Prodigy® Powder Port Feed Center (EU)

Customer Product Manual
Part 7156192A
Issued 8/09

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NORDSON CORPORATION • AMHERST, OHIO • USA

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EC DECLARATION OF CONFORMITY
ACCORDING TO CE DIRECTIVE 2006/42/ EC ANNEX II A

DESCRIPTION	PowderFeedCenter Family/ Models: PowderPort with-w/o Filter Unit
APPLICABLE DIRECTIVES	CEE 2006/42 (Machinery) and following amendments ATEX 94-9-EG Explosive Atmosphere CEE 2004/108 Electromagnetic Compatibility Directive CEE 2006/95 EEC Low Voltage Directive 97/23/EC Pressure Equipment Directive
STANDARDS USED TO VERIFY COMPLIANCE	EN 60204-1 Safety of machinery-Electrical equipment EN ISO 12100-1-2 Safety of machinery-Design EN 1127-1 Explosive atmospheres
MARKING OF PRODUCT	CE
MARKING/USE OF COMPONENTS IN ATEX ZONES	Ex *II 3 D*

The equipment delivered is generally intended to be part of a powder coating system, and can be operated on its own or in conjunction with other equipment.
In order to be in full compliance with the CE machinery directive and its amendments, the customer is obliged to respect the applicable regulations for his powder coating system upon incorporation of the equipment in the powder coating plant and before starting operation.

We hereby declare that the product specified conforms to the directives and standards described above and that it has been provided with a CE label. Provided the product is installed and operated in line with Nordson's manuals its operation is safe.

Kai Flockenhaus,
Manager - Procurement & Process,
ICS Europe Industrial Coating Systems Europe
Nordson Deutschland GmbH

Erkrath, 27th May 2014

Nordson International

http://www.nordson.com/Directory

Europe

Country		Phone	Fax
Austria		43-1-707 5521	43-1-707 5517
Belgium		31-13-511 8700	31-13-511 3995
Czech Republic		4205-4159 2411	4205-4124 4971
Denmark	*Hot Melt*	45-43-66 0123	45-43-64 1101
	Finishing	45-43-200 300	45-43-430 359
Finland		358-9-530 8080	358-9-530 80850
France		33-1-6412 1400	33-1-6412 1401
Germany	*Erkrath*	49-211-92050	49-211-254 658
	Lüneburg	49-4131-8940	49-4131-894 149
	Nordson UV	49-211-9205528	49-211-9252148
	EFD	49-6238 920972	49-6238 920973
Italy		39-02-904 691	39-02-9078 2485
Netherlands		31-13-511 8700	31-13-511 3995
Norway	*Hot Melt*	47-23 03 6160	47-23 68 3636
Poland		48-22-836 4495	48-22-836 7042
Portugal		351-22-961 9400	351-22-961 9409
Russia		7-812-718 62 63	7-812-718 62 63
Slovak Republic		4205-4159 2411	4205-4124 4971
Spain		34-96-313 2090	34-96-313 2244
Sweden		46-40–680 1700	46-40-932 882
Switzerland		41-61-411 3838	41-61-411 3818
United Kingdom	*Hot Melt*	44-1844-26 4500	44-1844-21 5358
	Finishing	44-161-495 4200	44-161-428 6716
	Nordson UV	44-1753-558 000	44-1753-558 100

Distributors in Eastern & Southern Europe

DED, Germany	49-211-92050	49-211-254 658

Outside Europe / Hors d'Europe / Fuera de Europa

- For your nearest Nordson office outside Europe, contact the Nordson offices below for detailed information.
- Pour toutes informations sur représentations de Nordson dans votre pays, veuillez contacter l'un de bureaux ci-dessous.
- Para obtener la dirección de la oficina correspondiente, por favor diríjase a unas de las oficinas principales que siguen abajo.

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Japan			
Japan		81-3-5762 2700	81-3-5762 2701
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Canada		1-905-475 6730	1-905-475 8821
USA	*Hot Melt*	1-770-497 3400	1-770-497 3500
	Finishing	1-880-433 9319	1-888-229 4580
	Nordson UV	1-440-985 4592	1-440-985 4593

Prodigy® Powder Port Feed Center

Safety

Read and follow these safety instructions. Task- and equipment-specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to all persons operating or servicing equipment.

Qualified Personnel

Equipment owners are responsible for making sure that Nordson equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

Intended Use

Use of Nordson equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

Some examples of unintended use of equipment include

- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

All phases of equipment installation must comply with all federal, state, and local codes.

Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.
- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.
- Keep clear of moving equipment. Before adjusting or servicing any moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.
- Obtain and read Material Safety Data Sheets (MSDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.
- To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

Fire Safety

To avoid a fire or explosion, follow these instructions.

- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored.
- Provide adequate ventilation to prevent dangerous concentrations of volatile materials or vapors. Refer to local codes or your material MSDS for guidance.
- Do not disconnect live electrical circuits while working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Nordson representative for parts information and advice.

Grounding

WARNING: Operating faulty electrostatic equipment is hazardous and can cause electrocution, fire, or explosion. Make resistance checks part of your periodic maintenance program. If you receive even a slight electrical shock or notice static sparking or arcing, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.

Grounding inside and around the booth openings must comply with NFPA requirements for Class II Division 1 or 2 Hazardous Locations. Refer to NFPA 33, NFPA 70 (NEC articles 500, 502, and 516), and NFPA 77, latest conditions.

- All electrically conductive objects in the spray areas shall be electrically connected to ground with a resistance of not more than 1 megohm as measured with an instrument that applies at least 500 volts to the circuit being evaluated.
- Equipment to be grounded includes, but is not limited to, the floor of the spray area, operator platforms, hoppers, photoeye supports, and blow-off nozzles. Personnel working in the spray area must be grounded.
- There is a possible ignition potential from the charged human body. Personnel standing on a painted surface, such as an operator platform, or wearing non-conductive shoes, are not grounded. Personnel must wear shoes with conductive soles or use a ground strap to maintain a connection to ground when working with or around electrostatic equipment.
- Operators must maintain skin-to-handle contact between their hand and the gun handle to prevent shocks while operating manual electrostatic spray guns. If gloves must be worn, cut away the palm or fingers, wear electrically conductive gloves, or wear a grounding strap connected to the gun handle or other true earth ground.
- Shut off electrostatic power supplies and ground gun electrodes before making adjustments or cleaning powder spray guns.
- Connect all disconnected equipment, ground cables, and wires after servicing equipment.

Action in the Event of a Malfunction

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

- Disconnect and lock out electrical power. Close pneumatic shutoff valves and relieve pressures.
- Identify the reason for the malfunction and correct it before restarting the equipment.

Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

Description

The Prodigy Powder Port is a powder feed center expressly designed for use in Prodigy Powder Coating Systems. It supplies powder to Prodigy Manual and Automatic Spray Guns and can be used with both spray-to-waste and reclaim systems.

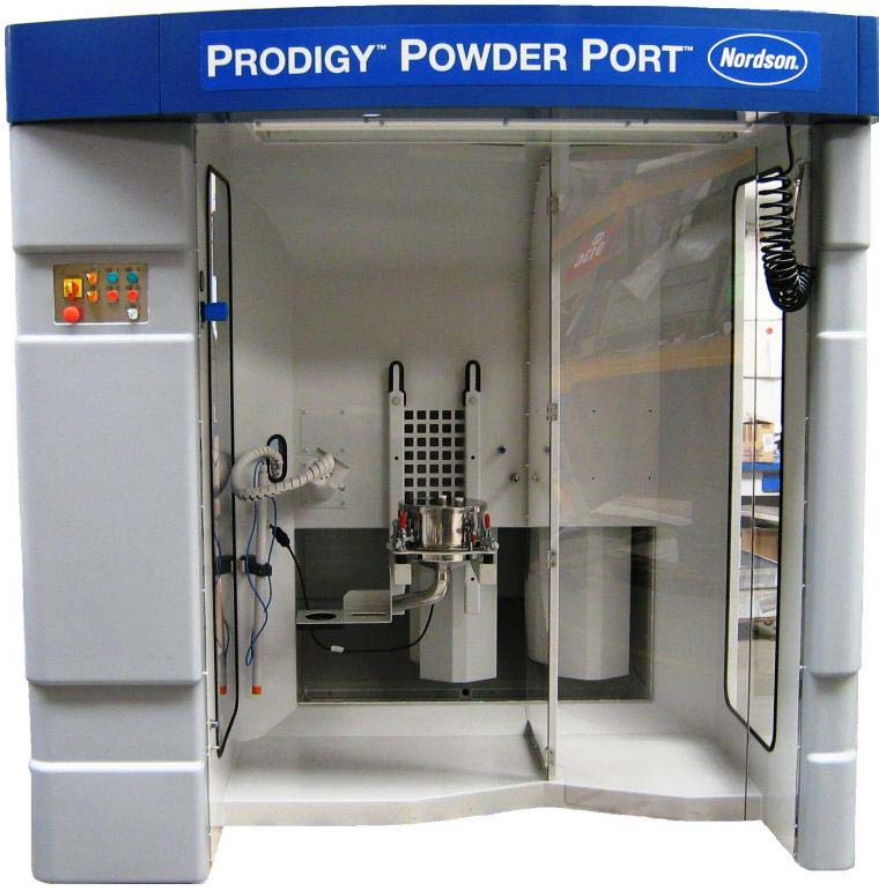


Figure 1 Prodigy Powder Port

There are 2 options available for the Prodigy Powder Port.

The standard has an extract hood connected via ductwork to the main system afterfilter. There is another alternative which consists of an enclosure with an exhaust fan, cartridge filters, pulse valves, and collector to collect and retain powder.

NOTE: The afterfilter exhaust fan generates the air flow through the feed center and carries the waste powder to the afterfilter.

Each side of the enclosure can house one or two pump panels. Each pump panel can hold up to 8 Prodigy HDLV spray gun pumps, one per spray gun (minimum system size is 4 guns, maximum size is 32 guns).

The pump panels are hinged to the enclosure so they can be swung out to provide access to the pumps and the feed center control panel. The pump control manifolds and circuit boards are housed inside the panels.

The Prodigy automatic spray gun pumps are configured and controlled by the Prodigy iControl system. Manual spray gun pumps are configured and controlled by Prodigy Manual Gun Controllers. Powder is supplied to the gun pumps from one or two lances (16 suction tubes per lance) and a fluidized bed feed hopper with a capacity of 26.7 kg (50 lb) of powder.

Prodigy High-Capacity HDLV transfer pumps deliver reclaimed and virgin powder to the vibratory sieve. The screened powder falls into the feed hopper. Both pumps are supplied with operating and purge pilot air from the feed center solenoid valve assembly.

Components

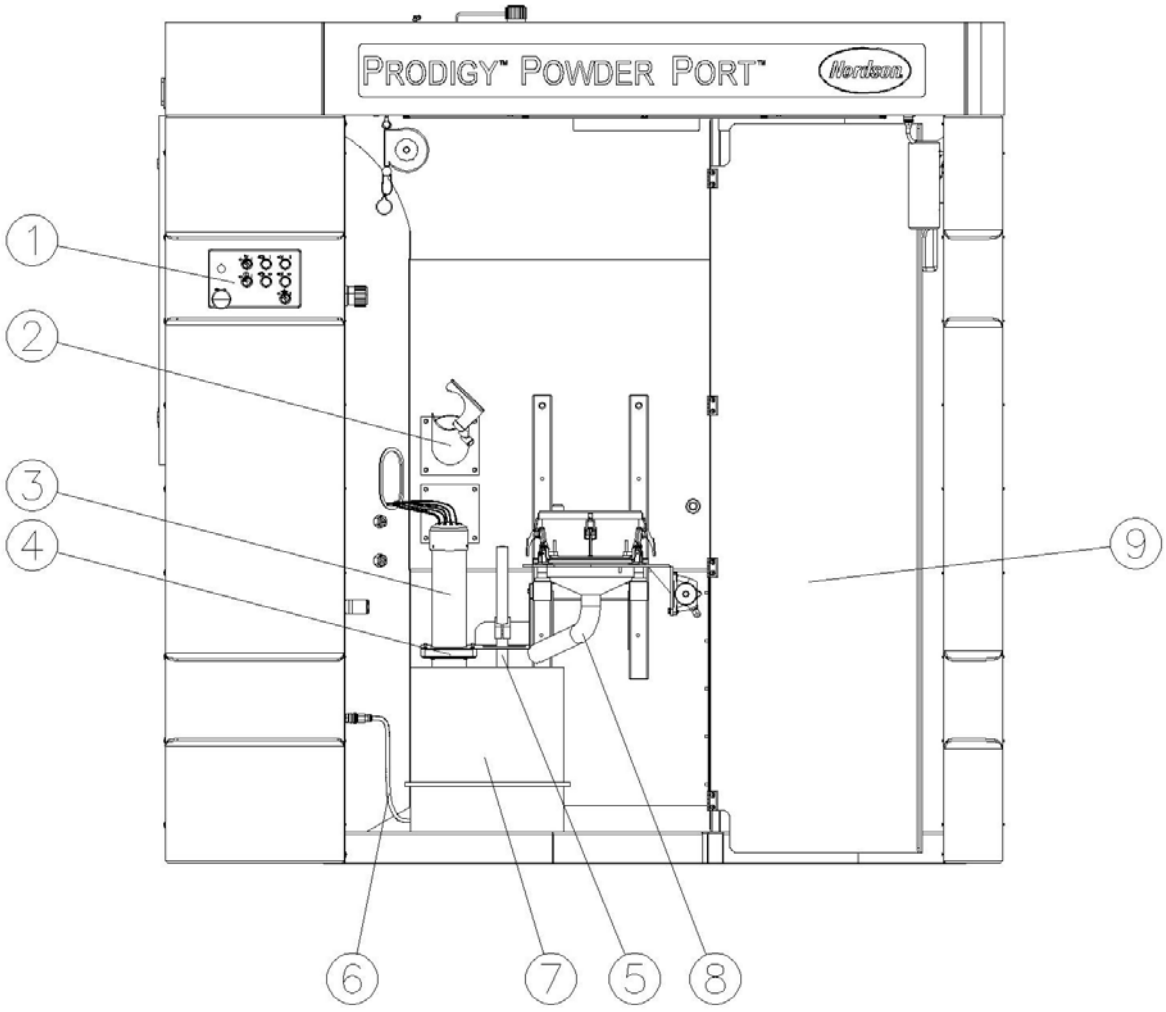


Figure 2 Front View of Feed Center

1. Control panel
2. Lance purge chutes
3. Lances
4. Lance guides
5. Level sensor and bracket
6. Fluidizing air hose
7. Feed hopper
8. Sieve discharge chute
9. Cleaning station

Components *(contd)*

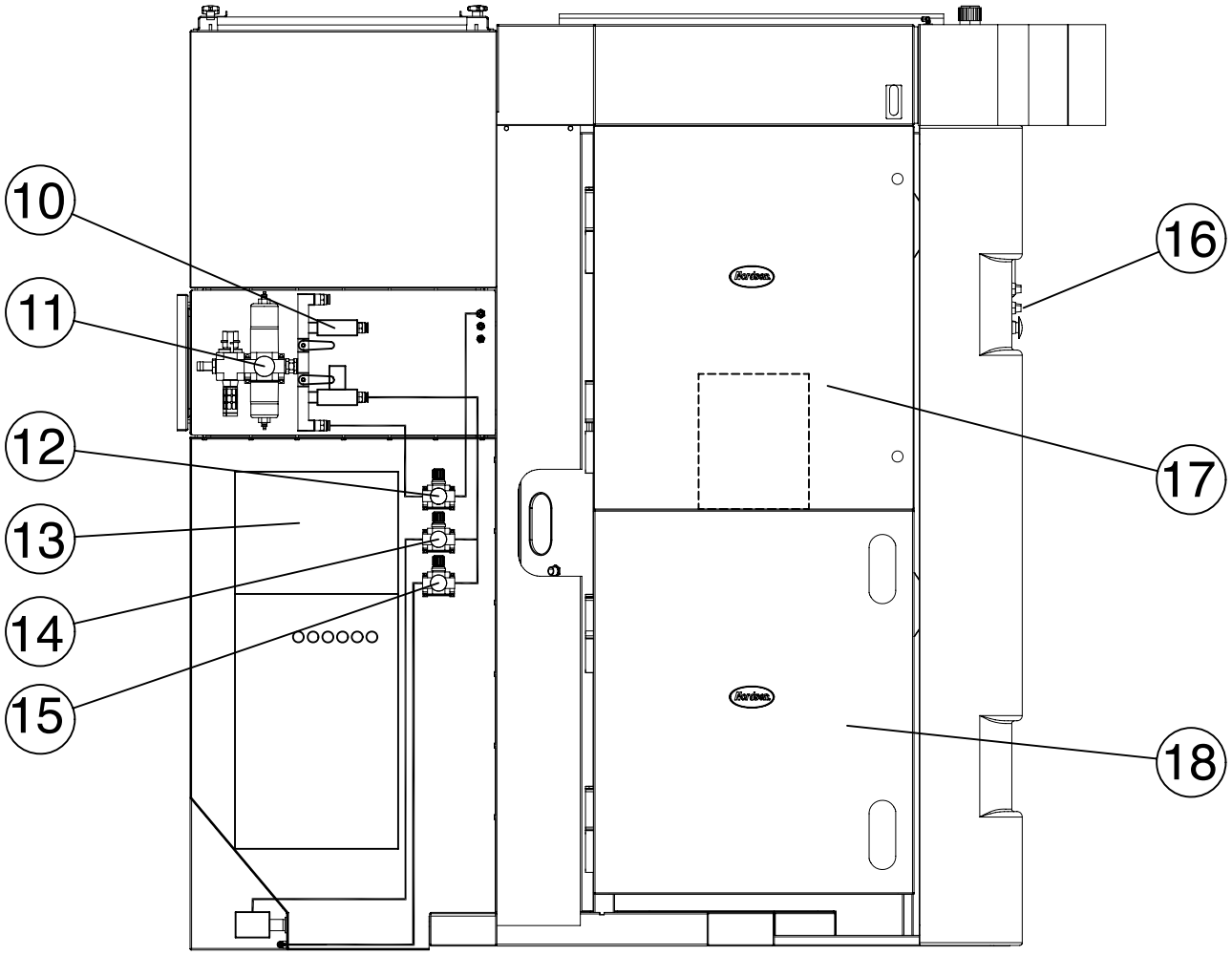
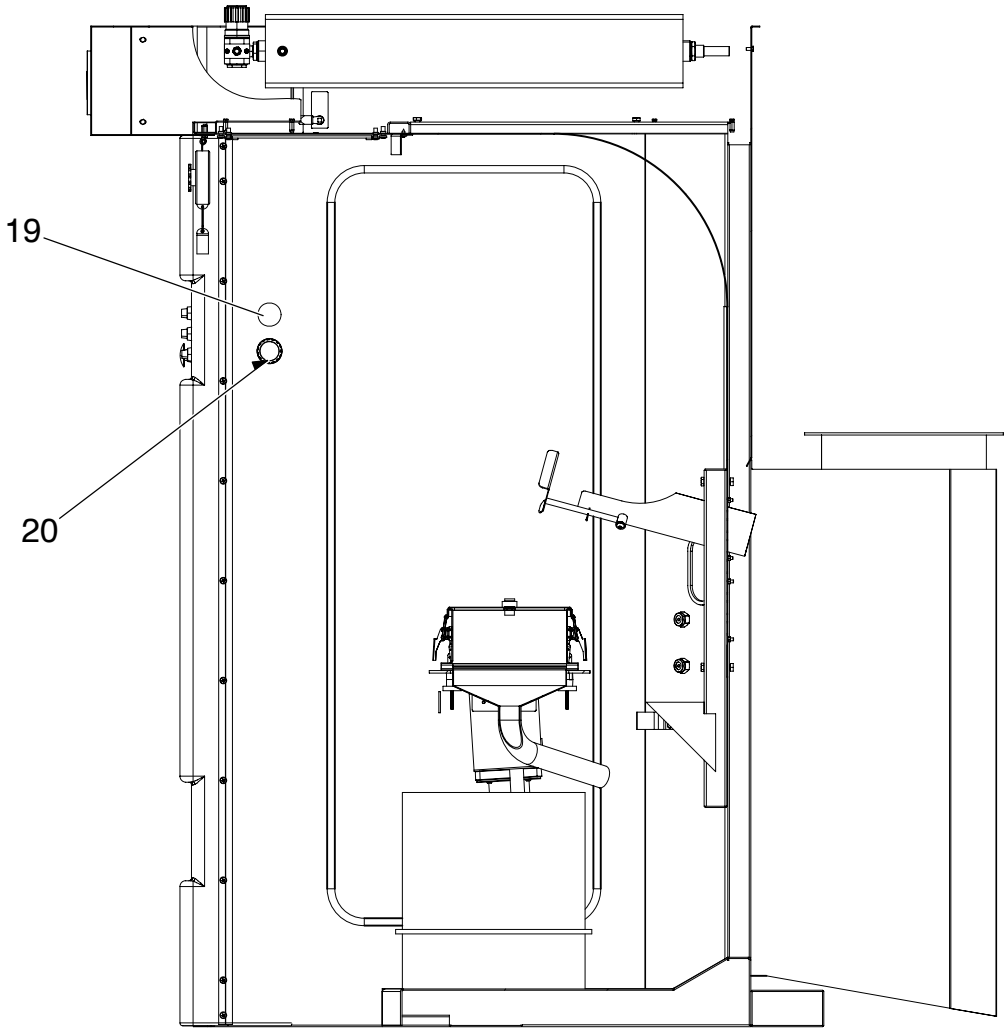


