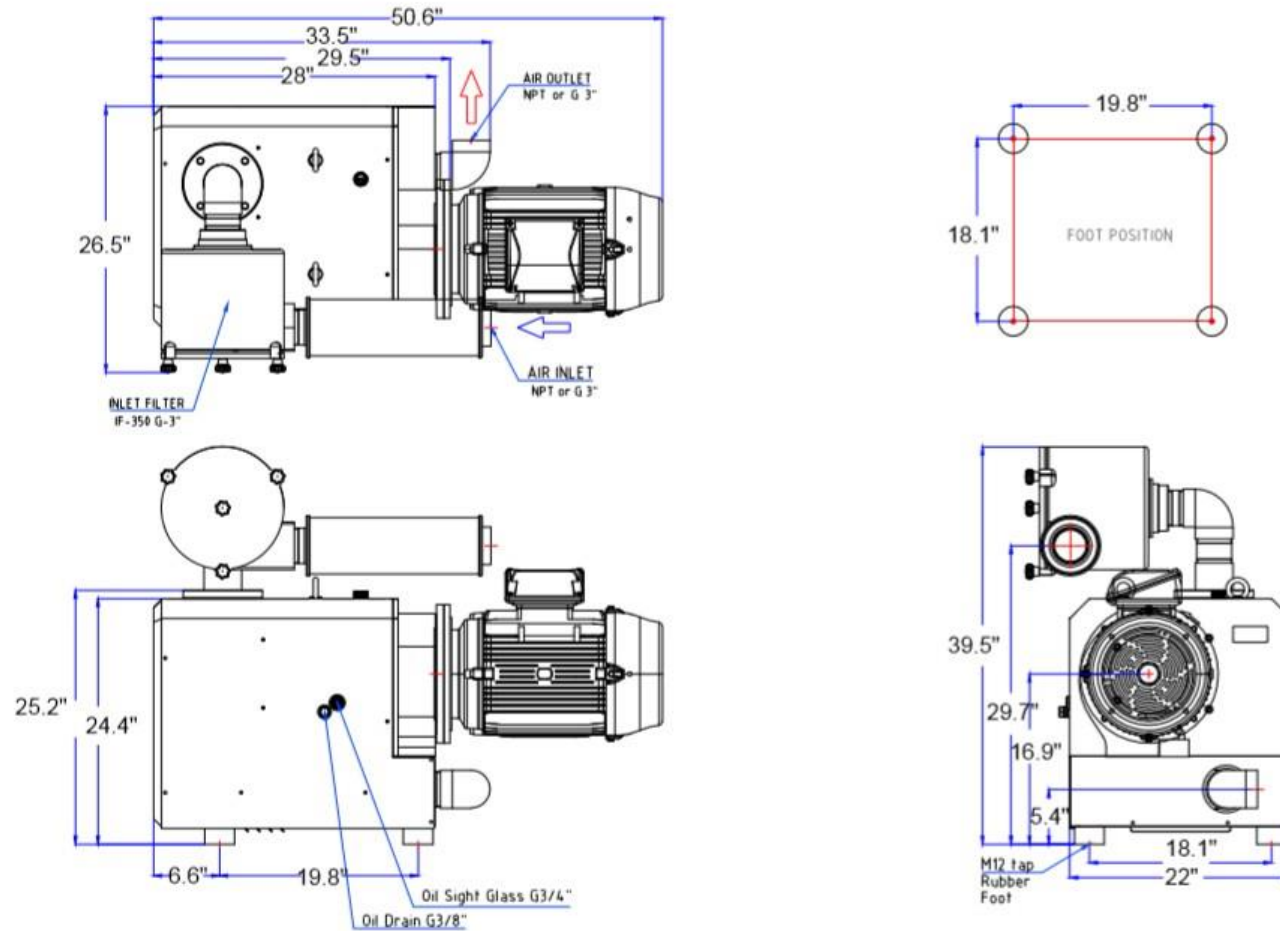


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△			DWN. BY	K.H. Kwon				
NO	REVISIONS	SIGNATURE	TRC. BY					

