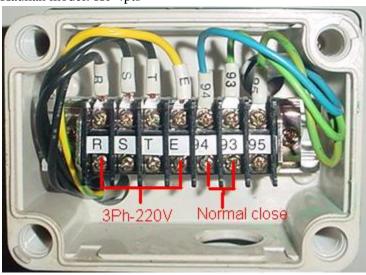


Oil spindle chiller ko-4pts trouble shooting

All machines run 8000rpm up, they must have oil spindle chiller. There are 2 types: Kaukan –KO-4PTS on floor and another one put on the machine.

Kaukan model: Ko-4pts



Kaukan-ko-4pts: Used 3ph-220V; electric current 4.5 A; Tank 20lit (5.284 gallons).

There recommended operation rang is the following:

Outlet oil temperature: min. -15°C max. +45°C (5°F to113°F) Air ambient temperature: min. -10°C max. +45°C (45°F to 113°F)

Centroid control has alarm "spindle chiller fault detected." Go check the oil spindle chiller Kankan and check what alarm indicates on panel.

Trouble shooting

		1
No any light was on, but	1. PCB is malfunction.	1.Replaced the PCB.
the main power was	2. The fuse (A1) on the power supply	2. Replaced the fuse (1.5 A).
supplied	3. The power supply was broken.	3. Replaced the power supply.
	4. The transformer was broken	4. Replaced the transformer.
Alarm light was on the	1. Main power was connecting to	1. Inverted the two phases from
display show (E01)	the reverse phase.	the cable.
	2.Missing one phase on the power.	2. Made sure the main power is
		normal- not loosing
Alarm light was on the	1.Pump motor over load breaker.	1. Press reset button.
display show (E02)	2.Pump motor is malfunction	2. Replaced the motor
Alarm light was on the	1.Pump motor over load breaker.	1. Press reset button.
display show (E03)	2.Pump motor is malfunction	2. Replaced the motor

Rev. Sep 2014 Page 1 of 2



Alarm light was on the display show (E04)	1. Excessive air temperature (over +45°C) 2. The air filter was clogged. 3. The condenser was clogged. 4. The refrigerant pressure switch (s63h) was malfunction	1.Press the reset button (red) after the air temperature was decreased to and under +45°C 2.Pressing the reset button (red) after the air filter was cleaner 3. Pressing the reset button after he condenser was cleaner 4. Replaced the switch.
Alarm light was on the display show (E05)	1.The piping on input side is loose 2.Input/output piping are connected backward 3.Tank oil lever is too low. 4. Pump woodruff key or motor shaft is malfunction 5. Pump pressure adjustment is malfunction 6. Oil pressure switch is malfunction 7.Hoses or liquid filter is clogged. 8. The pump pressure is too high	1.Tighten if it is losses. 2.Disconnect and tighten. 3.Eliminate the cause of the drop in liquid lever. Add liquid. 4.Replaced the motor or pump. 5.Replaced the pump. 6.Replaced the switch. 7.Clear the hoses, replaced the oil filter. 8. Lose the pump pressure adjustment or check the oil circuit is clear.
Alarm light was on the display show (E07)	1.Refrigerant is not enough for system 2. The refrigerant pressure switch (S631) was malfunction	1.Checking the refrigerant pressure and find out leakage. 2.Replaced the switch.
Alarm light was on the display show (E08)	1.The oil circuit was clogged or the piping was loose. 2. The oil flowing switch was malfunction	Cleaning the oil circuit or tighten the loose piping. Replaced the switch.
Alarm light was on the display show (E09)	The fluid sensor was malfunction	Replaced the sensor
Alarm light was on the display show (E11)	Oil temperature was over +45°C	Replaced the bigger cooling capacity oil cooler.
Alarm light was on the display show (E12)	Oil temperature has not decrease 1°C during two hours when the compressor operated.	Replaced the bigger cooling capacity oil cooler

Rev. Sep 2014 Page 2 of 2