Figure 3 Left Side View of Feed Center

10. Air solenoid
11. Mains air regulator and filter assembly
12. Pulse air regulator
13. Solenoid panel
14. Fluid bed air regulator
15. Transfer pump air regulator
16. Operator control panel
17. HDLV Pump control panel
18. HDLV Pump control panel

Note: Standard ducted version does not include items; 12, 14 & 15

Figure 4 Cutaway View of ducted version



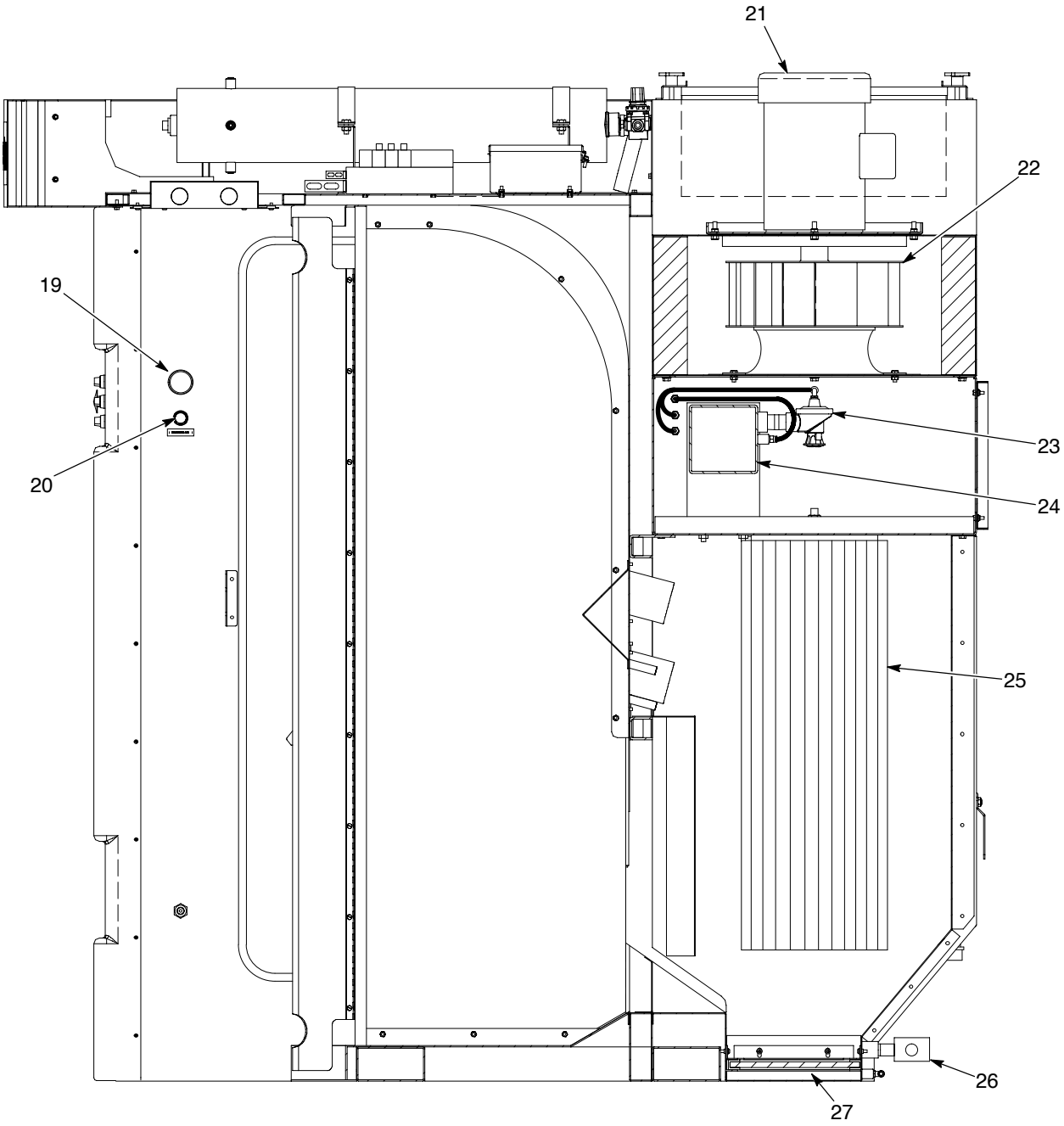


Figure 5 Cutaway View of Feed Center

19. Feed hopper fluidizing air gauge
20. Feed hopper fluidizing air regulator
21. Exhaust fan motor
22. Exhaust fan
23. Pulse valves
24. Pulse manifold
25. Cartridge filters
26. Waste pump
27. Fluidizing plate

Note: Cartridge filters are accessible through the side and rear access panels. Standard ducted version does not include items 21–27.

Components *(contd)*

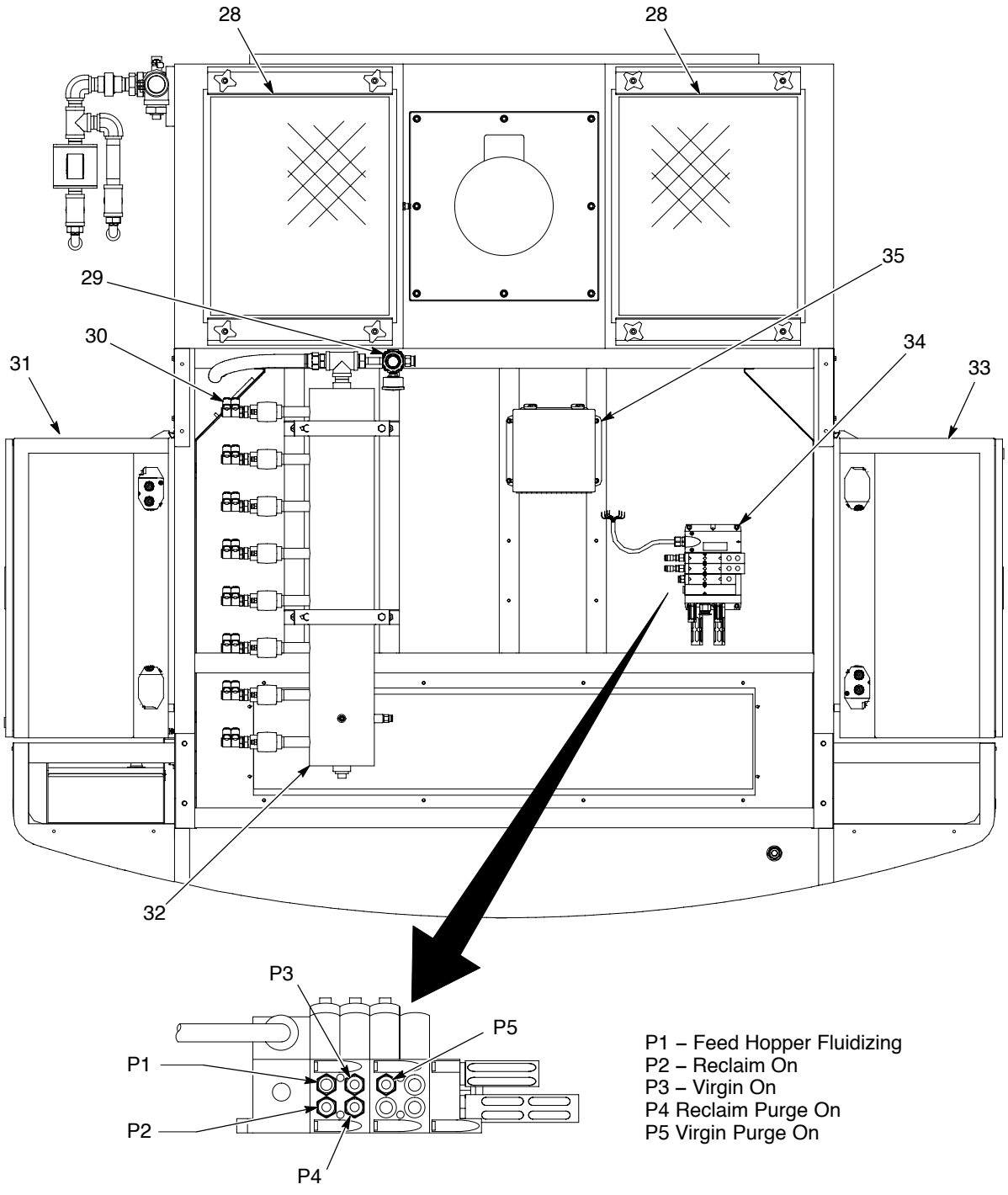


Figure 6 Top View of Feed Center

28. Final filters
29. Solenoid valve assembly air regulator
30. HDLV pump purge air outlets
31. Pump panels guns 1–16
32. Pump purge air accumulator tank
33. Pump panels guns 17–32
34. Solenoid valve assembly
35. Network interface box

Note: European version does not include item 30.

Feed Center Operator Panel Controls

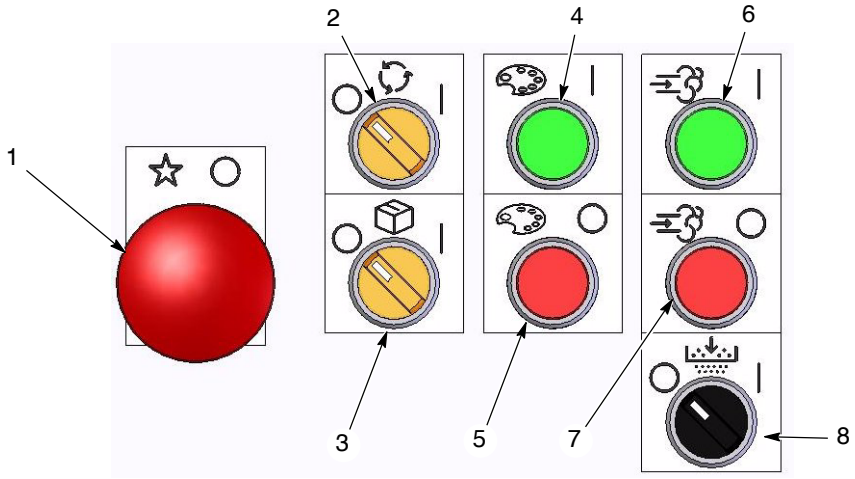


Figure 7 Feed Center Operator Control Panel

1. Emergency Stop
2. Reclaim Pump On/Off
3. Virgin Pump On/Off
4. Color Change Start
5. Color Change Stop
6. Transfer Pump Purge Start
7. Transfer Pump Purge Stop
8. Sieve On/Off

Control	Description
Emergency Stop	Shuts down the entire powder coating system. Rotate the button in the direction of the arrow to reset.
Reclaim Transfer Pump On/Off	Turns on and off the reclaim transfer pump. The pump runs continuously when turned on. Lights amber when pump is on.
Virgin Transfer Pump On/Off	Enables and disables the virgin transfer pump. Lights amber when pump is on. When enabled, the pump is controlled by the level sensor and a delay timer. The delay timer prevents the pump from starting until the delay runs out, to prevent pump chattering (rapid on/off cycles).
Color Change Start	Starts the color change process. Lights green when on. The spray guns, gun pumps, and lances are automatically purged and the guns are blown off.
Color Change Stop	Notifies system that all feed center color change tasks are complete. Stops process if pressed before complete. Silences low powder audible alarm.
Reclaim/Virgin Transfer Purge Start	Starts the reclaim and virgin transfer pump purge process. Lights green when on, flashes during purge cycle, off when complete. The purge cycle is controlled by the feed center controller programming. To abort the cycle press the Purge Stop button. **NOTE:** As long as a color change cycle is not in progress the Reclaim and/or Virgin transfer pumps can be manually purged by pressing and holding the feed center Purge Start button. Purging continues as long as the button is pressed.
Reclaim/Virgin Transfer Purge Stop	Stops the reclaim and virgin transfer pump purge process.
Sieve On/Off	Starts and stops the vibratory sieve.

Solenoid Panel Controls

NOTE: These controls are not used on the European version.

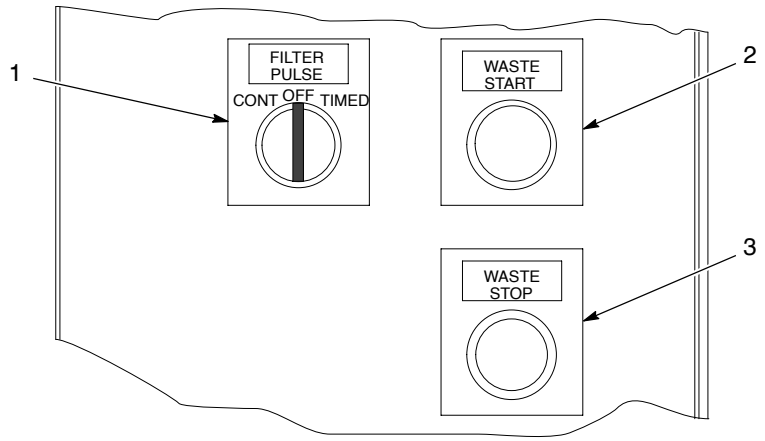


Figure 8 Solenoid Panel Controls for stand alone unti with built–in extract

1. Cartridge filter pulse mode
2. Collector transfer pump start
3. Collector transfer pump off

Note:

Control	Description
Cartridge Filter Pulse Mode Switch	Off: Cartridge filter pulsing stopped. Continuous: Filter pulsing runs continuously, controlled by delay and duration settings. Timed: Filter pulsing controlled by timer settings. Filter is pulsed in long intervals. Settings are made on the Siemens Logo controller in the main system panel. Refer to the Operation section for instructions on changing settings.
Waste Pump Start Button/Amber Indicator	Turns on the fluidizing air for the feed center collector hopper and starts the transfer pump. **NOTE:** Pump on time is controlled by a delay timer set on the Siemens Logo controller in the main system panel. The factory default setting is 10 minutes.
Waste Pump Stop Button	Overrides controller timer and turns off transfer pump and fluidizing air.

HDLV Reclaim Pump Panel Controls

The reclaim pump panel is typically mounted close to the recovery system cyclones. To maintain optimum powder delivery, keep the suction and delivery tubing no longer than:

Suction	3.65 m (12 ft)
Delivery	30.5 m (100 ft)

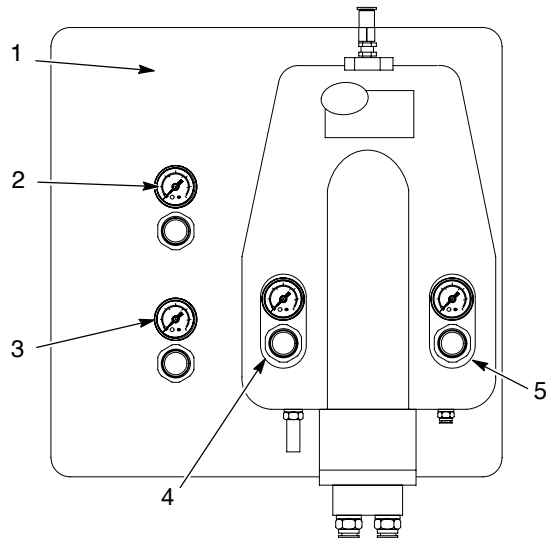


Figure 9 HDLV Reclaim Pump Panel (Typical)

1. Manual purge
2. Operating air
3. Transfer pan fluidizing air
4. Conveying air (pump)
5. Pinch air (pump)

Control	Air Pressure Setting	Function
Manual Purge Button	—	Allows the operator to manually purge the suction and delivery tubing when not performing a color change.
Operating Air	4.8 bar ± 0.7 bar (70 psi ±10 psi)	Regulates the incoming air to the reclaim transfer pump.
Transfer Pan Fluidize Air	0.14–0.2 bar (2–3 psi)	Regulates fluidizing air pressure to the transfer pan at the bottom of the cyclones.
Conveying Air	0.7–1.0 bar (10–15 psi)	Regulates the negative and positive air pressure that draws powder in and forces powder out of the pump.
Pinch Air	2.4–2.75 bar (35–40 psi)	Regulates the air pressure being applied to the pinch valves.

