Novitool®

Novitool® Aero® Press
End Plate Removal Instructions

⚠ WARNING

IMPROPER OR UNSAFE use of this tool can result in serious bodily injury! This manual contains important information about product function and safety. Please read and understand this manual BEFORE operating the tool. Please keep this manual available for other users and owners before they use the tool. This manual should be stored in a safe place.

Patent number: US 9,090,022 B1 and other Patents Pending

Table of Contents

General Safety Rules – Save These Instructions

Signal words:

"DANGER" indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

"WARNING" indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

"CAUTION" indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Safety Symbol

This international safety symbol is used to identify and call attention to specific safety matters.

Safety Information

To avoid severe personal injury or property damage, read carefully and understand the following Safety Precautions.

1. WORK AREA

⚠DANGER

High Voltage!

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

⚠CAUTION

Keep your work area clean and well lit.

2. ELECTRICAL SAFETY

⚠DANGER

The Aero® is a single insulated machine and needs a multiple wire grounded power cord and grounded power supply system. Do not modify electrical cables provided.

Ensure machine, power cable and power source are not positioned in standing water or exposed to wet conditions.

Do not connect machine to power or operate machine if machine is wet. Machine intended for non-condensing/non-icing conditions.

NEVER leave power cord plugged into wall while detached from unit as this could lead to a serious electrical danger if it comes in contact with fluids, such as water.

Service shall only be performed by a qualified electrician. Power shall be removed before service. Follow Lock-Out Tag-Out procedures. Observe proper maintenance procedures. Do not modify electrical circuit.

Never alter or remove safety devices.

Never operate press with an extension cord.

⚠WARNING

Operating press on incorrect voltage can cause serious damage and potential hazards. Available Aero® power cords:

- 110 volt; single phase
- 230 volt; single phase
- 230 volt; three phase
- 400 volt; three phase + neutral
- 400 volt; three phase
- 460 volt; three phase

Do not use outdoors. This machine is designed for indoor use only. The press must be transported in transport case when outdoors.

Inspect machine before each use. Ensure machine and power cable are not damaged. Machine shall not be operated with damaged controllers, power cords, or other mechanical components.

Avoid dropping or severe handling of machine at all times, including during movement in transport case.

If the electrical supply cord is damaged, it must be replaced by a special cord available from the manufacturer or it's service agent.

3. PERSONAL SAFETY

⚠WARNING

Use safety equipment. Always wear eye protection, gloves, non-skid safety shoes, and adhere to other safety standards of the facility where operating the press.

Stay alert, watch what you are doing, and use common sense when operating a machine. Do not use machine while tired or under influence of drugs, alcohol, or medication. A moment of inattention while operating machines may result in serious personal injury.

Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

When moving in transport case, ensure casters are unlocked and case is latched securely.

Abide by all instructions and warning labels.

This equipment is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge of the equipment.

4. USE AND CARE

⚠WARNING

Read and understand Aero® operations manual before using machine.

Do not store solvents in Aero® transport case.

⚠CAUTION

Only operate Aero® with machine positioned on a level, firm surface.

NEVER use a machine which is defective or operating abnormally. If machine appears to be operating unusually, making strange noises, or otherwise appears defective, stop using it immediately and arrange for repairs.

Do not use machine if switch does not turn it on or off. Any machine that cannot be controlled with a switch is dangerous and must be repaired.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect machine operation. If damaged, have machine serviced before using.

In order to maintain air flow, do not cover the air inlets on top, at ends and on sides where air flows through.

Maintain machine in clean condition. Remove any oils, greases, or food product from outside and inside machine.

⚠CAUTION

The Aero has been optimized for process speed, portability, and ease of use. A resulting affect of the designed portability is that the structure will deflect as internal air pressure is increasing during splice process. The length of press will determine how much deflection will occur at any specific pressure. Beam extrusions were designed with strength to return to their normal state when pressure is relieved; deflection will not be permanent.

Aero® Press End Plate Removal and Reassembly

A

A1 Tools to Service Press

- 2 mm hex key
- 6 mm hex key
- 7 mm crescent wrench
- Aero® splice press instruction manual

A2 End Plate Removal to Access Electrical Tray

Both top and bottom press beams contain an electrical tray with all electrical and pneumatic components. Prior to accessing electrical trays unplug all power cables (power switch alone is not sufficient). Procedure to remove electrical trays are as follows:

Top Beam End Plate Removal To Access Electrical Tray:

1. Locate rear top end plate (end without display screen). Using 6 mm hex key, unscrew 3 bolts located on rear top end plate.