DWG. NO 13-305.2.256-00

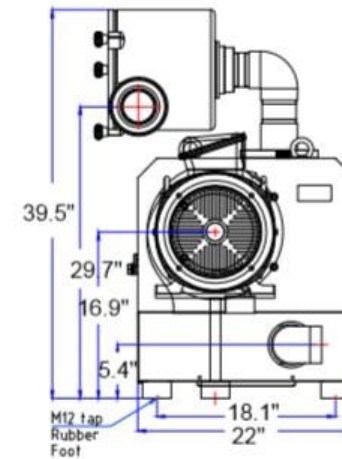
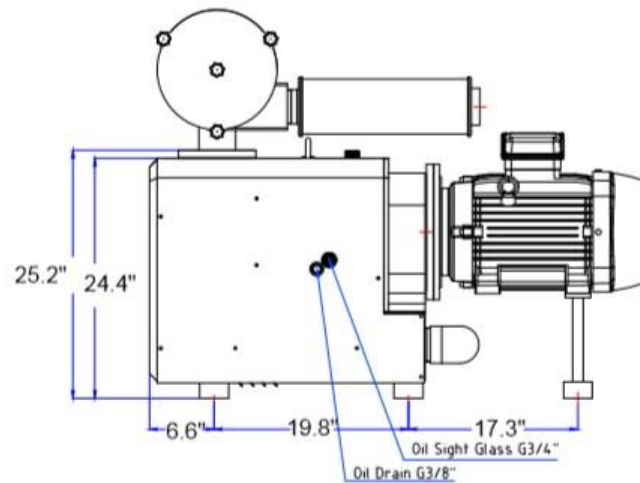
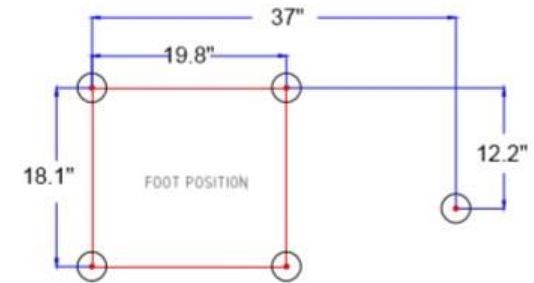
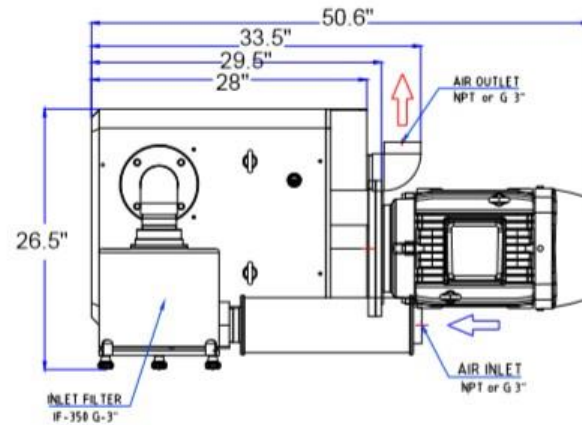