System Manuals

Refer to the following manuals for more information on other system components:

Prodigy Automatic Spray Gun:	1054075
Prodigy Manual Spray Gun:	1053680
Prodigy iControl Operator Interface:	1056418
Prodigy iControl Console Hardware Manual:	1056419
iControl Operator Card:	1024758
Prodigy Manual Gun Controller:	1054580
Prodigy HDLV Pump Lance Assembly:	1070925
Prodigy HDLV Pump:	1053244
Prodigy HDLV Pump Panel:	1070518
High-Capacity HDLV Pump (Transfer):	1053991

Refer to the system diagram included with this manual for system components and connections.

Nordson product manuals are subject to change without notice. The latest versions can be downloaded from the Nordson emanuals web site at: http://emanuals.nordson.com/finishing/

Setup

Feed Center PLC Settings

The feed center functions are controlled by a PLC inside the feed center control panel. The following function values are programmed into the controller at the factory and can be adjusted as needed for the application.

Virgin Powder Transfer Delay

This delay timer starts when the powder level in the feed hopper falls below the level sensor, and the virgin transfer pump switch and sieve are ON. When the timer runs out, the virgin transfer pump is turned on. This delay prevents frequent pump starts and stops (chattering).

Low Powder Alarm Delay

If the virgin transfer pump switch is on and the powder level in the feed hopper falls below the level sensor, this delay timer starts. If no powder is detected before the timer runs out, the audible alarm is turned on. If powder is detected before the timer runs out, the timer is canceled.

HDLV Transfer Pump Purge Pulse Cycle Rate

This timer sets the on/off cycle rate for the reclaim and virgin HDLV transfer pump purge sequence. The cycle is active while the pump purge duration timer is running.

HDLV Transfer Pump Purge Duration

This timer sets the duration for the reclaim and virgin HDLV transfer pump purge sequence. The purge sequence stops when the duration timer runs out.

Table 1 Default Powder Transfer Setup Menu Settings

Designator	Function	Default Setting
B01:T	Virgin Powder Transfer Delay (sec)	20.00
B02:T	Low Powder Alarm Delay (min.)	2.00
B04:T	HDLV Pump Purge Pulse Cycle Rate (sec)	0.25
B05:T	HDLV Pump Purge Duration (sec)	30.00

Changing Function Values

Swing aside the pump panels on the left side of the feed center to access the control panel. Open the panel door to access the PLC.

NOTE: These instructions are also reproduced on a label on the inside of the control panel door.

Figure 10 Feed Center PLC

1. Press the **ESC** and **OK** keys simultaneously.
2. Press the **DOWN** (▼) key until the display pointer is on **SET PARAM**.
3. Press the **OK** key. The display will show **B0x:T** and register preset value.
4. Press the **UP** (▲) key or **DOWN** (▼) key to select the register preset value to change.
5. Press the **OK** key. The display will highlight the first digit of the preset value.
6. Press the **LEFT** (◀) or **RIGHT** (▶) key until the digit to change is highlighted.
7. Press the **UP** (▲) key or **DOWN** (▼) key to change the digit value.
8. After each digit is changed to the desired value, press the **OK** key.
9. To change another value, go back to step 4. To exit, press the **ESC** key twice to return to the **RUN** display.

Feed Center Air Pressure Settings

Air Pressure	Typical Setting
Cartridge Filter Pulse Air	4.1 bar (60 psi)
Collector Transfer Pump*	2.75 bar (40 psi)
Collector Fluidizing*	0.5 bar (8 psi)
Solenoid Valve Air Supply	4.8 bar (70 psi)
* – You must press the Waste Start button to adjust these pressures.	

Transfer Pump Air Pressure Settings

Air Pressure	Typical Setting
Operating Air	4.8 bar ± 0.7 bar (70 psi ±10 psi)
Transfer Pan Fluidize Air	0.14–0.2 bar (2–3 psi)
Conveying Air	0.7–1.0 bar (10–15 psi)
Pinch Air	2.4–2.75 bar (35–40 psi)

Operation

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

HDLV Transfer Pump and Sieving Operation

See Figure 7 for the feed center operator controls.

Sieve Operation

Powder is supplied to the feed center by the reclaim and virgin powder transfer pumps. The powder must pass through the vibratory sieve before filling the feed hopper.

The sieve is turned on and off with the Sieve selector switch. When the switch is off, the reclaim and virgin powder transfer pumps are disabled.

Transfer Pump Selector Switch Operation

Two selector switches control the operation of the Reclaim and Virgin powder transfer pumps. Each switch includes an amber indicator that lights when the transfer pump is turned on. Turning the switch to ON (**I**) enables the transfer pump.

If the reclaim or virgin transfer pump selector switches are in the ON position when the feed center is turned on, or after a color change cycle is completed, then the pumps will be forced off. To re-enable the pumps you must turn the selector switches off then on again.

The transfer pumps will not turn on if the sieve is not turned on.

Reclaim Transfer Pump Operation

When the reclaim transfer pump is turned on, solenoid 2 in the solenoid valve assembly on top of the feed center sends operating air to the transfer pump. The pump runs continuously to pump the reclaimed powder in the surge hopper back to the feed center.

Virgin Transfer Pump Operation (optional)

The feed hopper level sensor controls the virgin powder transfer pump operation. If the powder level falls below the level sensor a delay timer is started. When the delay timer runs out the solenoid 3 in the solenoid valve assembly on top of the feed center sends air to the virgin powder transfer pump. The pump runs until the powder in the feed hopper reaches the level sensor, then turns off.

If the virgin transfer pump remains on for too long a buzzer is turned on to warn the operator that the feed hopper powder supply has not been replenished.

The warning buzzer can be silenced by:

- filling the feed hopper until the powder supply contacts the level sensor
- pressing the color change stop button
- turning the virgin transfer pump switch to OFF

Colour Change Operation

See Figure 7 for feed center operator panel controls.

A color change sequence is started by pressing the Color Change Start button. The sequence is finished or aborted by pressing the Color Change Stop button.

Pressing the Color Change Start button starts the spray gun purge and blowoff cycles. If turned on, the reclaim transfer pump will remain on to return reclaimed powder to the feed hopper. If turned on, the virgin transfer pump will be shut off.

When the spray gun purge and blowoff cycles are complete, the transfer pumps can be purged.

Turn the Reclaim and Virgin Transfer Pump selector switches to the ON position (if not on), then press and release the Purge Start button. The cycle control turns on the purge output and pulses the pump purge air for a set duration. During the purge cycle the pump selector switches will be lit and the green purge indicator light will flash. Pressing the Purge Stop button will abort the purge cycle.

When the purge cycle is complete, the transfer pumps are forced off. To turn them back on you must turn the pump selector switches to OFF and then to ON.

The automatic portion of the color change procedure is complete. Clean the booth, transfer pan, and feed center according to the instructions in the Color Change Procedure on page 21.

Press the Color Change Stop button to finish the color change cycle.

Transfer Pump Manual Purging

During a colour change operation, the operator presses and releases the Purge Start button and the pumps are purged according to the programmed values in the feed center PLC.

During normal operations, if the transfer pumps become blocked, the operator can purge them manually by pressing and holding the Purge Start button (pump selector switches must be in ON position). The pumps will be purged as long as the Purge Start button is held down.

Startup

1. If the feed center is not powered, swing open the top left pump panel and to access the control panel power switch and turn on power.
2. At the booth control panel, press the Feed Center Fan Start button.
3. Fill the feed hopper with 50 lbs of powder. If you have a bulk feed system you can use it to fill the hopper after placing it in the feed center.
4. See Figure 11. Position the feed hopper (4) under the lance guide (2).
5. Make sure the sieve discharge chute (5) is positioned so the screened powder will fall into the feed hopper. To position the chute, release the sieve deck clamps, rotate the chute, then retighten the clamps.
6. Connect the fluidizing air hose (3) to the hopper fluidizing pan.
7. Install the level sensor on the hopper. The slot in the sensor bracket slides over the edge of the hopper.
8. If used, connect the reclaim and virgin powder transfer tubing (7) to the sieve lid inlets.

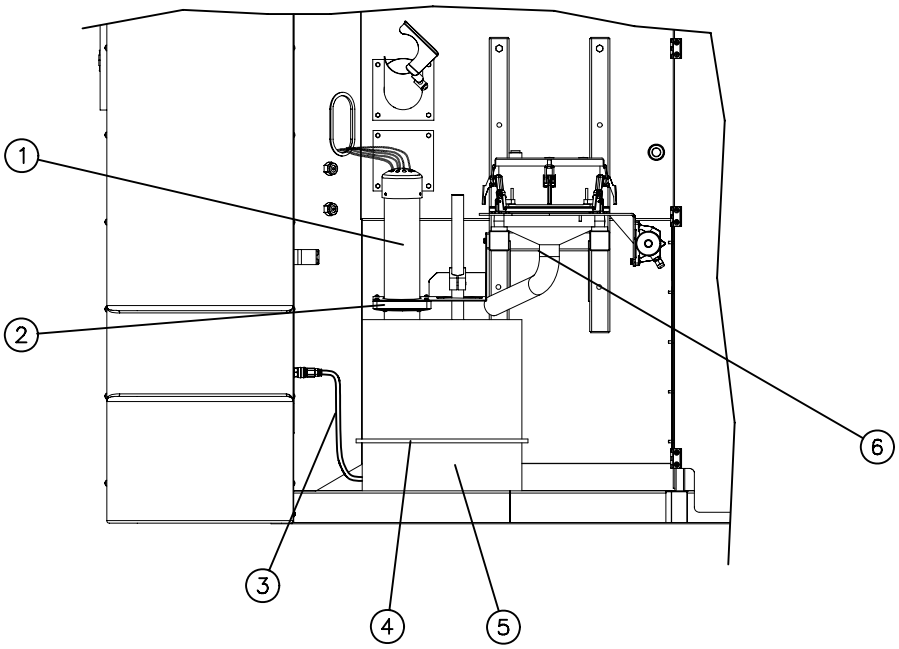


Figure 11 Feed Hopper and Sieve Setup and Connections

1. Lance
2. Lance guide
3. Fluidizing air hose
4. Fluidised plate
5. Powder Hopper
6. Discharge chute/pan

9. See Figure 12. Connect the feed center waste pump hose to the waste container lid. Make sure the waste container vent hose is connected to the vent stub mounted on the side of the feed center.

10. See Figure 7. Turn the Sieve switch to ON.
11. Turn the Virgin switch to ON if your system includes a bulk feed system. If the powder level in the feed hopper is below the level sensor, the system will turn on the virgin transfer pump after a short delay.
12. See Figure 5. Use the regulator on the left wall to adjust the feed hopper fluidizing air pressure so the powder is gently boiling.
13. See Figure 8. On the feed center solenoid panel, select Continuous or Timed filter pulsing.
14. See Figure 11. Install the lance(s) in the lance guide.
15. See Figure NO TAG. If reclaiming powder, adjust the transfer pan fluidizing air regulator (typically on the reclaim pump control panel) to 0.14–0.2 bar (2–3 psi).
16. Turn the Reclaim switch to ON if reclaiming powder. The reclaim pump will start and run continuously.

The feed center is now ready for normal operation.

Normal Operation

Powder Supply: If the powder in the feed hopper falls below the level sensor and the virgin transfer switch and sieve are on, the virgin transfer pump will turn on after a short delay. A low powder alarm delay starts when the pump turns on. If the level sensor does not detect powder before the low powder alarm delay runs out, an audible alarm will sound.

Final Filter Monitor: If the final filters start to clog, a pressure monitor will detect the buildup of powder on the final filters and shut down the feed center fan. The shutdown is triggered by the pressure sensor in the solenoid panel, which is set to 3 in. w.c.

Reclaim and Virgin HDLV Pump Manual Purge: If the pump switches are on, the pumps can be manually purged by pressing and holding the Purge Start button. The pumps will be purged as long as the button is held down. The pump panels also include manual purge buttons, which allow the operator to purge the pumps at any time.

Gun Control: The automatic spray gun pumps are controlled by the iControl system. If manual spray guns are included in the system, they are controlled by Prodigy Manual Gun Controllers. Refer to the appropriate manuals for configuration and operation instructions.

Color Change Procedures: Refer to Color Change Procedures in this manual.

Emptying the Feed Center Collector Hopper

The level of powder in the collector hopper should be visually monitored and pumped into a waste container as needed. To empty the hopper:

1. Turn on the feed center exhaust fan. It must be running or the interlock valve will not open to supply air to the pump and fluidizing pan.
2. See Figure 12. Install a waste lid on an empty 55 gallon drum.
3. Connect the waste lid ground wire to the feed center base or to another grounded structure such as the cyclone stand or booth base.
4. Connect a vent hose to the waste lid and the feed center vent stub on the filter access panel.
5. Connect the waste pump hose to the inlet stub on the waste lid.
6. Press the Waste Pump Start button on the feed center solenoid panel. When the collector hopper is empty, press the Waste Pump Stop button.

NOTE: The waste pump will stop automatically after an adjustable time delay. The factory default is 10 minutes.

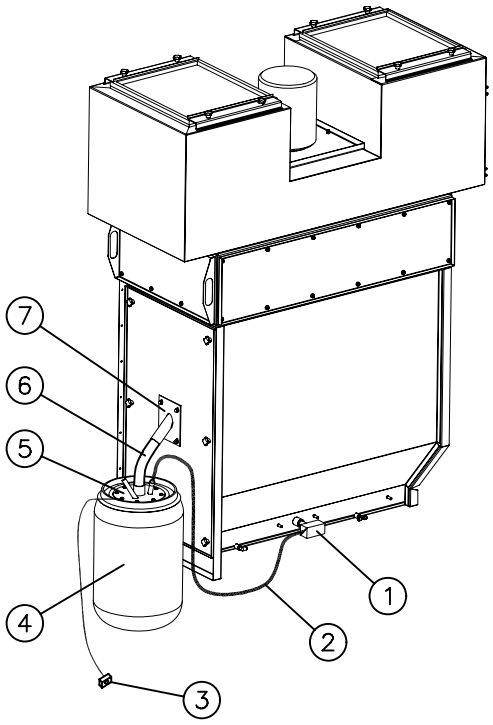


Figure 12 Waste Container Connections

1. Waste pump
2. Powder transfer hose
3. Waste lid ground cable and clamp
4. Waste drum
5. Waste lid
6. Vent hose
7. Vent stub

Color Change Procedures

Spray-to-Waste Procedure

Use this procedure when spraying to waste. The powder collected in the cyclone transfer pan is pumped by the reclaim pump directly into a waste drum that is vented into the feed center collector or the booth.

1. If using a bulk feed system, turn OFF the virgin transfer pump switch.
2. Remove the level sensor and bracket from the feed hopper. Disconnect the fluidizing hose from the hopper.
3. Remove the lances from the lance guide and install them in the purge chutes. Rotate the locks in place over the lance ends.
4. Turn OFF the sieve switch.
5. If using a bulk feed system, disconnect the virgin transfer hose from the sieve deck and connect it to the waste stub on the back wall.
6. Make sure the manual gun operators have their spray guns pointed into the booth, or place the guns in holders that point into the booth.
7. Press the Color Change Start button to start the gun and pump purge/blowoff cycle.
8. While the gun/pump purge/blowoff cycle is running, move the feed hopper out of the feed center. Install the lid on the feed hopper before storing it.
9. Start cleaning the booth.
10. If using a bulk feed system:
    a. Disconnect the suction tubing from the pickup tube. Connect the tubing to a powder collection system, which could be either the feed center or the afterfilter.
    b. Turn ON the virgin transfer pump switch. The pump will turn on when the purge cycle is activated.
11. Press the Purge Start button to purge the transfer pump(s) and tubing.

    Purging will stop automatically at the end of the purge cycle. To abort the purge cycle press the Purge Stop button.
12. Blow off the sieve, then unclamp the sieve deck and blow it clean.
13. Remove the sieve screen. Clean the screen and gasket.
14. Blow off the sieve discharge pan.
15. Remove the lances from the purge chutes. Blow off the lances and purge chutes.
16. Blow off the lance guides and all inside surfaces of the feed center.
17. If using a bulk feed system, clean it as directed in its manuals.
18. Perform the Completing a Color Change Cycle procedure.

Reclaim Procedure

Use this procedure when reclaiming oversprayed powder for reuse. The powder collected in the cyclone transfer pan is pumped by the reclaim pump back to the feed center sieve.

1. If using a bulk feed system, turn OFF the virgin transfer pump switch.
2. Remove the level sensor and bracket from the feed hopper. Disconnect the fluidizing air hose from the feed hopper.
3. Remove the lance(s) from the lance guide and install them in the purge chute(s). Rotate the locks in place over the lance ends.
4. Turn OFF the sieve switch.
5. Unclamp the sieve deck. Rotate the sieve discharge chute so powder falls into the collector chute.
6. Reclaim the sieve deck and turn ON the sieve switch.
7. Make sure the manual gun operators have their spray guns pointed into the booth, or have placed them in holders that hold them pointed into the booth.
8. Press the Color Change Start button. This starts the gun and pump purge/blowoff cycle.
9. When the gun/pump purge/blowoff cycle is complete, clean the booth.
10. When the booth is clean, shut OFF the sieve switch. This stops the sieve and the reclaim transfer pump. Leave the reclaim pump switch in the ON position.
11. Disconnect the virgin and reclaim transfer tubing from the sieve deck. Connect the tubing to the purge stubs on the back wall.
12. If using a bulk feed system:
    a. Disconnect the suction tubing from the pickup tube. Connect the tubing to a powder collection system, which could be either the feed center or the afterfilter.
    b. Turn ON the virgin transfer pump switch. The pump will turn on when the purge cycle is activated.
13. Press the Purge Start button to purge the reclaim and virgin transfer pumps and tubing.

    Purging will stop automatically at the end of the purge cycle. To abort the purge cycle press the Purge Stop button.
14. During the purge cycle, open and blow out the cyclone transfer pan. The purge air will prevent any powder in the pan from contaminating the transfer pump or suction hose.
15. Push the manual purge button on the reclaim pump panel to clean out any powder that may have been blown into the pump during the cleaning of the transfer pan.
16. Open the cyclone access door and blow out the cyclone.

17. Move the feed hopper out of the feed center. Install the lid on the feed hopper before storing it.
18. Blow off the sieve, then unclamp the sieve deck and blow it clean.
19. Remove the screen. Clean the screen and gasket.
20. Blow off the sieve discharge pan.
21. Remove the lances from the purge chutes. Blow off the lances and purge chutes.
22. Blow off the lance guides and all inside surfaces of the feed center.
23. If using a bulk feed system, clean it as directed in its manuals.
24. Perform the Completing a Color Change Cycle procedure.

Completing a Color Change Cycle

1. Re-assemble the sieve with a clean or new screen.
2. Connect the virgin transfer tubing (and reclaim tubing if reclaiming powder) to the sieve deck inlet stubs.
3. Install the new color feed hopper under the lance guide and make sure the sieve discharge chute is positioned to dump the screened powder into the feed hopper.
4. Install the lances in the lance guide.
5. Connect the fluidizing air hose to the feed hopper.
6. Install the level sensor and bracket on the feed hopper.
7. Press the Color Change Stop button to tell the system that the color change cycle is complete.
8. Turn the Sieve switch ON.

