

# ELECTRIC OIL CHARGING PUMP PCO-4/6

Operation manual

## 5. Troubleshooting

Problem	Cause	Action
Solution pump isn't operating At all	<ol style="list-style-type: none"> <li>1.Power doesn't reach the pump</li> <li>2.The voltage isn't correct</li> <li>3.The thermal protector works</li> <li>4.The temperature is too low</li> <li>5.The pump body locked due to the dirt</li> </ol>	<ol style="list-style-type: none"> <li>1.Check the power and switch</li> <li>2.Make sure to keep the input voltage within rated voltage <math>\pm 5\%</math></li> <li>3.Check the thermal protector</li> <li>4.Increase the environment temperature</li> </ol>
Flow rate is too small or can't pump anymore	<ol style="list-style-type: none"> <li>1.The inlet hose or filter blocking</li> <li>2.The system has the air</li> <li>3.The outlet hose block</li> <li>4.The oil level is too low</li> <li>5.The system pressure is too high</li> <li>6.Pump stored for a long time</li> </ol>	<ol style="list-style-type: none"> <li>1.Clean the inlet hose and filter</li> <li>2.Discharge the air</li> <li>3.Keep the outlet hose unblock</li> <li>4.Check the inlet hose is under the oil level or not</li> <li>5.Solve the problem of high pressure</li> <li>6. Pour a little oil from the pump inlet port</li> </ol>
Pump runs with high noise	<ol style="list-style-type: none"> <li>1. too low oil level</li> <li>2. unreasonable hose size</li> <li>3. the dirt inside to pump</li> <li>4. the system has the air</li> <li>5. pump inner body damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. check the inlet hose is under the oil level or not</li> <li>2. adjust the hose size</li> <li>3. repair the pump</li> <li>4. discharge the air</li> <li>5. repair the pump, change the parts</li> </ol>
Pump temperature is too high	<ol style="list-style-type: none"> <li>1.Work pressure is more than max. pump pressure</li> <li>2. No enough fan cooling</li> <li>3. The environment temperature is too high</li> <li>4.Poor ventilation</li> </ol>	<ol style="list-style-type: none"> <li>1. Read the manual carefully/select the model</li> <li>2.Check the motor fan runs well or not</li> <li>3.Decrease the environment temperature</li> <li>4.Improve ventilation</li> </ol>

### 1. Notice for Use

Thank you for buying electric oil charging pumps, pls check if your ordered goods in good shipment condition, with the correct accessories. This manual gives instructions on the correct installation, It's important that you follow this instructions carefully.

### 2. Caution

**▲ WARNING**  
Before carrying out any adjustments or servicing, make sure the installation is disconnected from the power supply.

**▲ WARNING**  
Don't run this pump without oil.  
Don't run in the place with explosion hazard and inflammables

**▲ WARNING**  
Don't touch the motor and pump after running long-time to prevent to scald the hand.

### 3. Product Introduction

#### 3.1 Product Overview

electric oil charging pump is designed according to the feature of compressor oil supplement or change. It's body adapts with integration gear pump. electric oil charging pump is suitable for all kinds oil, especially for high viscosity oil and low temperature conditions: big flow rate, low noise, convenient carrying with toolbox, safety and reliability with thermal protection.











#### 3.1.1 Scope of use

electric oil charging pump is one of the special equipment used for refrigerant oil supplement and replacement of compressor. It can fill all kinds of refrigerant oil.

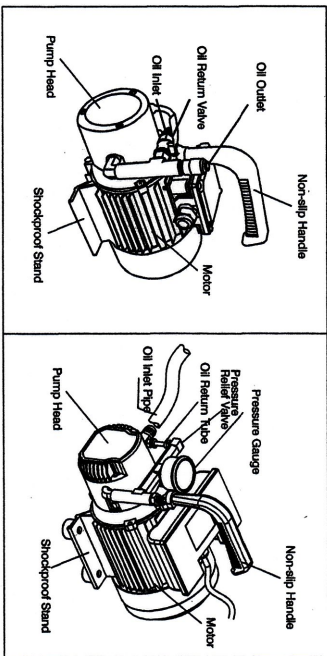
#### 3.1.2 Technical Data

Model	PCO-4	PCO-6
Voltage	230V~/50-60Hz 100-120V~/50-60Hz	230V~/50-60Hz 100-120V~/50-60Hz
Suit for oil viscosity	All kinds oil	All kinds oil (Especially high viscosity oil)
Motor	1/3 HP	3/4HP
Flow rate	150 L/h	350L/h
Max. Pressure	1.6MPa(232Psi)	2.5MPa(362Psi)
Outlet port	1/4" & 3/8" SAE	1/4" & 3/8" SAE
Weight	5.6kgs	10.4kgs

### 3.1.3 Accessories

	
PCCO-4	PCCO-6
 1/4 SAE  3/8 SAE  1.5m Outlet tube  Portable Toolbox	 1/4 SAE  3/8 SAE  1.5m Outlet tube  Portable Toolbox

### 3.1.4 Product Indication Chart



### 3.2 Operating Instruction

#### 3.2.1 Check Before Operation

(Only qualified service personal should operate this unit , may require the user to be licensed for some countries )

- Working-spot should have good lighting and Atmospheric conditions.
- Make sure the charging refrigerant oil from the oil tank is the same as the type indicated on the nameplate.
- Make sure with the correct voltage as the same as nameplate.

#### 3.2.2 Oil Charging Process

- 1) Clean the inlet and outlet hose to protect the oil mix,connect to the oil pump,then insert the inlet hose to the tank.
- 2) Switch on the pump for suction oil and discharge the air from the inlet hose and pump body,then switch off the pump once make sure no air inside( Judgment Principle: The discharged oil has no foam or obvious air discharge noise, proves that the air has been discharged ). Connect the outlet hose to the oil charging valve of compressor.
- 3) Open the oil charging valve , switch on the oil pump to start to charge the oil.
- 4) Running the compressor to review if the oil level , pressure , oil temperature is under normally conditions, and do the adjustment if necessary.
- 5) Remove the oil tank ,oil pump and outlet hose if everything is fine, wipe out the rest oil inside hose and pump, Pack them with sealed plastic bag ,then keep the compressor running again.

### 3.2.3 During Operation

#### 1) PCCO-4 Oil Charging Pump

When the pressure in the pump is too high and the PCCO-4 motor cannot operate normally at the rated speed, the oil return valve of the pump can be opened and then closed after the speed is normal, thus achieving the effect of instant pressurization.

#### 2) PCCO-6 Oil Charging Pump

- When the charging pressure exceeds 2.5MPa, the pipeline safety relief valve opens. Oil flows back to the oil inlet through the return pipe to reduce the pressure of the outlet pipe.
- When the oil outlet pressure exceeds 5MPa, please stop charging and check whether the oil outlet pipeline is blocked.

### 4. Maintenance

#### ▲ WARNING

Before/during checking process, make sure the installation is disconnected from the power supply.

#### ▲ WARNING

Don't touch the pump while the unit is very hot after running long-time.

#### ▲ WARNING

When the working pressure exceeds 5MPa, please stop charging and check whether the oil outlet pipeline is blocked.(PCCO-6)

To ensure the long-life and performance of oil pump, it should need to use clean ,pure refrigerant oil . Be sure to check first when the oil doesn't be used for a long time.