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NO	REVISIONS	SIGNATURE	TRC. BY					
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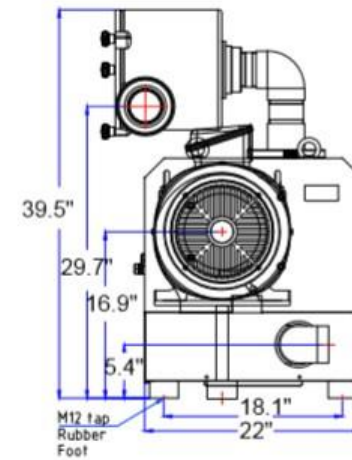
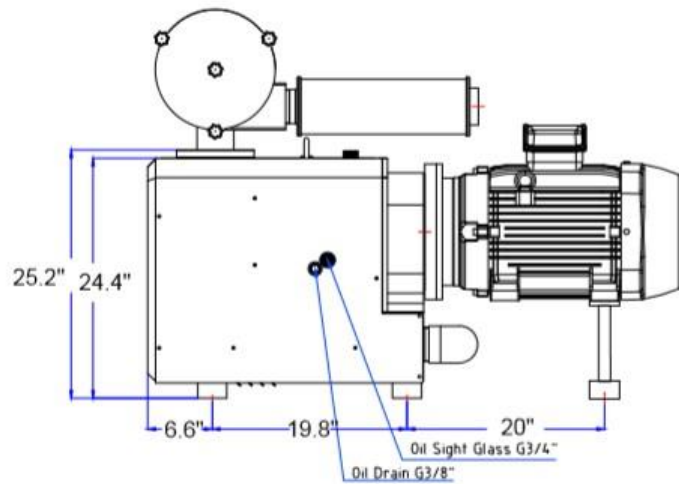
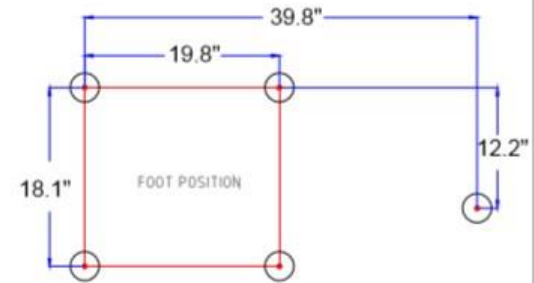
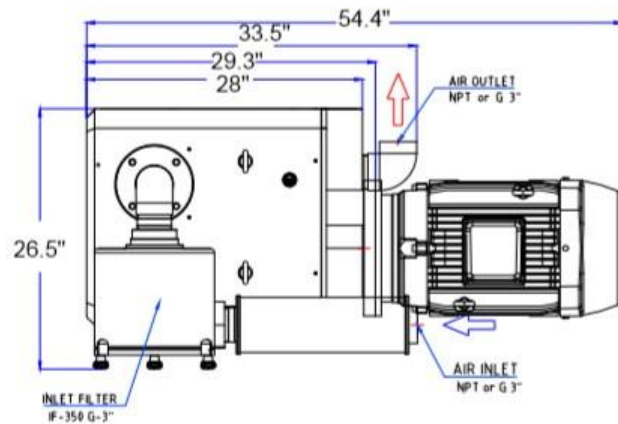


△			APP. BY	DATE	2016. 06. 02	SCALE	1:1	CA10-20 CLAW COMPRESSOR with 20 HP Nema 256TC Motor	
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△			DWN. BY						
NO	REVISIONS	SIGNATURE	TRC. BY						DWG. NO 13-405.2.256-00



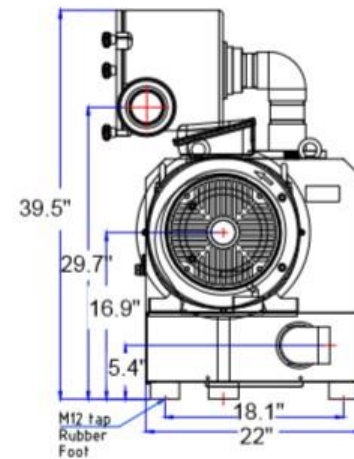
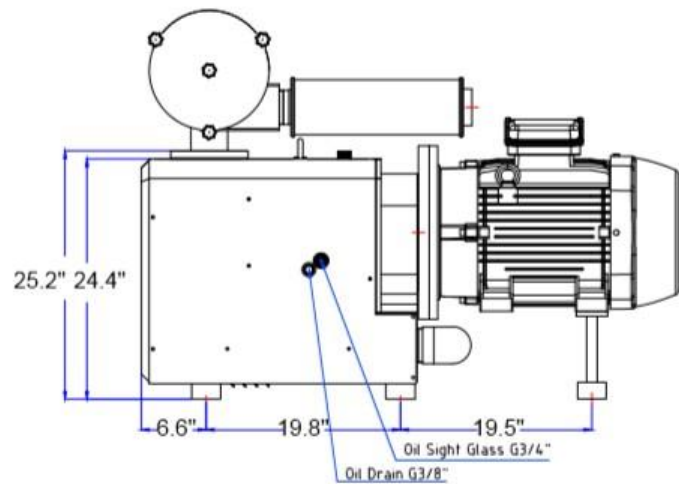
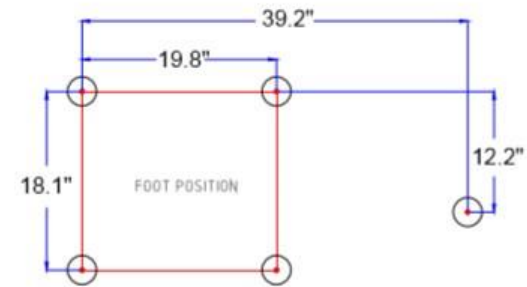
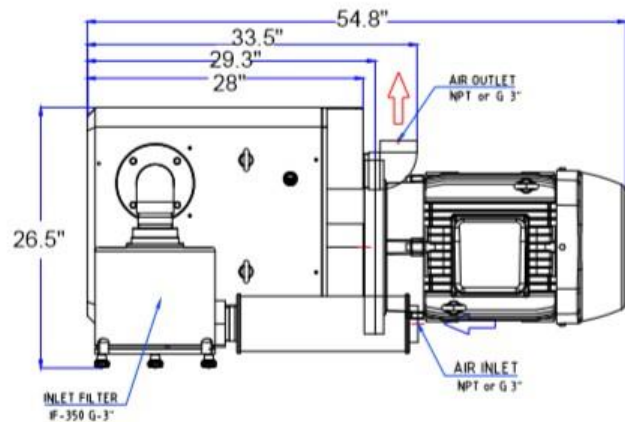