NOTE: If the Reclaim or Virgin transfer pump switches were in the ON position when the Color Change Stop button was pressed, you must turn the switches OFF then ON to turn the pumps on.

9. Turn the Reclaim transfer pump switch ON.
10. If using a bulk feed system for the new color, turn the Virgin transfer pump switch ON.

Maintenance

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

Daily Maintenance

NOTE: You may need to perform these procedures more or less often, depending on your application requirements.

Table 1 Daily Maintenance Procedures

Component	Maintenance Procedure
Sieve	Disassemble and clean the sieve. Inspect the sieve screen and replace it if powder is fused to it or it is damaged.
Cables and Feed Hoses	Check all external cables and powder and air tubing for damage. Repair or replace as necessary.
Waste Hopper	Turn off the exhaust fan and check the level of powder in the feed center collector hopper. If the powder level is above $^1/_2$ full, empty the hopper.
HDLV Pumps	Inspect the pinch valve bodies for signs of powder leakage. Refer to the Prodigy HDLV pump manual for repair procedures.
Cartridge Filters	Pulse the filters as needed to prevent powder from building up on the filter media, reducing the air flow through the enclosure, and allowing powder to escape from the enclosure.
HDLV Transfer Pumps	Purge pumps. Inspect the pinch valve section for signs of powder leakage. If powder is present in the pinch valve section, replace pinch valves.

Periodic Maintenance

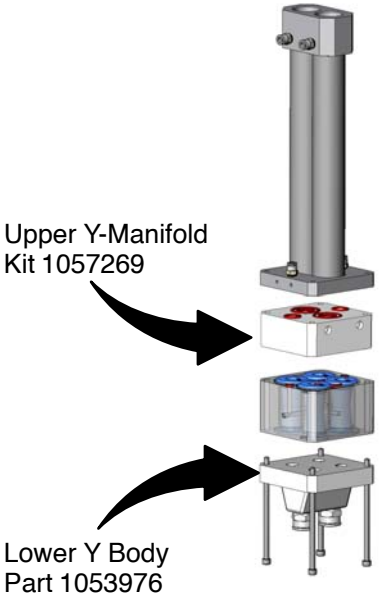
NOTE: You may need to perform these procedures more or less often, depending on your application requirements.

Table 2 Periodic Maintenance Procedures

Component	Maintenance Procedure
Airflow	Take regular airflow readings. A properly functioning powder feed center should provide a face velocity of around 125 fpm. A lower reading indicates clogged filters or a malfunctioning fan.
Fan Motor	Perform the following checks regularly. Problems will be apparent if you notice changes in the following factors. • Pay attention to changes in vibration and noise levels. • Take current readings regularly. • Check all electrical connections regularly.
Cartridge Filters/Final Filters	The final filters are monitored by a pressure sensor. The fan motor will shut down if the pressure exceeds 3 in. W.C.., indicating that the final filters are clogging. Remove the final filters and check the filters and fan compartment for signs of powder leaks. If more than traces of powder dust are visible, check the cartridge filter media and gaskets for damage and replace them if necessary. Replace the final filters if necessary.
Compressed Air System	Open the drop leg and use a clean, white cloth to check for contaminants. Correct any problems immediately. Drain the air filters and change the elements as necessary.
Electrical System	Tighten all electrical connections and inspect for loose or broken wires. Check the electrical system for electrical safety every 12 months. The system must comply with all local, state, and federal codes.
System Grounds	Check all equipment grounds. Electrical equipment must be grounded to code. For maximum transfer efficiency and safety, electrostatic equipment must be grounded to provide a complete circuit from the spray guns through the workplace hangers, conveyors, and booth back to the gun controllers. Refer to publication number THAT-06-3881 on the Nordson emanuals web site for more information on powder coating system grounding.
Air Tubing	Pressurize the system and listen for air leaks. Replace or repair leaking tubing or fittings.

HDLV Transfer Pump Maintenance

For more detailed maintenance and repair information, refer to the Prodigy HDLV High-Capacity Pump manual.

Component	Maintenance Procedure	
HDLV Reclaim and Bulk Feed Pumps	**Daily** Inspect the pinch valve body for signs of powder leakage. If you see powder in the pinch valve body or stress cracks in the pinch valves, replace the pinch valves.	 Pinch Valves Kit 1057265
	Every Six Months or Each Time You Disassemble the Pump Disassemble the pump assembly and inspect the lower Y body and upper Y-manifold for signs of wear or impact fusion. Clean these parts in an ultrasonic cleaner if necessary. **NOTE:** To reduce downtime, keep a spare upper Y-manifold and lower Y body in stock to install while you are cleaning the other set.	 Upper Y-Manifold Kit 1057269 Lower Y Body Part 1053976

Troubleshooting

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

If you cannot solve your problem with the information in this manual or related equipment manuals, contact your local Nordson representative.

Troubleshooting Chart

Problem	Possible Cause	Corrective Action
1. Fan stops running or will not start. (If ducted to main system afterfilter please refer to it's technical documentation)	E-Stop button pressed	Reset E-Stop.
	Final filters clogged	Check final filters. Fan will be shut off if pressure across filters reaches 3 in. w.c. If filters are clogged check cartridge filter media and gaskets for leaks. Replace damaged cartridge filters. Replace final filters.
	Fan start/stop button or wiring defective	Check fan motor control circuits (main system electrical panel).
	Fan motor overload tripped	Overload occurs when motor operates at a greater amperage than designed for. Make sure overload is set to proper limit. Make sure nothing is stopping motor and fan from turning. Check fuses. Failure of one of three fuses in a 3-phase motor circuit can cause overload to trip. Check the motor and electrical connections. Reset overload.
	Fan motor fuse failure	Check motor and electrical circuits. Replace fuses.
	Fan motor failure	Replace motor.

Problem	Possible Cause	Corrective Action
2. Powder escaping from enclosure openings. (If ducted to main system afterfilter please refer to it's technical documentation)	Cartridge filters clogged; pulsing not cleaning filters inside main system After Filter or inside extract system of Powder Port if self contained stand alone unit.	Pulse cartridge filters to blow off powder. Check pulse air pressure Check the cartridge filter pulse sequence. Refer to Main System Panel PLC Programming in Prodigy ColorMax system manual. If Off duration is too short pulse manifold may be built up enough pressure to blow off cartridge filters. If On duration too short not enough air will be released to blow off filters. If On duration too long pulse manifold may not be able to build up air pressure. Replace cartridge filters if pulsing does not correct problem.
	Pulse pressure too low	Set the pressure to 4.1 bar (60 psi).
	Pulse valve failed	Replace the pulse valve.
	Cartridge filters leaking, inside main system After Filter or inside extract system of Powder Port if self contained stand alone unit.	Check the cartridge filter gaskets and media for damage. Tighten the mounting nut to compress the gaskets. Replace filters as necessary.
	Cross drafts interfering with exhaust fan draw	Check for cross drafts at the enclosure opening. Eliminate or divert drafts.
	Fan rotation backward, inside main system After Filter or inside extract system of Powder Port if self contained stand alone unit.	Reverse motor rotation.
	Access panels not sealed	Tighten all access panels. Check and replace the panel gaskets as necessary.
3. No feed hopper fluidizing air	Spray booth and/or feed center fan not running	Start spray booth and feed center exhaust fans (main system panel).
	Fan interlock circuit or solenoid valve circuit defective	Check fan interlock wiring between feed center panel and main system panel. Check wiring from feed center panel to solenoid valve assembly on top of feed center.
	Fluidizing air solenoid valve defective, or air not being supplied to solenoid valve assembly, or fluidizing air regulator defective.	If wiring to valve is OK and voltage is present at valve but valve does not open replace valve. If valve opens but no air flows from valve check air supply to valve assembly from accumulator tank. If air flows from valve but no air is supplied to feed hopper check fluidizing air regulator.

Problem	Possible Cause	Corrective Action
4. Powder in feed hopper not fluidizing, or clouds of powder erupting from surface	Fluidizing air pressure too low or too high	Increase the fluidizing air pressure until the powder is gently boiling. Decrease the pressure if clouds of powder are erupting from the surface.
	Moist or oil-contaminated powder	Check the air supply for water or oil. Check the filters, separators, and air dryer. Replace the powder in the feed source if it is contaminated. Refer to the next possible cause.
	Fluidizing plate gasket leaking, or fluidizing plate plugged, cracked, or installed incorrectly	Check for air leaks around the fluidizing plate gasket. If leaks are found, replace the gasket. Inspect the fluidizing plate for stains, discoloration, polished surfaces, or cracks. Replace it if it is contaminated, plugged, or damaged. The plate should be installed with the smooth surface up (in contact with the powder).
	Incorrect ratio of reclaimed to virgin powder	Increase or decrease the transfer rate. The powder supply should be no more than three parts reclaim-to-one part virgin powder.
	Uneven distribution of powder in feed source	Check the powder and the fluidizing plate for contamination as previously described.
5. Feed center waste pump does not start, no fluidizing air to collector hopper	Spray booth and/or feed center fan not running, or fan interlock circuit defective	Turn on exhaust fans. Check fan interlock wiring between feed center panel and main system panel.
	Waste pump start or stop pushbutton defective, or solenoid valve 608 in solenoid panel failed, or no air supply to valve	Check solenoid valve and waste start/stop pushbutton circuits. Replace failed components or repair wiring. Check air supply to solenoid valve panel.
	Pilot valve controlling air supply to pump and fluidizing air regulators failed	Check pilot valve. If air being supplied to valve but valve does not open replace valve.
6. Waste powder transfer stops too soon	Waste powder transfer delay timer setting too short	Timer automatically shuts off pump and fluidizing air. To change timer setting, refer to Main System Panel PLC programming instructions

Problem	Possible Cause	Corrective Action
7. Sieve turned ON, but no vibration (refer to Sieve Technical Manual)	E-Stop button pressed	Reset E-Stop button.
	Spray booth or feed center exhaust fan not running	Start spray booth and feed center exhaust fans.
	Sieve switch or wiring defective	Check switch and wiring. Replace switch or repair wiring as needed.
	Sieve motor overload	Overload occurs when motor operates at higher amperage than designed for. Make sure nothing is preventing motor vibration. Check motor and electrical connections. Check motor internal weights for proper adjustment. Make sure overload protector is set to proper limit. Check fuses. Failure of one of three fuses in 3-phase motor circuit can cause overload to trip. Reset overload.
	Sieve motor fuse failed	Check motor and electrical circuits. Replace fuses if failed.
	Sieve motor failed	Replace sieve motor.
8. Powder build up on sieve mesh (refer to Sieve Technical Manual)	Mesh not cleaned frequently enough	Clean the sieve mesh at more frequent intervals. Upgrade to Vibrasonic sieve screen if necessary.
	Mesh size too small for powder being used	Use a sieve screen with a larger mesh size. Upgrade to Vibrasonic sieve screen if necessary.
9. Excessive sieve noise (refer to Sieve Technical Manual)	Sieve deck or discharge pan not secure	Tighten the clamps securing the sieve deck and discharge pan to the sieve.
	Knobs or clamps not tightened; isolators loose or damaged; rubber sleeves damaged	Make sure the clamps are tight. Check the isolators for looseness or damage. Tighten the isolator mounting screws. Check the rubber sleeves for damage and replace them if necessary.
10. Contaminants in feed hopper powder	Sieve screen torn	Replace the screen.
	Sieve screen not thoroughly cleaned before installation	Remove and clean the sieve screen.

Problem	Possible Cause	Corrective Action
11. Reclaim or Virgin transfer pump turned on, but pump does not run	E-Stop button pressed	Reset E-Stop button.
	Spray booth and/or feed center fan not running, or fan interlock circuit defective	Turn on exhaust fans. Check fan interlock wiring between feed center panel and main system panel.
	Sieve motor not running	Reclaim or Virgin pumps will not run unless sieve is on. Turn On sieve.
	Reclaim or Virgin switch or wiring is defective	Check switch and wiring. Repair or replace as needed.
	Reclaim or Virgin circuits disabled	Circuits are disabled if the switches are in the On position when feed center power is turned on or when the Color Change Stop button is pressed. Turn the Reclaim or Virgin switch Off then On to reset.
	No air supply to solenoid valve assembly, or solenoid valve not opening	Check air supply to solenoid valve assembly on top of feed center. Check solenoid valve and wiring. Replace valve or repair wiring as needed.
	Problem with remote pump controls or HDLV transfer pump.	Check pump and controls. Refer to High Capacity HDLV pump manual.
12. Reclaim or Virgin transfer pump cannot be purged manually by pressing Purge button	Reclaim or Virgin pump not turned on	Turn Reclaim or Virgin pump switch to On position. Press Purge button to purge. Purge will be on while button is pressed.
13. Reclaim or Virgin transfer pump turned off but continues to run	Solenoid valve in manual override	Check solenoid valve assembly on top of feed center. Make sure manual operator on valve is not in override position.
	Solenoid valve failed open	Replace valve.
14. Virgin transfer pump is turned on but pump not running	Level sensor on feed hopper is detecting powder in hopper	Pump will not be turned on until powder level falls below level sensor and delay timer runs out.
	Refer to Problem 8 for other causes	
15. Virgin transfer pump does not stop automatically	No powder supply at bulk feed system	Check bulk feed supply.
	Feed hopper level sensor not adjusted properly	Level sensor stops pump when it detects powder. Sensor indicating light should be yellow when powder is detected. Adjust the level sensor if it is not detecting powder. Refer to level sensor documentation.
	Level sensor failed or wiring defective	Check level sensor and wiring. Repair or replace as needed.

Problem	Possible Cause	Corrective Action
16. Reclaim and/or Virgin transfer pump purge cycle does not start when Purge Start button pressed	Reclaim and Virgin transfer pumps not turned on	Pumps must be on before purge can start. Turn on pump to be purged.
	Purge Start button or wiring defective	No signal from button to controller. Pressing the button should turn on signal. Check button and wiring, repair or replace as needed.
	Purge Stop button or wiring defective	No signal from button to controller. Signal must be on as long as button is not pressed. Check button and wiring, repair or replace as needed.
	Purge solenoid valves or wiring defective	Check wiring from feed center control panel to solenoid valve assembly on top of feed center. Check solenoid valve operation. Check air supply to solenoid valve assembly. Repair or replace as needed.
	Purge air pilot valve or pilot air tubing defective	Check pilot air tubing. Make sure air signal is reaching pilot valve. Check pilot valve operation. Check air supply to pilot valve. Repair or replace as needed.
17. Feed center low powder level alarm buzzer on	Alarm buzzer delay timer has run out, level sensor not detecting powder	Alarm buzzer timer starts when the transfer pump turns on. If the timer runs out and the level sensor has still not detected powder then the alarm buzzer is turned on. The timer default is 3 minutes. To turn off buzzer press Color Change Stop button.
	Problem with powder supply or Virgin transfer pump	Refer to Problems 8, 10, 11, 12.
18. Color change does not start when Color Change Start button pressed, light off	E-Stop button pressed	Reset E-Stop button.
	Spray booth and/or feed center fan not running, or fan interlock circuit defective	Turn on exhaust fans. Check fan interlock wiring between feed center panel and main system panel.
	Color Change Start button or wiring defective	No signal from button to controller. Pressing the button should turn on signal. Check button and wiring, repair or replace as needed.
	Color Change Stop button or wiring defective	No signal from button to controller. Signal must be on as long as button is not pressed. Check button and wiring, repair or replace as needed.

Problem	Possible Cause	Corrective Action
19. Color change does not start with Color Change Start button pressed, light on	Parts still in booth	iControl system tracks parts through booth and will delay color change start until parts clear booth. Booth length is configurable through iControl Configuration. Refer to iControl Operator Interface manual for more information.
	iControl gun positioners not in manual or auto mode	Set the gun positioners to either manual or auto mode.
	iControl gun positioner #1 controller did not receive Color Change Start signal from feed center	The feed center passes signals for color change to the gun positioner #1 electrical panel which then communicates with the iControl system. Check the wiring and connections between the feed center control panel and the gun positioner #1 panel.
	Reciprocator not in auto mode	Reciprocator must be in auto mode for color change cycle to start. Set the reciprocator to auto mode.
20. Color change cycle started, gun positioner stopped at forward limit switch	Reciprocator not at bottom of stroke	Reciprocator must be at bottom of stroke for spray guns to be in position for gun blowoff. Blowoff will not start until bottom of stroke sensor is on and remains on. Check reciprocator position.
	Reciprocator not stopped	Reciprocator gets stop command from gun positioner #1 control panel. Check wiring and connections between gun positioner control panel and main system panel.
	Reciprocator not at Park position	Reciprocator must be at Park position for spray guns to be in position for gun blowoff. Blowoff will not start until Park position is achieved. Check reciprocator position. Make sure Park position is configured within stroke range. Refer to iControl Operator Interface manual for reciprocator configuration settings.

Problem	Possible Cause	Corrective Action
21. Color change cycle started, blowoff air does not turn on	No air supply to solenoid valve or pilot valve, failed valve, or bad electrical connection	Solenoid valve (typically located in the main system panel) is activated by signal from the gun positioner control panel. Solenoid valve sends air signal to large pilot valve that provides air to the blowoff nozzles. Make sure main system panel air supply is on. Check solenoid valve output. If solenoid coil is energized but no air flows from valve, replace valve. Check air tubing to pilot valve. Check pilot valve operation. Check the wiring and connections between the gun positioner panel and main system panel.

Repair

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

Cartridge Filter Replacement *(not for ducted version)*

See Figure 13.

1. Remove the pulse valve and cartridge filter access panels at the rear and side of the enclosure.
2. Pull up on the mounting rod (6) T-handle to hold the cartridge filter up against the mounting plate, or support the filter from underneath.
3. Remove the nut, flat washer, and mounting bracket (1, 2, 3). Save these parts for reuse.
4. Carefully lower the cartridge filter (4) away from the mounting plate and out of the filter section. The centering bracket and mounting rod (5, 6) will stay in place.
5. Unscrew the mounting rod and remove it and the centering bracket from the cartridge filter.
6. Thoroughly clean the sealing surface on the underside of the mounting plate. A dirty surface will prevent the cartridge filter gasket from sealing properly and allow powder to leak into the fan section.
7. Remove the new cartridge filter from its carton and inspect it for damage. Do not use damaged cartridge filters.
8. Set the centering bracket (5) into the open end of the new cartridge filter. Slide the mounting rod (6) through the centering bracket and screw it into the bottom of the cartridge filter.
9. Center the cartridge filter under the opening in the mounting plate. Use the T-handle to pull up the cartridge filter against the mounting plate, or push it up from underneath.
10. Install the mounting bracket (3) on the mounting rod, making sure that the slots in the mounting bracket slip over the T-handle.
11. Install the flat washer and nut (1, 2) onto the mounting rod. Do not tighten the nut at this time.
12. Slip the ends of the mounting bracket into the locating slots around the filter opening in the mounting plate.
13. Tighten the nut until the mounting and centering brackets are touching. This will compress the gasket and seal the cartridge against the mounting plate.
14. Install the pulse valve and cartridge filter access panels.

