

**Machine #:** \_\_\_\_\_ **Machine Type:**  P40  P30  P20 **Room #:** \_\_\_\_\_ **Console Serial #:** \_\_\_\_\_

**General Inspection & Start Up**

**Check the quality of the following items. Indicate their status as follows:**

✓ - Acceptable X - Not Acceptable O - Attention needed N/A - not applicable

**General Machine**

- Cabinet square & plumb
- Even door gaps
- Door seals properly
- Door latches properly
- Upper & lower doors aligned
- Door gasket good condition
- Door sweep effective
- Joints properly caulked
- ECU position & condition, supports properly located
- Guide rails height & install
- Grout complete & clean
- Silicone around all liquid tight, light bar, etc.

**Functional Units**

- ECU sloped away from intake
- ECUs in line
- Damper motor operation
- Damper closed adjustment
- Damper openings equal
- Motor mount bolts (16) tight
- Touch screen

**Machine Console**

- Console latches & seals
- Console doors are aligned
- Console interior dry
- Cleanliness in console
- Primary alarm connected
- Network connection
- Status Lights Work
- Internal LEDs work
- E-Stop button works
- Motors off switch works
- Lights - Alarm (Red)
- Lights - Alarm Bypass (Amber)

**Sensors**

- Temp probe condition
- Humidity sensor condition
- Humidity sensor cover
- CO<sub>2</sub> sensor condition
- CO<sub>2</sub> sensor cover
- BUA probe installed and connected

**Site Leader:** \_\_\_\_\_

**Calibration**

**Fill out the actual values in this area.**

*Calibration Checks:*

**Temperature**

Set Point \_\_\_\_\_ °F/°C      Display reading \_\_\_\_\_ °F/°C      Check reading \_\_\_\_\_ °F/°C      Offset: \_\_\_\_\_

**Humidity**

Set Point \_\_\_\_\_ %/°F/°C      Display reading \_\_\_\_\_ %/°F/°C      Check reading \_\_\_\_\_ %/°F/°C      Offset: \_\_\_\_\_

**Carbon Dioxide**

Calibration Type:  instrument  bottle

Set Point \_\_\_\_\_ %/ppm      Display reading \_\_\_\_\_ %/ppm      Check reading \_\_\_\_\_ %/ppm

**Damper**

Set Point \_\_\_\_\_ %      Display reading \_\_\_\_\_ %

**Voltage Check Points - SMA111 Circuit Board** [Use TP21 Black as a reference]

\_\_\_\_\_ TP20 (Red) +5 VDC +/- 0.1      \_\_\_\_\_ TP19 (Green) +1.00 VDC +/- 0.0      \_\_\_\_\_ TP18 (Orange) +0.1 to 1.1 VDC

\_\_\_\_\_ TP9 (solder) +12 VDC +/- 0.6      \_\_\_\_\_ TP8 (solder) -12 VDC +/- 0.6      \_\_\_\_\_ TP15 (solder) +5 VDC +/- 0.25

**Transformer T1 Voltage**

\_\_\_\_\_ Output X1 to X4 24 VAC +/- 2.0

**Transformer T2 Voltage**

\_\_\_\_\_ Output X1 to X4 208-240 VAC

**Three Phase AC Voltage at Switch** [Fans at 100%]

\_\_\_\_\_ Terminal 2 to 4      \_\_\_\_\_ Terminal 2 to 6      \_\_\_\_\_ Terminal 4 to 6

**System Set-Up**

**Check the quality of the following items. Indicate their status as follows:**

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*Machine Programming:*

**System Checks**

- Console switch settings
- Check all wiring terminations

Latest program version

**Setup Screen**

- Display units
- Time and date
- Turn setup
- Humidity setup
- Fan speed setup
- Carbon dioxide setup
- Holding mode
- Dry Down configuration
- Password protection

Hatchcom Installed & Set Up

**Alarm Screen**

- Alarm relay test
- Alarm delays set
- Alarm ranges set
- Alarm override test
- Alarm silence test

**Graph Setup**

- Graph range
- Graph sample time

**Main Screen**

- Room number
- Machine type
- Unit address
- Setpoints

**Diagnostic Screen**

- All outputs green
- Analog: 0000
- Novram: 0000

**Interface/Display**

- Fan button
- Fan failure calibration
- Light button
- Alarm bypass button
- Emergency shut off
- Alarm bypass switch (located inside console)

Primary Alarm operational

Correct profiles loaded

**Field Service Technician:** \_\_\_\_\_

**Service Commissioning**

**Check the quality of the following items. Indicate their status as follows:**

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Water System Available:

Chiller, Setpoint: \_\_\_\_\_  
 Boiler, Setpoint: \_\_\_\_\_

Fluid Cooler if temps <40F

Glycol if temps <40F

Contractor completed water system start up and flushed lines:

Chilled water system

Hot water system

**Cooling**

58°F ± 1°F at ECU unit  
 40 PSI maximum pressure  
 3 (P20, P30) or 4 (P40) US GPM flow  
 Cold water valve  
 Coils functioning  
 Supply flushed before solenoid  
 ECUs purged of air  
 System free of leaks

**Heating - Water**

150°F at ECU unit  
 40 PSI maximum pressure  
 3 (P20, P30) or 4 (P40) US GPM flow  
 Hot water valve  
 Coils functioning  
 Supply flushed before solenoid  
 ECUs purged of air  
 System free of leaks

**Heating - Electric**

Electric heat working  
 Current: \_\_\_\_\_

**Humidity System**

Minimum 65 PSI at ECU unit  
 Humidity nozzles removed  
 & system flushed  
 Humidity system checked for leaks  
 Humidity sprays functioning  
 Humidity water meets JW requirements

**Fan Systems**

Variable speed drives function  
 VSD programming correct  
 Fan rotation correct  
 1,4: CCW 2,3: CW

Ventilation (complete for the first machine in each room)

**Temperature**

Set Point \_\_\_\_\_ °F/°C  
 JW: 72-78°F (22-26°C) opt. 75°F (24°C)

**Humidity**

Set Point \_\_\_\_\_ %  
 JW: 40-50%, opt. 45%

**Pressure**

Set Point \_\_\_\_\_ in w.c.  
 JW: P40: 0.010-0.020" (2.5-5 Pa) P30,P20:  
 0.005-0.015" (1.2-3.7 Pa)

**Plenum Pressure**

Set Point \_\_\_\_\_ in w.c.  
 JW: P40: -0.030 to -0.040" (-7.5 to -10 Pa)  
 P30: -0.020 to -0.030" (-5.0 to -7.5 Pa) P20: -  
 0.015 to -0.020" (-3.7 to -5.0 Pa)

Set points meet JW recommendations; If NO, advise customer of JW req'ts   
 Ventilation meeting all set points

Commissioning Field Service Technician: \_\_\_\_\_

**Additional Notes:**

COMMISSIONED BY: \_\_\_\_\_

CUSTOMER NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

ORDER #: \_\_\_\_\_

CUSTOMER SIGNATURE: \_\_\_\_\_