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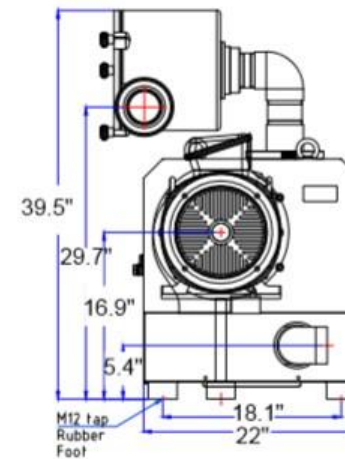
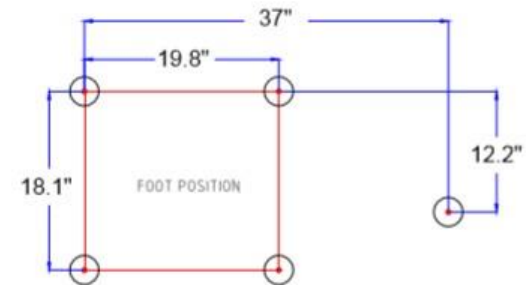
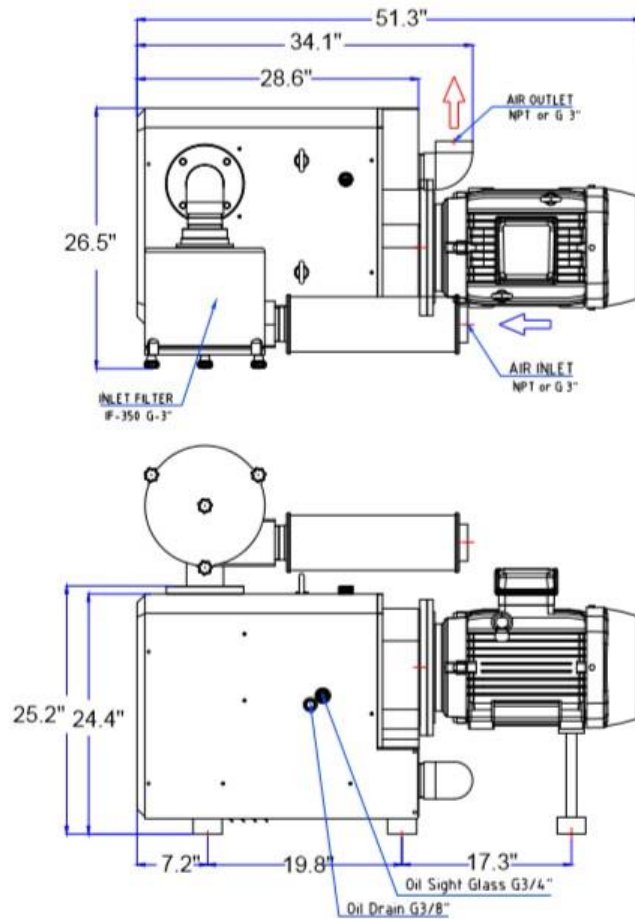