Cartridge Filter Replacement *(not for ducted version)(contd)*

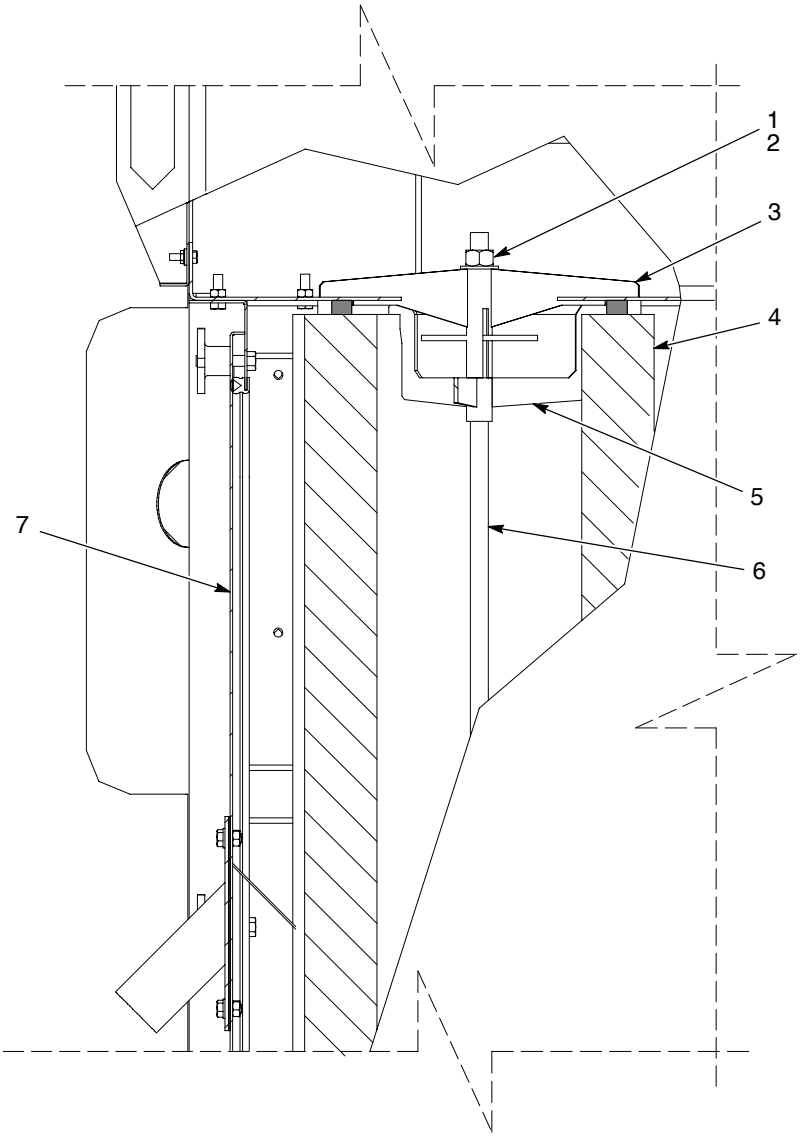


Figure 13 Cartridge Filter Replacement

1. Nut 5/8 in.
2. Flat washer 5/8 in.
3. Filter mount
4. Filter
5. Centering bracket
6. Mounting rod
7. Side access panel

Collector Fluidizing Plate Replacement

1. Empty as much powder as possible from the waste hopper.
2. Turn off and lock out power to the powder feed center.
3. See Figure . Remove the cartridge filter access panel (6) and vacuum out any remaining powder.
4. Remove the screws, lock washers, and flat washers (1, 2, 3) securing the six retaining angles (4).
5. Remove the retaining angles and fluidizing plate (5).
6. Set the new fluidizing plate smooth side up into the waste hopper.
7. Set the retaining angles on top of the fluidizing plate.
8. Secure the retaining angles and fluidizing plate to the waste hopper using the screws, lock washers, and flat washers.

NOTE: As you tighten the screws, push down on the retaining angles to compress the fluidizing plate gasket evenly.

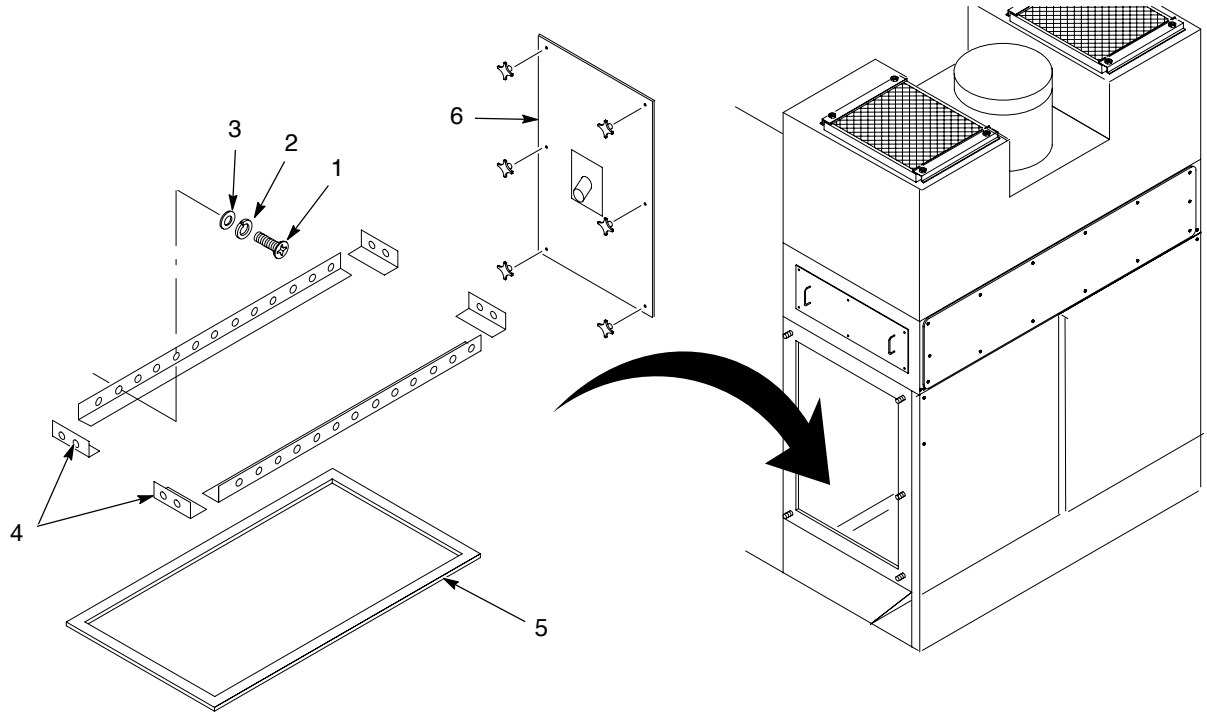


Figure 14 Collector Fluidizing Plate Replacement

Parts

Miscellaneous Parts

Item	Part	Description	Quantity	Note
1	7033000	KNOB, final filter clamp, Excel	AR	
2	7033001	MOTOR,	1	
3	156995	FILTER, final,	2	
4	7033011	VALVE, pulse	2	
5	165726	NOZZLE, cartridge pulse	2	
6	767058	FILTER, Cartridge	2	
7	165633	PUMP, transfer, metric	1	
7A	7033002	ADAPTER, pump, transfer	1	
8	688435	FLUIDIZING PLATE assembly, Prodigy	1	
9	7033004	VALVE	1	
10	7033009	VALVE, solenoid, assembly	1	
11	7033006	LIGHT FIXTURE, 4 ft, 2 light	1	
NS	900651	TUBING, powder, transfer, 19 mm (.75 in.) ID, blue	AR	

AR: As Required

NS: Not Shown

Continued...

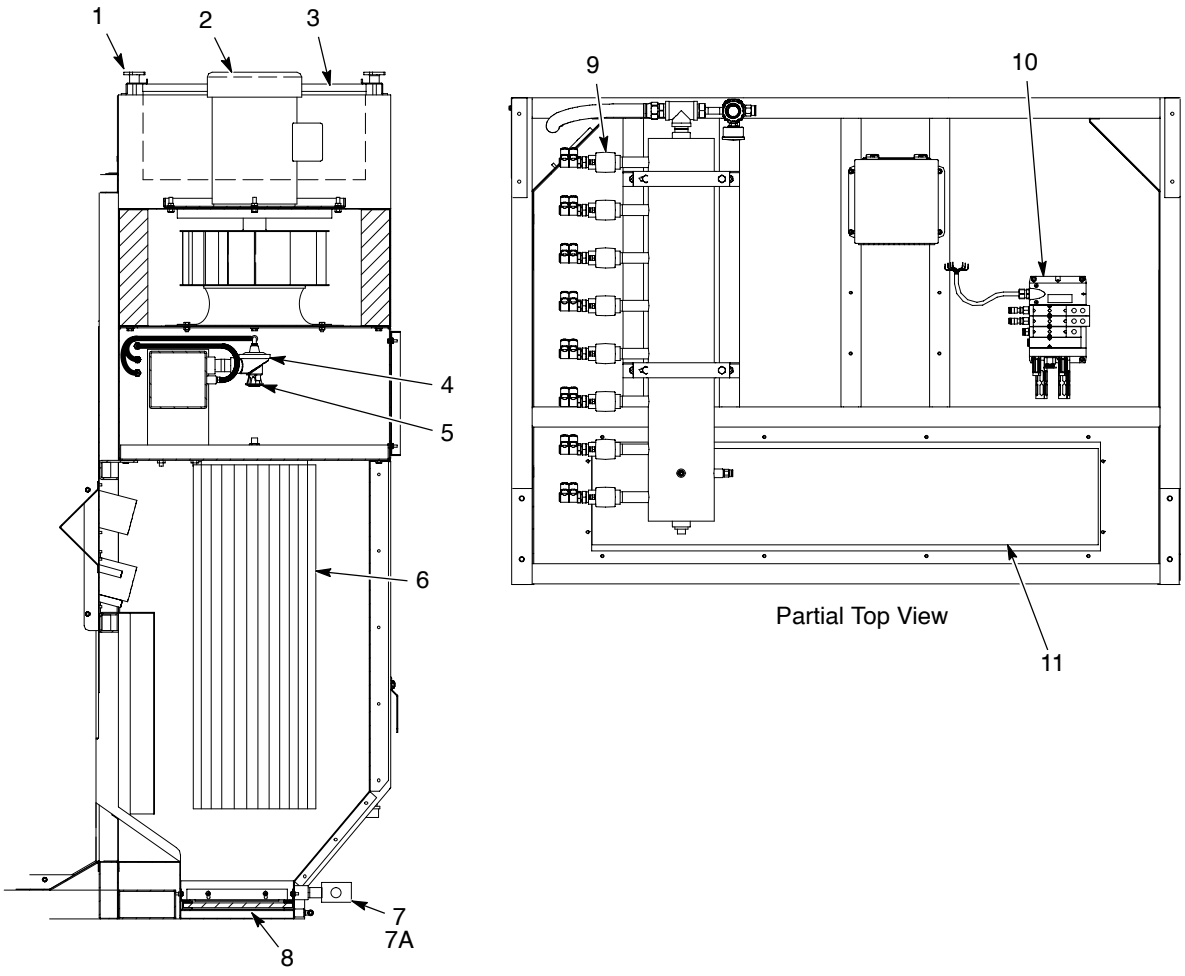


Figure 15 Miscellaneous Parts (1 of 2)

Item	Part	Description	Quantity	Note
11	1070171	LANCE, Prodigy, 4 pump	1	A
11	1070172	LANCE, Prodigy, 6 pump	1	A
11	1070173	LANCE, Prodigy, 8 pump	1	A
11	1070174	LANCE, Prodigy, 10 pump	1	A
11	1070175	LANCE, Prodigy, 12 pump	1	A
11	1070176	LANCE, Prodigy, 14 pump	1	A
11	1070177	LANCE, Prodigy, 16 pump	1	A
12	1071323	WIPER, rubber, lance	AR	
13	737701	HOPPER assembly,w/sloping side	AR	
NS	7032244	PROBE, level sensor	AR	

NOTE A: Use 1071376 Kit, fitting upgrade, lance, to replace broken powder tube fittings in the lance head. Each kit comes with the parts to replace two fittings.

AR: As Required

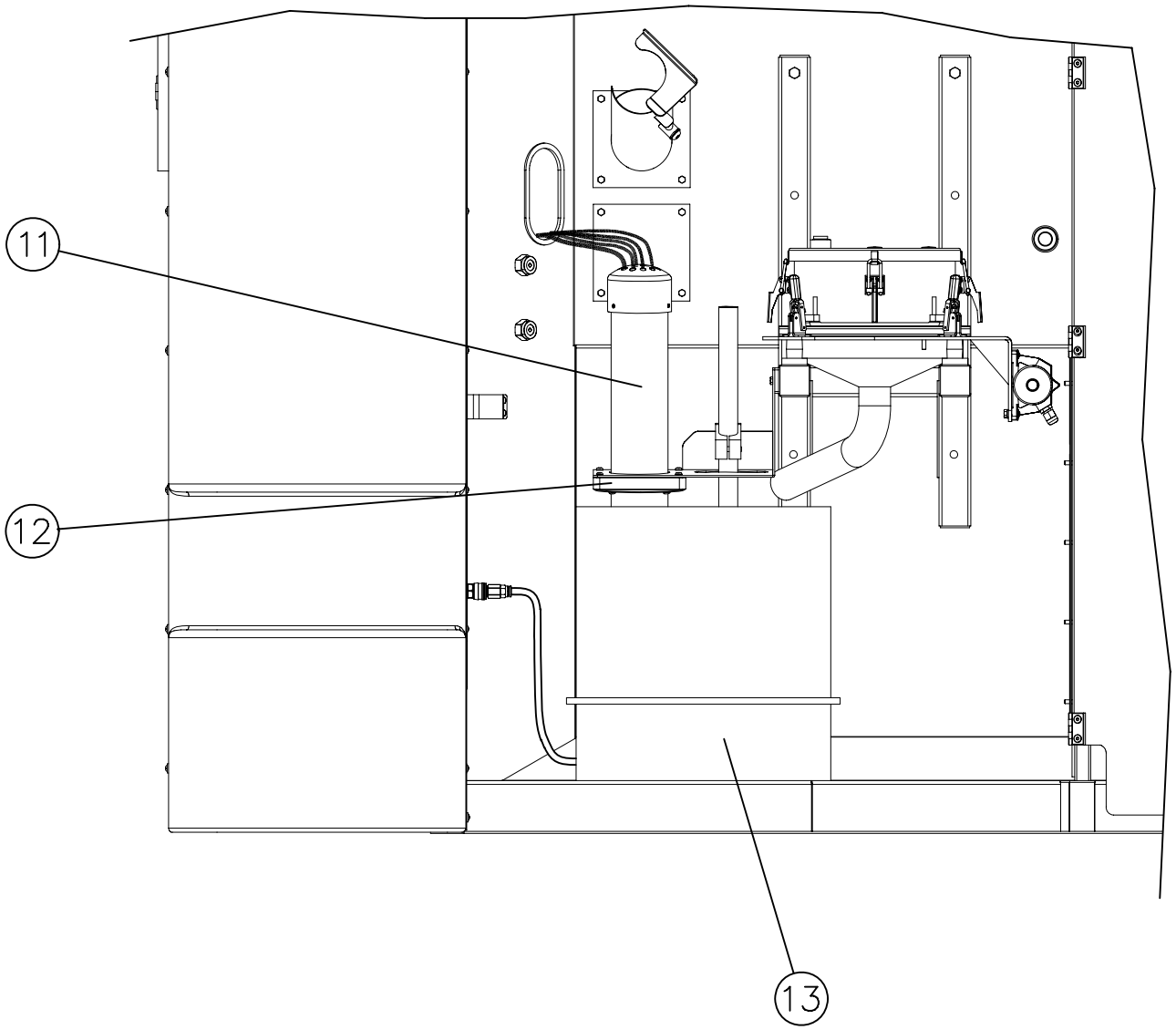


Figure 16 Miscellaneous Parts (2 of 2)

0 1 2 3 4 5 6 7 8 9

POWDER PORT

TECHNICAL SPECIFICATIONS

CONSTRUCTION YEAR:	2008.10.01
WEIGHT:	
TYP:	CUBE 2008-07 /_RIT 2008-09
VOLTAGE:	3 x 400V + N / 50HZ
POWER:	4 KW
CONTROL VOLTAGE:	24V AC/DC

WIRING COLOURS:	
POWER CIRCUITS:	BLACK
GROUND CONDUCTOR:	YELLOW-GREEN
NEUTRAL CONDUCTOR POLE (N):	SKY-BLUE
CONTROL VOLTAGE:	
AC VOLTAGE:	RED
DC VOLTAGE:	BLUE
EXTERNEL VOLTAGES:	ORANGE

3

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			Bearb.	CAD			
			Gepr.	2009.03.06			
¿nderung	Datum	Name	Norm				

=	KUNDE: MASTER		
+	POWDER PORT		
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			92 Bl¿tter

0 1 2 3 4 5 6 7 8 9

CONTENTS

1 11

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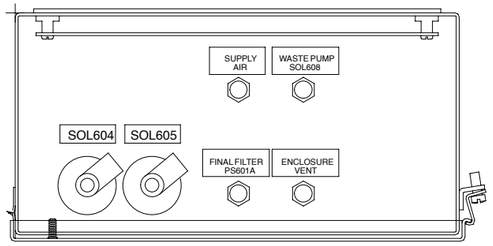
			Bearb.	CAD				+ POWDER PORT
			Gepr.	2009.03.06			RIT 2008-09-24	1 Bl. 3
¿nderung	Datum	Name	Norm					92 Bl¿tter

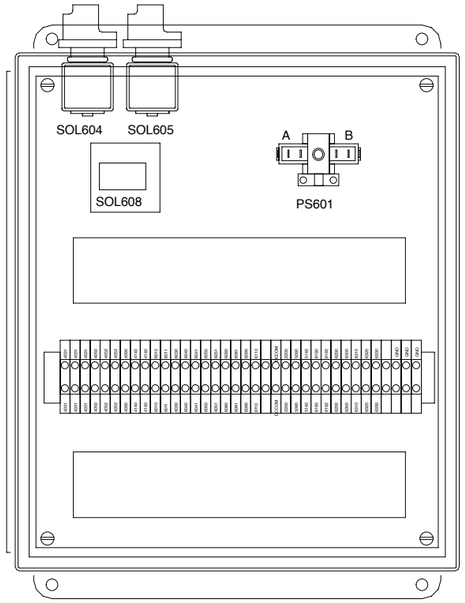
ITEM	QTY	DESCRIPTION	PART NO.	MFG.
	1	ENCLOSURE, 14 X 12 X 6	A–1412CH	HOFFMAN
	1	SUBPANEL	A–14P12	HOFFMAN
TB	A/R	WIRE DUCT, 1 1/2" x 3"	––	––
TB	3	TERMINAL BLOCK, GROUND	–––––––	–––––
TB	33	TERMINAL BLOCK	–––––––	–––––
TB	1	END SECTION	–––––––––	–––––––
TB	2	END STOP	–––––––––	–––––––
TB	A/R	DIN RAIL	–––––––––	–––––––
SOL608	1	VALVE, SOLENOID, 3–WAY, 120V	35 SERIES	MAC
SOL608	1	MALE ELBOW	–––––––––	–––––––
SOL604,605,608	3	MALE CONNECTOR	KQ2H06–01S	SMC
SOL604,605	2	VALVE, SOLENOID, 2–WAY, 120V	RCA–3D2	GOYEN
PS601A/B	1	PRESSURE SWITCH, DUAL SETPOINT	MPL–604–G–3/2.5	MICRO PNEUMATIC LOGIC
PS601,SOL608	3	BULKHEAD UNION, 6mm	KQ2E06–00	SMC
	1	BREATHER VENT	F28	ALWITCO
	A/R	6mm POLYTUBING	1J–242–10	SMC
PBL608	1	PUSHBUTTON, ILLUM, N.O., AMBER, L.E.D.	E22TB9X96W	CUTLER–HAMMER
PB609	1	PUSHBUTTON, N.C., RED	E22EB2B	CUTLER–HAMMER
SS605	1	SELECTOR SWITCH, 3–POS, MAINTAINED	E22XBG1D	CUTLER–HAMMER
SS605,PB609,PBL608	3	NAMEPLATE (BLACK)	E22NSP77	CUTLER–HAMMER

TB

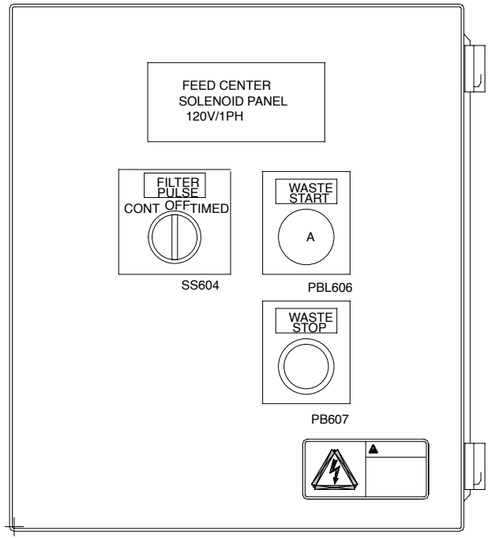
AC VOLTS	4031	4031	
	4031	4031	
	4031	4031	
	4050	4050	
	4052	4052	
	4053	4053	
	4090	4090	
	4140	4140	
	4140	4140	
	6010	6010	
	6011	6011	
	6030	6030	
	6040	6040	
	6041	6041	
	6050	6050	
	6051	6051	
	6080	6080	
	6081	6081	
	6090	6090	
	6110	6110	
DC VOLTS	DCCOM	DCCOM	
	2200	2200	
	5090	5090	
	5140	5140	
	6190	6190	
	6192	6192	
	6200	6200	
	6300	6300	
	6310	6310	
	6320	6320	
	6330	6330	
		GND	
		GND	
		GND	



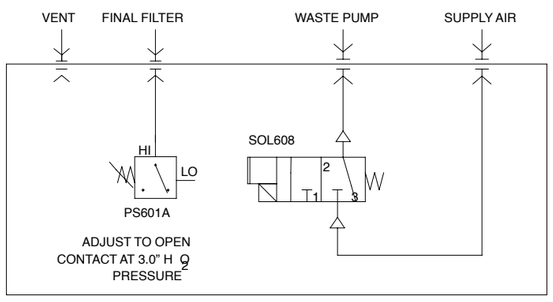
TOP OF ENCLOSURE

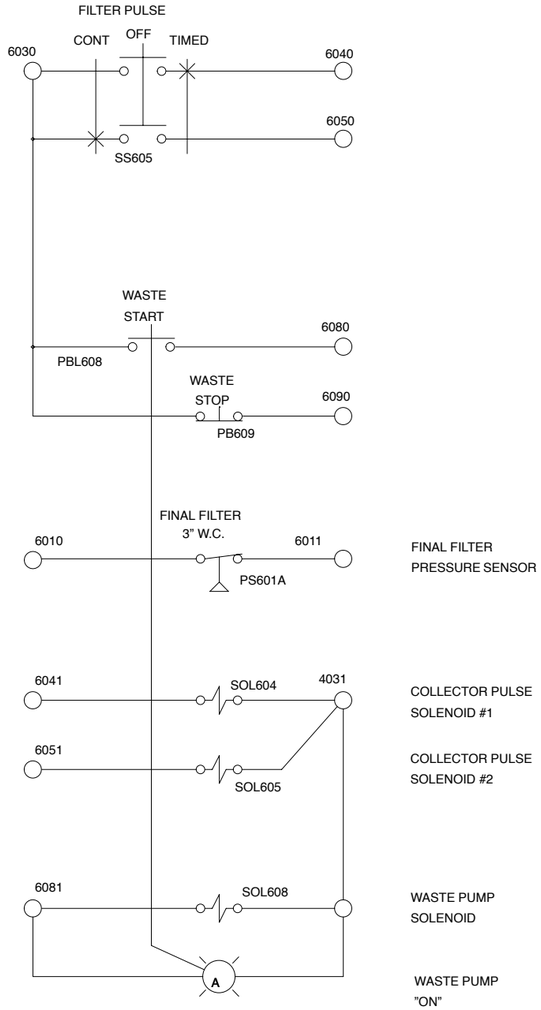


SUBPANEL LAYOUT



DOOR LAYOUT

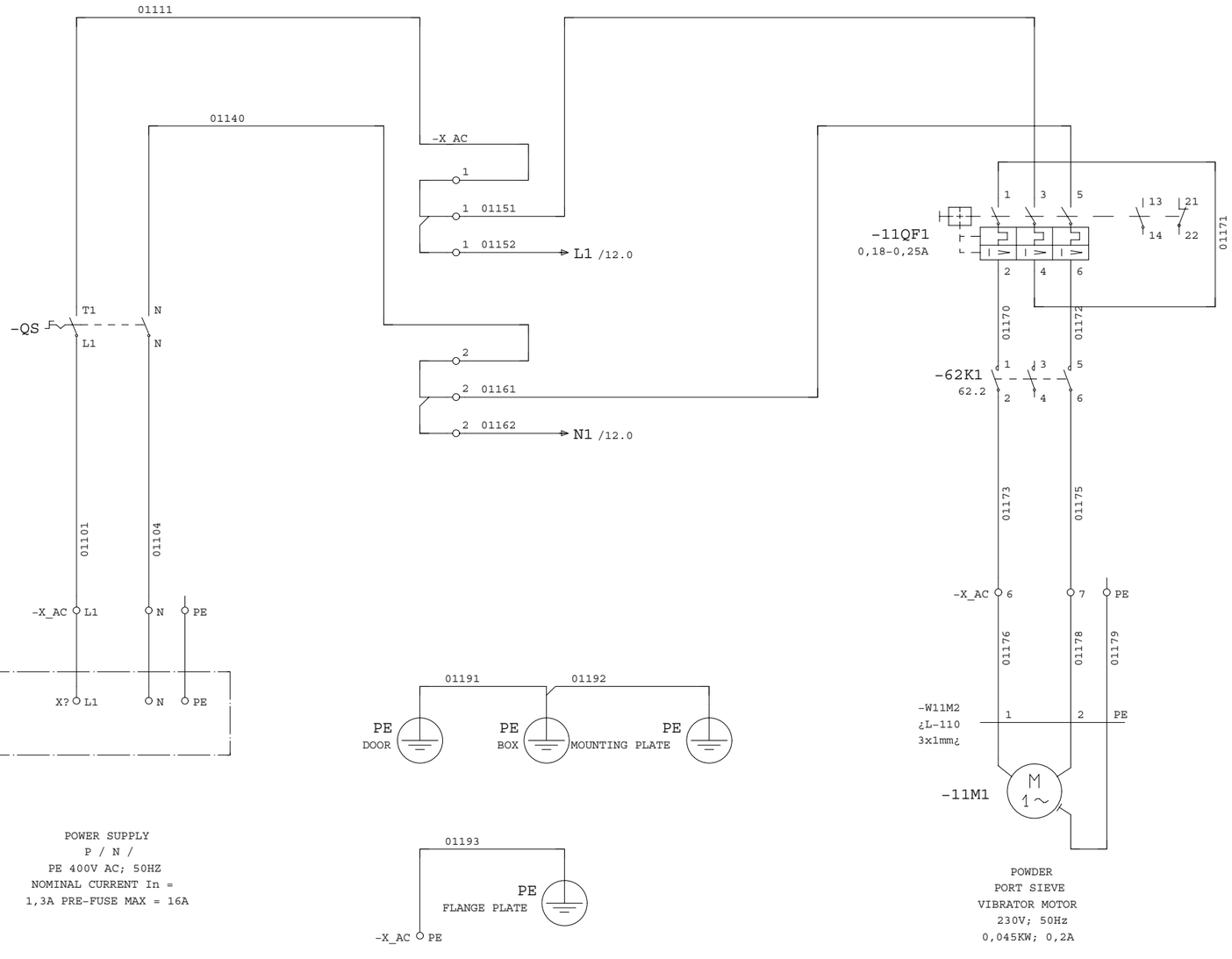




0	1	2	3	4	5	6	7	8	9

MAIN SWITCH

POWDER PORT
SIVE VIBRATOR



POWER SUPPLY
P / N /
PE 400V AC; 50HZ
NOMINAL CURRENT In =
1,3A PRE-FUSE MAX = 16A

POWDER
PORT SIEVE
VIBRATOR MOTOR
230V; 50Hz
0,045KW; 0,2A

3 12

			Datum	
			Bearb.	CAD
			Gepr.	2009.03.06
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Benennung / Description
POWER SUPPLY 400V
AC

=	KUNDE: MASTER
+	POWDER PORT
RIT 2008-09-24	1
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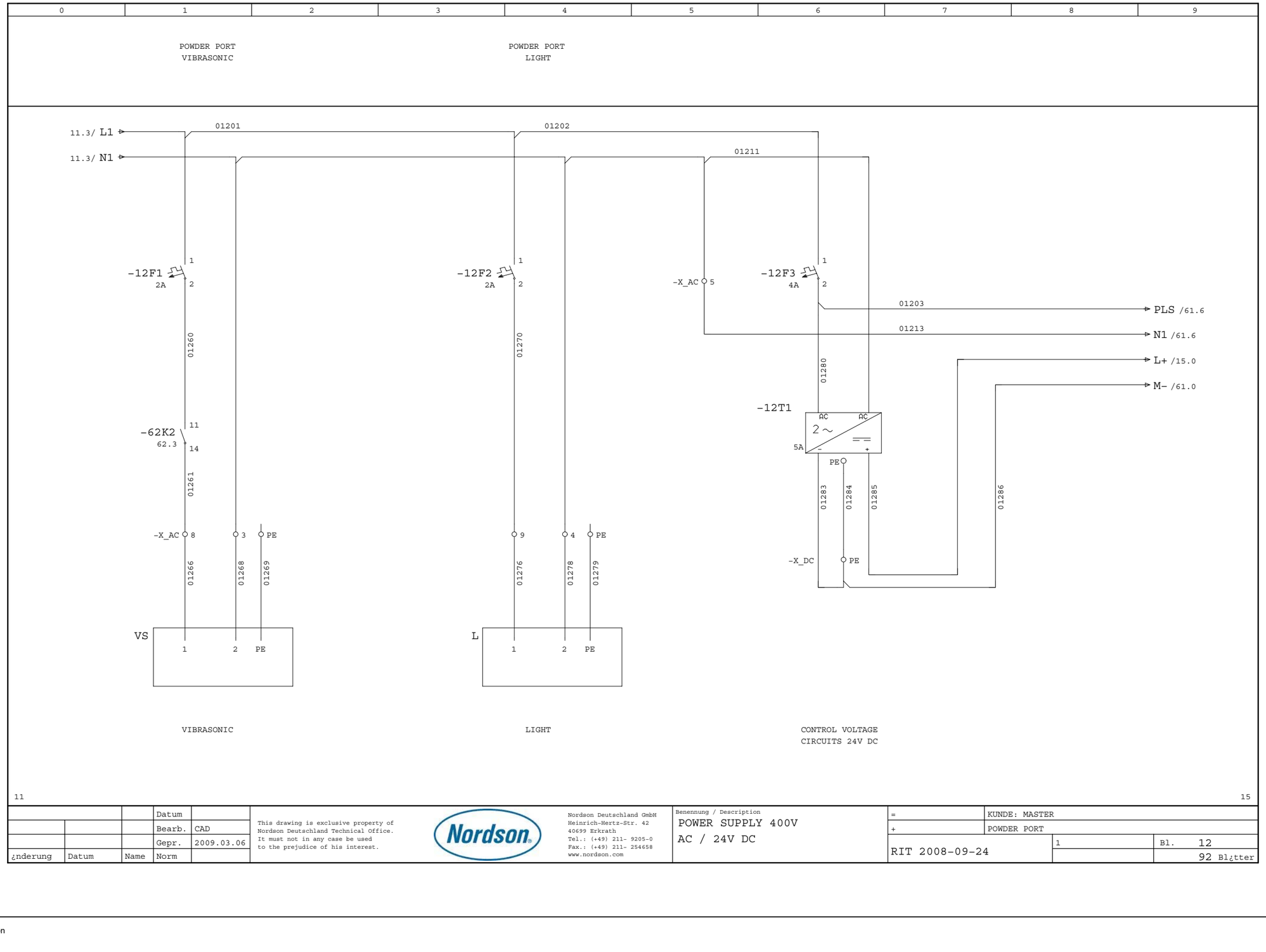
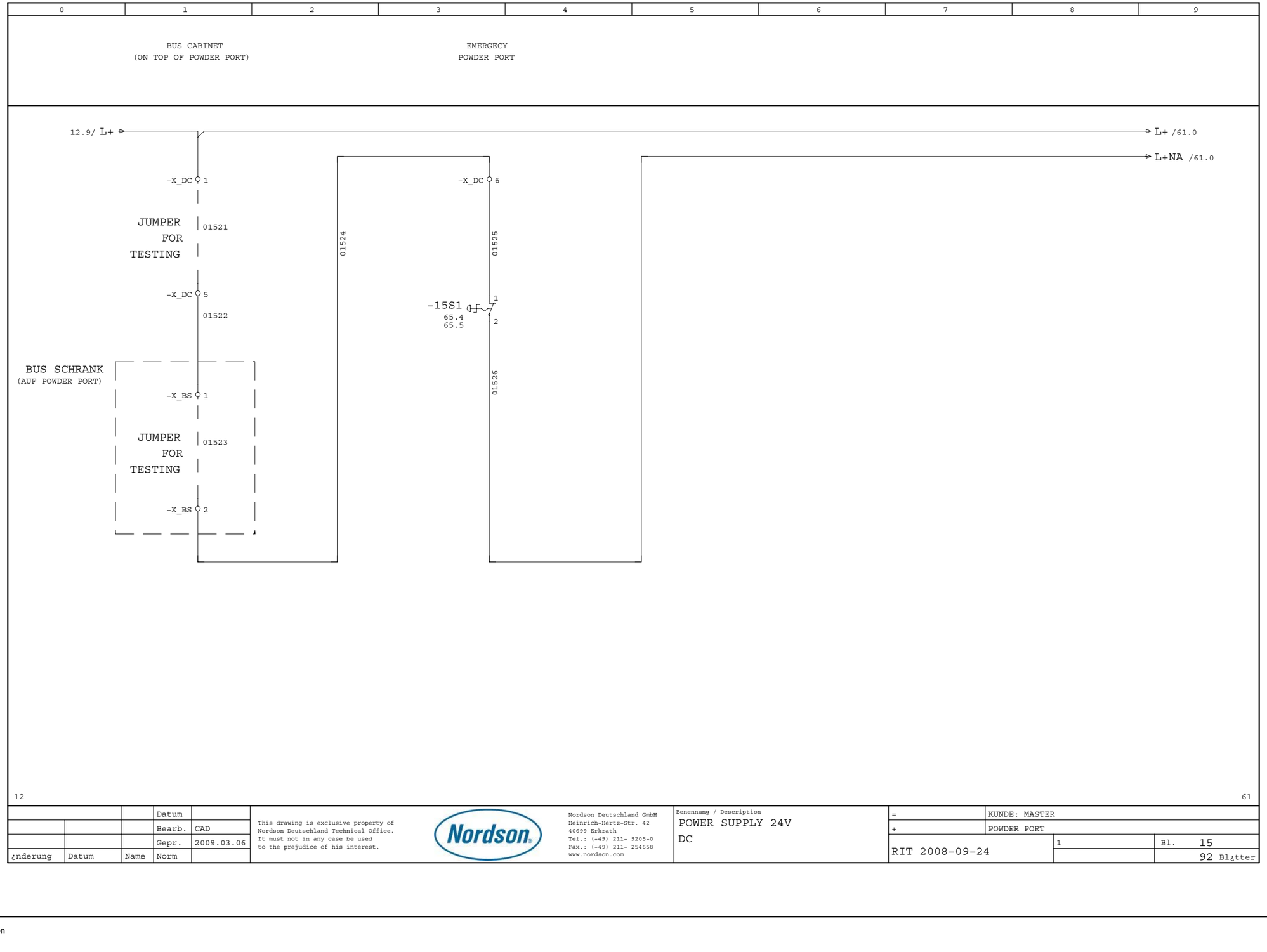
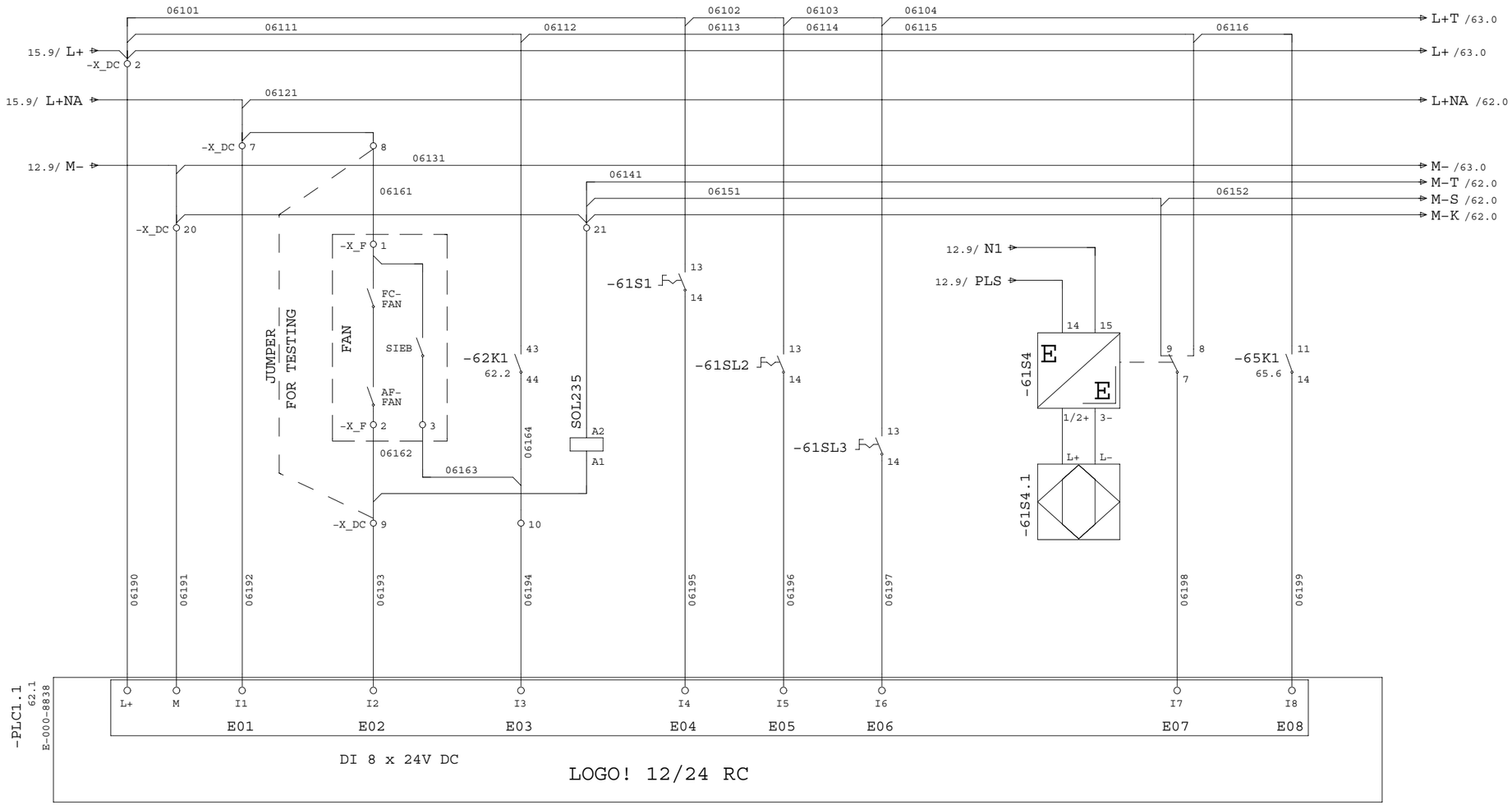
	92 Bl¿tter