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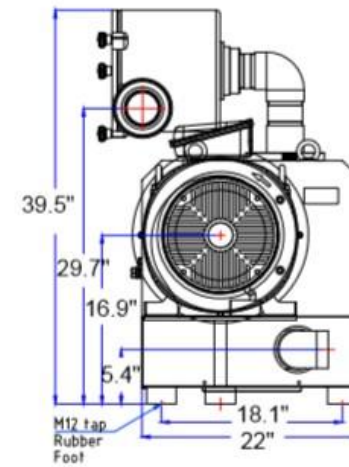
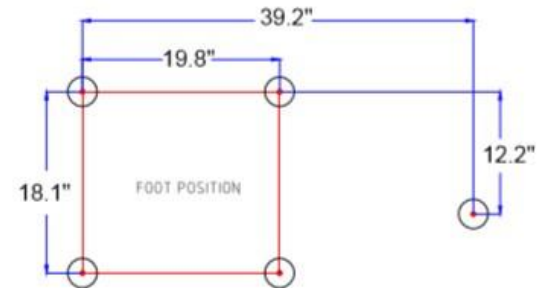
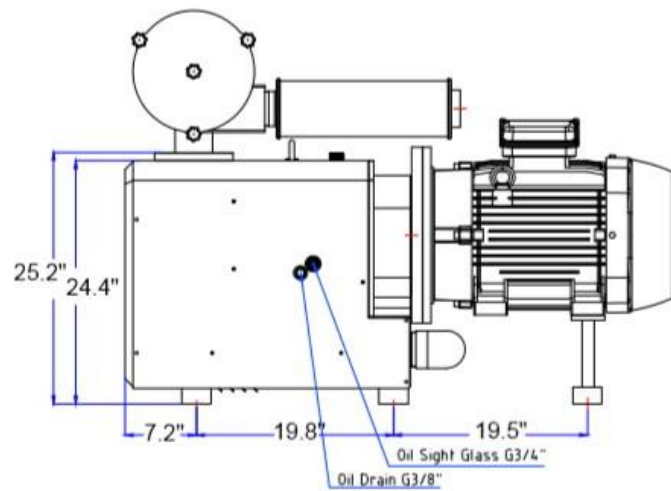
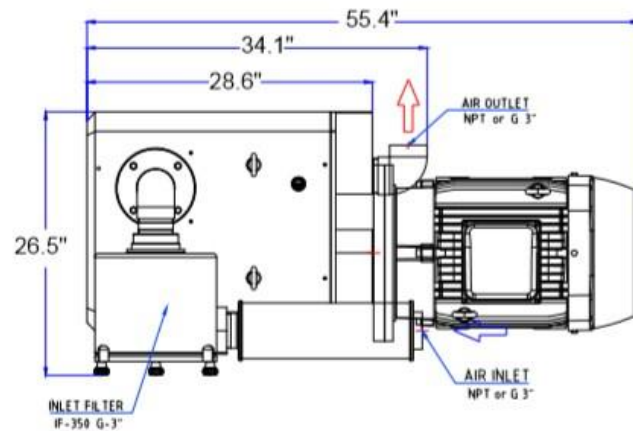