0	1	2	3	4	5	6	7	8	9

SPRAY BOOTH PANEL — LIQUEFACTION — SIEVE SELECTOR — SIEVE SELECTOR — VIRGIN SELECTOR — POWDER LEVEL SENSOR — CC CYCLE COMPLETE



15 62

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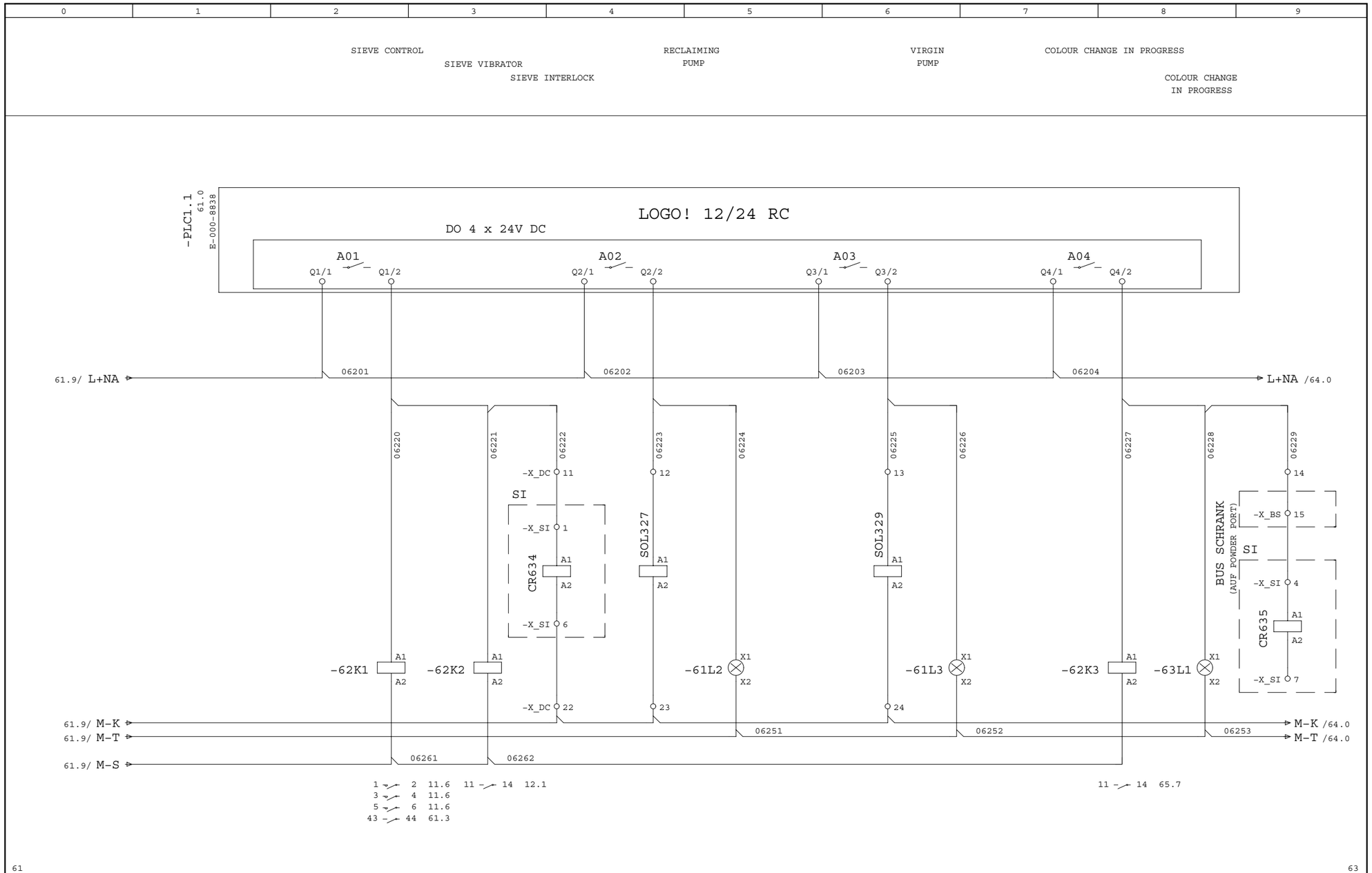
			Bearb.	CAD				RIT 2008-09-24	1 Bl. 61
			Gepr.	2009.03.06					92 Blätter
änderung	Datum	Name	Norm						



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			Bearb.	CAD				+	POWDER PORT
			Gepr.	2009.03.06				RIT 2008-09-24	1 / Bl. 62
¿nderung	Datum	Name	Norm						92 Bl¿tter

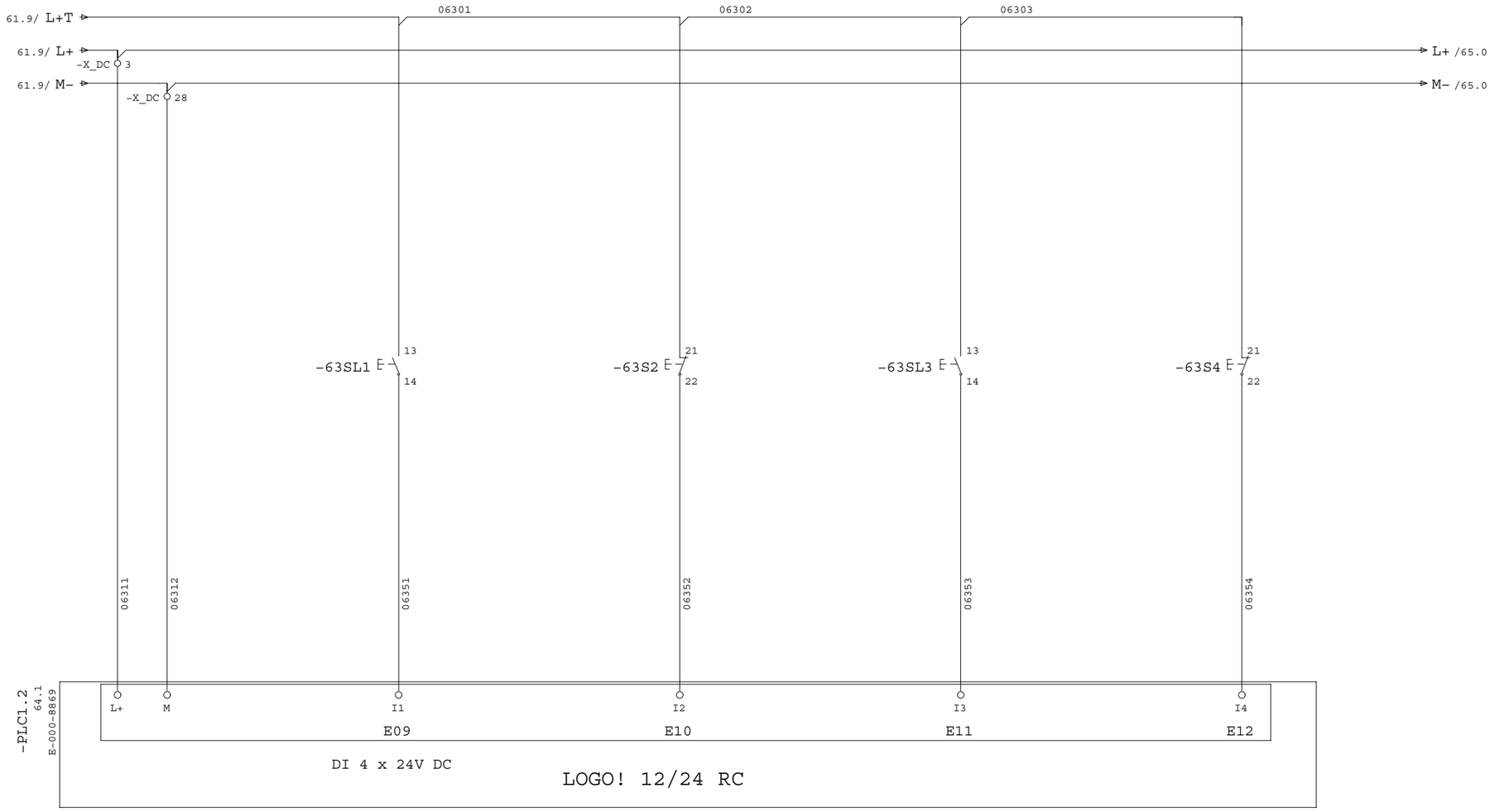
0	1	2	3	4	5	6	7	8	9

COLOUR CHANGE START

COLOUR CHANGE STOP

HDLV CLEANING START

HDLV CLEANING STOP



62 64

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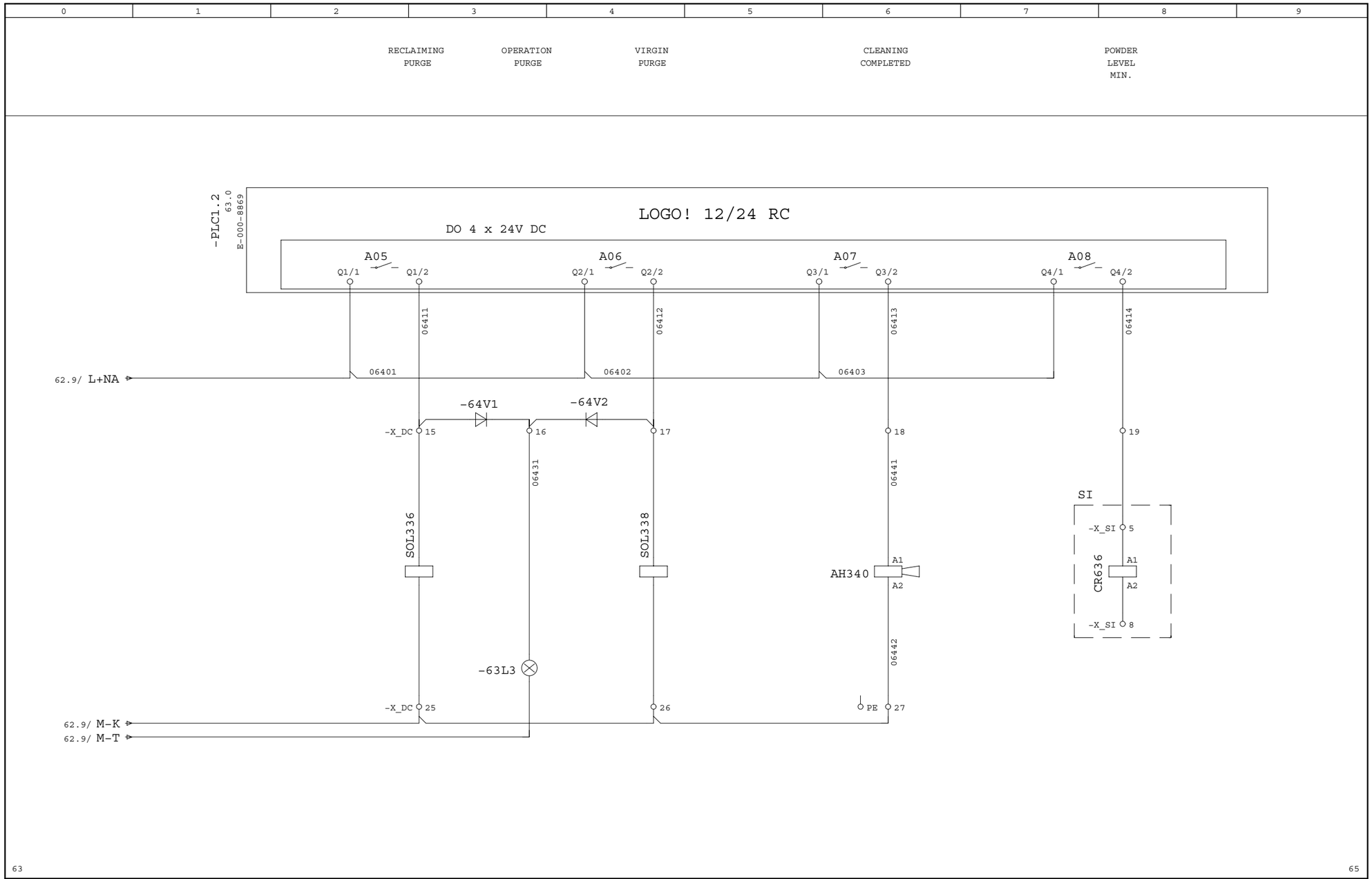
			Bearb.	CAD				+ POWDER PORT
			Gepr.	2009.03.06			RIT 2008-09-24	1 Bl. 63
¿nderung	Datum	Name	Norm					92 Bl¿tter



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			Gepr.	2009.03.06			
¿nderung	Datum	Name	Norm				

=	KUNDE: MASTER		
+	POWDER PORT		
RIT 2008-09-24	1	Bl.	64
			92 Bl¿tter

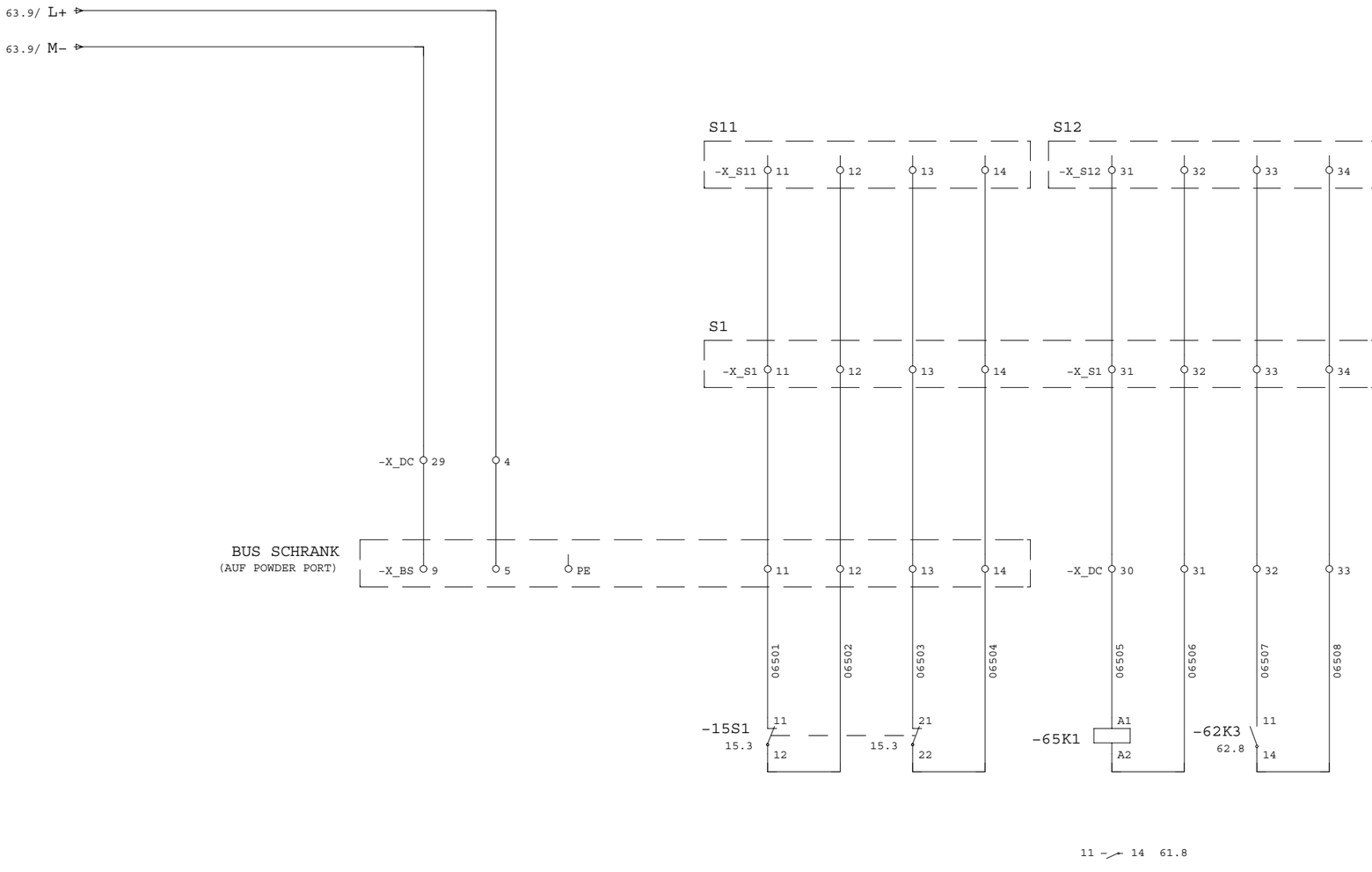
0	1	2	3	4	5	6	7	8	9

EMERGECY FOR EXTERN CANAL 1

EMERGECY FOR EXTERN CANAL 2

GUNS CLEAN COMPLETE

COLOUR CHANGE IN PROGRESS



64 71

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			Gepr.	2009.03.06			
¿nderung	Datum	Name	Norm				

=	KUNDE: MASTER		
+	POWDER PORT		
RIT 2008-09-24		1	Bl. 65
			92 Bl¿tter

Anschlussleiste

Terminal strip

-X_AC

1mm¿ GNGE	1mm¿ SW	3x1mm¿ ¿L-110 -W11M2	1.5mm¿ HBL	1mm¿ HBL	1.5mm¿ SW	Ziel/Destination Kennzeichen Designation	Anschlu¿/Connection	Klemmen-Nr. Terminal No.	Br¿cke/Link	Ziel/Destination Kennzeichen Designation	Anschluss/Connection	1.5mm¿ SW	1.5mm¿ HBL	6mm¿ GNGE	1mm¿ HBL	1mm¿ SW	Seite/Pfad Page/Path
						-X?	L1	L1		-QS	L1	X					/11.1
						-X?	N	N		-QS	N		X				/11.1
								PE		-PE				X			/11.3
						-X?	PE	PE									/11.1
					X	-QS	T1	1	●								/11.3
				X		-11QF1	3	1	●								/11.3
				X		-12F1	1	1	●								/11.3
			X			-QS	N	2	●								/11.3
				X		-11QF1	5	2	●								/11.3
								2	●								/11.3
				X		-VS	2	3	●								/12.1
				X		-L	2	4	●								/12.4
				X		-61S4	15	5	●	-12T1					X		/12.5
		1				-11M1		6		-62K1	2					X	/11.6
		2				-11M1		7		-62K1	6				X		/11.6
		PE				-11M1		PE									/11.6
	X					-VS	1	8		-62K2	14					X	/12.1
	X					-L	1	9		-12F2	2					X	/12.4
X						-VS	PE	PE									/12.2
X						-L	PE	PE									/12.4

65 72

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			Bearb.	CAD			
			Gepr.	2009.03.06			
¿nderung	Datum	Name	Norm				

=	KUNDE: MASTER		
+	POWDER PORT		
RIT 2008-09-24		1	Bl. 71
			92 Bl¿tter

0	1	2	3	4	5	6	7	8	9

Anschlussleiste
Terminal strip

-X_BS

1mm¿ OR	1mm¿ DBL	Core No.	Type	Ziel/Destination: Kennzeichen Designation	Ziel/Destination: Anschluz/Connection	Klemmen-Nr. Terminal No.	Brücke/Link	Ziel/Destination: Kennzeichen Designation	Ziel/Destination: Anschluss/Connection	Core No.	Type	1mm¿ DBL	Cable No.	Seite/Pfad Page/Path
						1		-X_DC	5			X		/15.1
	X			-X_DC	6	2								/15.1
						5		-X_DC	4					/65.3
						9		-X_DC	29					/65.2
X				-15S1	11	11		-X_S1	11					/65.4
X				-15S1	12	12		-X_S1	12					/65.5
X				-15S1	21	13		-X_S1	13					/65.5
X				-15S1	22	14		-X_S1	14					/65.5
				-X_SI	4	15		-X_DC	14					/62.9
						PE								/65.3

71 73

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		Bearb.	CAD		
		Gepr.	2009.03.06		
¿nderung	Datum Name	Norm			

Benennung / Description: -X_BS

=	KUNDE: MASTER
+	POWDER PORT
RIT 2008-09-24	1 / Bl. 72 / 92 Bl¿tter

Anschlussleiste
Terminal strip

-X_DC

1mm¿ OR / 1mm¿ DBL	Core No.	Ziel/Destination: Kennzeichen Designation	Ziel/Destination: Anschluß/Connection	Klemmen-Nr. Terminal No.	Brücke/Link	Ziel/Destination: Kennzeichen Designation	Ziel/Destination: Anschluss/Connection	Core No.	1mm¿ GNGE	1mm¿ DBL	Seite/Pfad Page/Path
	Type							Type			
	Cable No.							Cable No.			
X		-12T1		PE		-12T1	PE		X		/12.6
				1		-12T1	4			X	/15.1
X		-PLC1.1	L+	2		-61S1	13			X	/61.1
		-PLC1.2	L+	3							/63.1
		-X_BS	5	4							/65.3
X		-X_BS	1	5							/15.1
X		-15S1	1	6		-X_BS	2			X	/15.3
X		-PLC1.1	I1	7		-15S1	2			X	/61.1
X		-X_F	1	8							/61.2
X		-PLC1.1	I2	9		-X_F	2			X	/61.2
X		-PLC1.1	I3	10		-62K1	44			X	/61.3
		-X_SI	1	11		-62K2	A1			X	/62.4
				12		-PLC1.1	Q2/2			X	/62.4
				13		-PLC1.1	Q3/2			X	/62.6
		-X_BS	15	14		-63L1	X1			X	/62.9
				15		-PLC1.2	Q1/2			X	/64.3
X		-63L3		16		-64V1					/64.3
				17		-PLC1.2	Q2/2			X	/64.4
X		-AH340	A1	18		-PLC1.2	Q3/2			X	/64.6
		-X_SI	5	19		-PLC1.2	Q4/2			X	/64.8
X		-PLC1.1	M	20		-X_DC	PE			X	/61.1
				21		-61L2	X2			X	/61.3
				22		-X_SI	6				/62.4
				23							/62.4
				24							/62.6
				25							/64.3
				26							/64.4
X		-AH340	A2	27							/64.6
				PE							/64.6
		-PLC1.2	M	28		-X_DC	20			X	/63.1
		-X_BS	9	29							/65.2
	X	-65K1	A1	30		-X_S1	31				/65.6
	X	-65K1	A2	31		-X_S1	32				/65.7
	X	-62K3	11	32		-X_S1	33				/65.7
	X	-62K3	14	33		-X_S1	34				/65.7

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		Datum	2008.10.08	
		Bearb.	CAD	
		Gepr.	2009.03.06	
¿nderung	Datum	Norm		

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Benennung / Description: -X_DC

=	KUNDE: MASTER
+	POWDER PORT
RIT 2008-09-24	1
	Bl. 73
	92 Bl¿tter

0	1	2	3	4	5	6	7	8	9

Anschlussleiste
Terminal strip
-X_F

1mm¿ DBL	Core No. / Type / Cable No.	Ziel/Destination: Kennzeichen Designation	Anschlu¿/Connection	Klemmen-Nr. Terminal No.	Br¿cke/Link	Ziel/Destination: Kennzeichen Designation	Anschluss/Connection	Core No. / Type / Cable No.	1mm¿ DBL	Seite/Pfad Page/Path
				1		-X_DC	8		X	/61.2
X		-X_DC	9	2						/61.2
X		-X_DC	10	3						/61.2

73 75

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			Bearb.	CAD					+	POWDER PORT
			Gepr.	2009.03.06					RIT 2008-09-24	1 Bl. 74
¿nderung	Datum	Name	Norm							92 Bl¿tter

Anschlussleiste
Terminal strip

-X_S1

Core No.	Type	Ziel/Destination Kennzeichen Designation	Anschluz/Connection	Klemmen-Nr. Terminal No.	Brücke/Link	Ziel/Destination Kennzeichen Designation	Anschluss/Connection	Core No.	Type	Cable No.	Seite/Pfad Page/Path
		-X_BS	11	11		-X_S11	11				/65.4
		-X_BS	12	12		-X_S11	12				/65.5
		-X_BS	13	13		-X_S11	13				/65.5
		-X_BS	14	14		-X_S11	14				/65.5
		-X_DC	30	31		-X_S12	31				/65.6
		-X_DC	31	32		-X_S12	32				/65.7
		-X_DC	32	33		-X_S12	33				/65.7
		-X_DC	33	34		-X_S12	34				/65.7

74 76

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			Bearb.	CAD	
			Gepr.	2009.03.06	
¿nderung	Datum	Name	Norm		

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www.nordson.com

Benennung / Description
-X_S1

=	KUNDE: MASTER
+	POWDER PORT
RIT 2008-09-24	1 / Bl. 75
	92 Bl¿tter

Anschlussleiste
Terminal strip

-X_S11

Core No.	Type	Cable No.	Kennzeichen Designation	Anschluß/Connection	Klemmen-Nr. Terminal No.	Brücke/Link	Kennzeichen Designation	Anschluss/Connection	Type	Cable No.	Core No.	Seite/Pfad Page/Path
			Ziel/Destination				Ziel/Destination					
			-X_S1	11	11							/65.4
			-X_S1	12	12							/65.5
			-X_S1	13	13							/65.5
			-X_S1	14	14							/65.5

75 77

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			Bearb.	CAD				+	POWDER PORT
			Gepr.	2009.03.06				RIT 2008-09-24	1 / Bl. 76
¿nderung	Datum	Name	Norm						92 Bl¿tter

Anschlussleiste
Terminal strip

-X_S12

Core No.	Type	Cable No.	Kennzeichen Designation	Anschluß/Connection	Klemmen-Nr. Terminal No.	Brücke/Link	Kennzeichen Designation	Anschluss/Connection	Core No.	Type	Cable No.	Seite/Pfad Page/Path
			Ziel/Destination				Ziel/Destination					
			-X_S1	31	31							/65.6
			-X_S1	32	32							/65.7
			-X_S1	33	33							/65.7
			-X_S1	34	34							/65.7

76 78

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			Bearb.	CAD				+	POWDER PORT
			Gepr.	2009.03.06				RIT 2008-09-24	1 / Bl. 77
¿nderung	Datum	Name	Norm						92 Bl¿tter

0	1	2	3	4	5	6	7	8	9

Core No. | Anschlussleiste / Terminal strip | -X_SI | Core No.

Type	Ziel/Destination				Ziel/Destination		Type	
Cable No.	Kennzeichen Designation	Anschluz/Connection	Klemmen-Nr. Terminal No.	Brücke/Link	Kennzeichen Designation	Anschluss/Connection	Cable No.	Seite/Pfad Page/Path
			1		-X_DC	11		/62.4
			4		-X_BS	15		/62.9
			5		-X_DC	19		/64.8
	-X_DC	22	6					/62.4
			7					/62.9
			8					/64.8

77 81

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			Bearb.	CAD				+ POWDER PORT
			Gepr.	2009.03.06			RIT 2008-09-24	1 Bl. 78
¿nderung	Datum	Name	Norm					92 Bl¿tter

0	1	2	3	4	5	6	7	8	9
KABELBEZEICHNUNG CABLE	ZIEL 1 DESTINATION 1			ZIEL 2 DESTINATION 2		TYP TYPE	ADERN LEAD	QUERS./ SECTION [qmm]	BEMERKUNGEN REMARKS SEITE PAGE
-W11M2	-X_AC			-11M1		¿L-110	3	1	- /11.6

78 91

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			Bearb.	CAD				+ POWDER PORT
			Gepr.	2009.03.06				1 Bl. 81
¿nderung	Datum	Name	Norm				RIT 2008-09-24	92 Bl¿tter

0	1	2	3	4	5	6	7	8	9
ST. QTY.	BEZEICHNUNG / BESTELLNUMMER DESIGNATION / IDENTIFICATION DATA		TYPENNUMMER / TECHN. BESCHREIBUNG TECHNICAL DESCRIPTION			BENENNUNG DESIGNATION			HERSTELLER / LIEFER. PRODUCER / MANUFACT.
1	MAIN SWITCH E-000-8859 KG10A_T202/04_FT2		2 TERMINAL.			-QS			KRAUS & NAIMER K+N.KG10A_T202/04_FT2
1	POWER CIRCUIT BREAKER 1-004-1231 3RV1011-0CA10		0,18-0,25A			-11QF1			Siemens 3RV1011-0CA10
1	MINIATURE CIRCUIT BREAKER 1-006-8714 24111		C 60 N B, 2A			-12F1			 MERL.24111
1	MINIATURE CIRCUIT BREAKER 1-006-8714 24111		C 60 N B, 2A			-12F2			 MERL.24111
1	POWER SUPPLY UNIT E-000-6430 2938581		100 - 240 VAC / 24 VDC; 5A			-12T1			QUINT QUI.2938581
1	MINIATURE CIRCUIT BREAKER 1-006-8716 24113		C 60 N B, 4A			-12F3			 MERL.24113
1	MUSHROOM-SHAPED PUSHBUTTON RED E-000-6512 ZB4-BT84		ZB4-BT84 WITH RELIEF BY DRAWING NO CIRCUMVENTION POSSIBLE			-15S1			TELEMECANIQUE TEL.ZB4-BT84
1	AUXILIARY CONTACT E-000-6514 ZB4-BZ104		ZB 4 BZ 104 2NC WITH MOUNTING FLANGE			-15S1			TELEMECANIQUE TEL.ZB4-BZ104
1	SWITCHING ELEMENT E-000-1344 ZBE-102		1 NC			-15S1			TELEMECANIQUE TEL.ZBE-102
1	LOGO 24RC COMPACT E-000-8838 6ED1052-1HB00-0BA5		8 IN, 4 OUT (RELAIS, 10A), 24 V DC			-PLC1.1			Siemens 6ED1052-1HB00-0BA5
1	FRONT ELEMENT ILLUMINATED SWITCH E-000-6533 ZB4-BK1213		ZB4-BK1213			-61S1			TELEMECANIQUE TEL.ZB4-BK1213
1	AUXILIARY CONTACT E-000-6522 ZB4-BZ101		ZB 4 BZ 101 1NO WITH MOUNTING FLANGE			-61S1			TELEMECANIQUE TEL.ZB4-BZ101
1	FRONT ELEMENT ILLUMINATED SWITCH E-000-8863 ZB4-BK1253		ZB4-BK1253			-61SL2			TELEMECANIQUE TEL.ZB4-BK1253
1	AUXILIARY CONTACT BLOCK E-000-6526 ZB4-BW0B11		1NO, WITH LED MODUL 24V WHITE			-61SL2			TELEMECANIQUE TEL.ZB4-BW0B11
1	FRONT ELEMENT ILLUMINATED SWITCH E-000-8863 ZB4-BK1253		ZB4-BK1253			-61SL3			TELEMECANIQUE TEL.ZB4-BK1253
1	AUXILIARY CONTACT BLOCK E-000-6526 ZB4-BW0B11		1NO, WITH LED MODUL 24V WHITE			-61SL3			TELEMECANIQUE TEL.ZB4-BW0B11
81									92

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			Bearb.	CAD				+ POWDER PORT
			Gepr.	2009.03.06				1 Bl. 91
¿nderung	Datum	Name	Norm				RIT 2008-09-24	92 Bl¿tter

0	1	2	3	4	5	6	7	8	9
ST. QTY.	BEZEICHNUNG / BESTELLNUMMER DESIGNATION / IDENTIFICATION DATA		TYPENNUMMER / TECHN. BESCHREIBUNG TECHNICAL DESCRIPTION			BENENNUNG DESIGNATION			HERSTELLER / LIEFER. PRODUCER / MANUFACT.
1	EVALUATION UNIT LEVEL SENSOR E-000-8958 N0031A		 230VAC +/- 10%, 1 VA			-61S4			IFM IFM.N0031A
1	CONTACTOR 4KW,24VDC A-D89-9371 3RT1016-2BB42		 1NC SIZE S00			-62K1			Siemens 3RT1016-2BB42
1	AUXILIARY CONTACT BLOCK A-D89-9821 3RH1911-2FA31		 6A, 3NC/1NO CAGE CLAMP			-62K1			Siemens 3RH1911-2FA31
1	VARISTOR A-D89-5298 3RT1916-1DG00		 12-250VDC, (3RT1. S00)			-62K1			Siemens 3RT1916-1DG00
1	RELAY-INTERFACE-CLAMP 1-005-1644 2966472		PLCRSC-24DC/21 1 W, CAGE CLAMP			-62K2			PH¿NIX PH¿.2966472
1	RELAY-INTERFACE-CLAMP 1-005-1644 2966472		PLCRSC-24DC/21 1 W, CAGE CLAMP			-62K3			PH¿NIX PH¿.2966472
1	LOGO 24RC COMPACT E-000-8869 6ED1055-1HB00-0BA0		 4 IN, 4 OUT (RELAIS, 10A), 24 V DC			-PLC1.2			Siemens 6ED1055-1HB00-0BA0
1	FRONT ELEMENT ILLUMINATED PUSHBUTTON E-000-6535 ZB4-BW333		ZB4-BW333 GREEN EVEN ONLY FOR LED-MODULE			-63SL1			TELEMECANIQUE TEL.ZB4-BW333
1	AUXILIARY CONTACT BLOCK E-000-6536 ZB4-BW0B31		 1S, WITH LED MODULE 24V GREEN			-63SL1			TELEMECANIQUE TEL.ZB4-BW0B31
1	FRONT ELEMENT E-000-6537 ZB4-BA4		ZB 4 BA 4 PUSHBUTTON RED FRONT ELEMENT			-63S2			TELEMECANIQUE TEL.ZB4-BA4
1	AUXILIARY CONTACT E-000-6528 ZB4-BZ102		ZB 4 BZ 102 1NC WITH MOUNTING FLANGE			-63S2			TELEMECANIQUE TEL.ZB4-BZ102
1	FRONT ELEMENT ILLUMINATED PUSHBUTTON E-000-6535 ZB4-BW333		ZB4-BW333 GREEN EVEN ONLY FOR LED-MODULE			-63SL3			TELEMECANIQUE TEL.ZB4-BW333
1	AUXILIARY CONTACT BLOCK E-000-6536 ZB4-BW0B31		 1S, WITH LED MODULE 24V GREEN			-63SL3			TELEMECANIQUE TEL.ZB4-BW0B31
1	FRONT ELEMENT E-000-6537 ZB4-BA4		ZB 4 BA 4 PUSHBUTTON RED FRONT ELEMENT			-63S4			TELEMECANIQUE TEL.ZB4-BA4
1	AUXILIARY CONTACT E-000-6528 ZB4-BZ102		ZB 4 BZ 102 1NC WITH MOUNTING FLANGE			-63S4			TELEMECANIQUE TEL.ZB4-BZ102
1	RELAY-INTERFACE-CLAMP 1-005-1644 2966472		PLCRSC-24DC/21 1 W, CAGE CLAMP			-65K1			PH¿NIX PH¿.2966472

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			Bearb.	CAD				+ POWDER PORT
			Gepr.	2009.03.06			RIT 2008-09-24	1 Bl. 92
¿nderung	Datum	Name	Norm					92 Bl¿tter