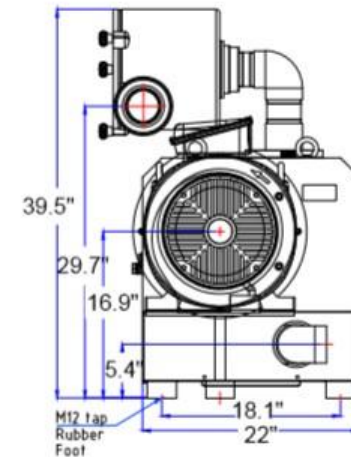
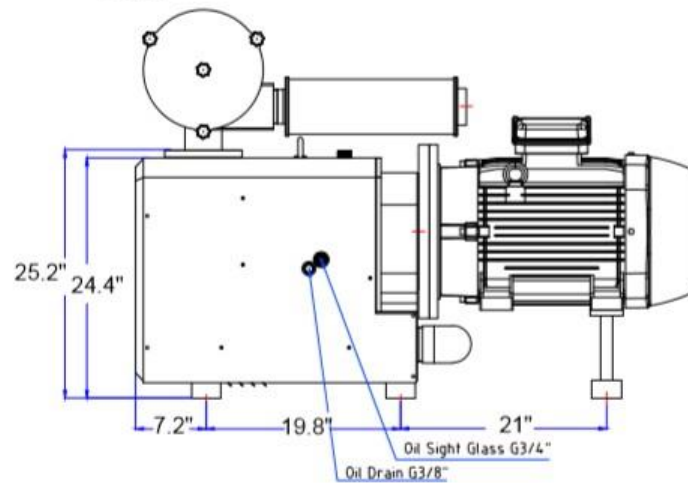
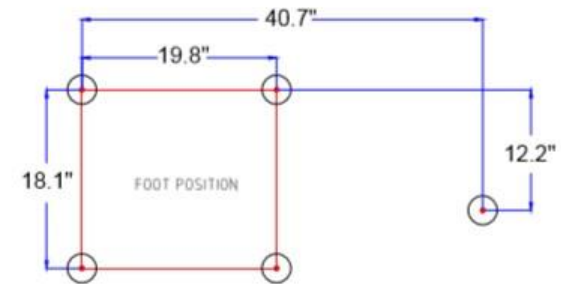
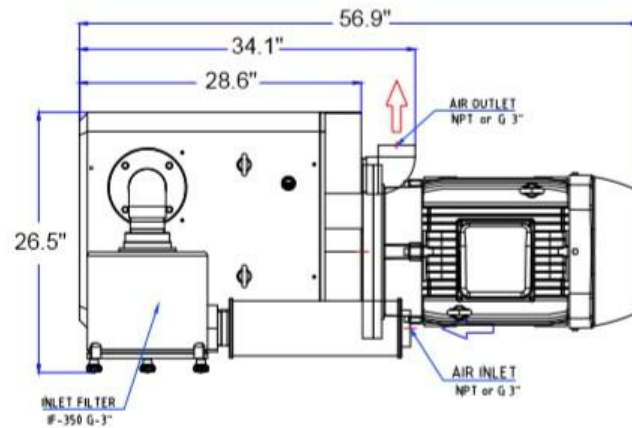
			APP. BY	DATE	2016. 06. 02	SCALE	1:1	CA10-40 CLAW COMPRESSOR with 40 HP Nema 324TC Motor
			CHK. BY					
			DWN. BY					
NO	REVISIONS	SIGNATURE	TRC. BY	DWG. NO 13-405.2.324-00				



△			APP. BY	DATE	2016. 06. 08	SCALE	1:1	CA15-25 CLAW COMPRESSOR with 25 HP Nema 284TC Motor
△			CHK. BY					
△			DWN. BY	K.H. K-wok				
NO	REVISIONS	SIGNATURE	TRC. BY					
								DWG. NO 13-515.2.284-00



△			APP. BY	DATE	2016. 06. 08	SCALE	1:1	<b>CA15-40 CLAW COMPRESSOR</b> <b>with 40 HP Nema 324TC Motor</b>  DWG. NO 13-515.2.324-00
△			CHK. BY					
△			DWN. BY	K.H. Kwok				
NO	REVISIONS	SIGNATURE	TRC. BY					



△			APP. BY	DATE	2016. 06. 08	SCALE	1:1	CA15-50 CLAW COMPRESSOR with 50 HP Nema 326TC Motor
△			CHK. BY					
△			DWN. BY	K.H. Kwok				
NO	REVISIONS	SIGNATURE	TRC. BY					DWG. NO 13-515.2.326-00



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