   Pull away from extrusion.

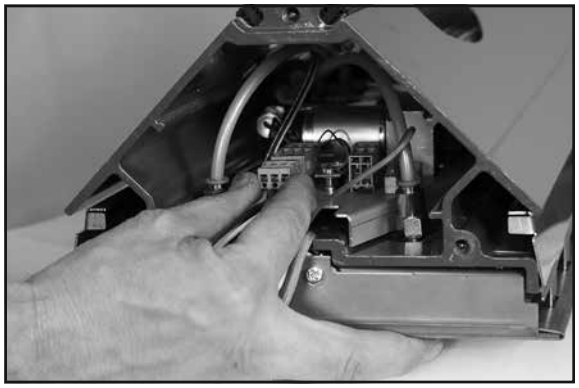
2. Disconnect ground wires from end plate.

   Remove end plate.

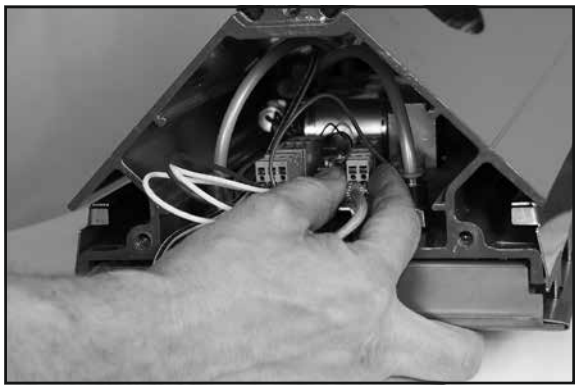
FLEXCO

3. Disconnect by pulling three connectors straight out inside top beam of press.
   NOTE: pull on connectors not wires themselves:

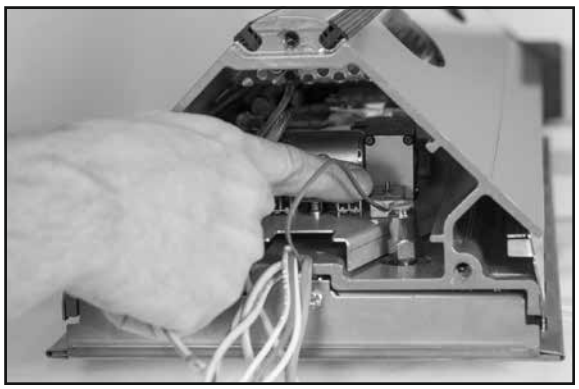
   A. Heater connector (gray): 2 white wires and 1 red wire



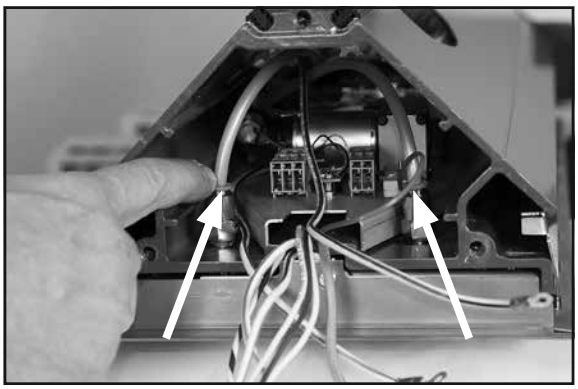
   B. Thermal fuse connector (gray): white wire



   C. Thermocouple connector (yellow): 2 mm hex key may be used to assist in removal



4. Disconnect the 2 pneumatic connections. Hold down blue ring of connector and pull hose out.



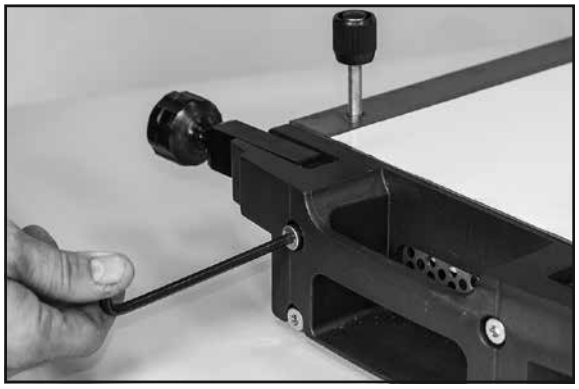
5. Using 6 mm hex key, unscrew 3 screws located on front end plate.

Ensure wires are free to move and not tangled. Then gently pull top end plate to slide electrical tray out of beam.

Bottom Beam End Plate Removal to Access Electrical Tray:

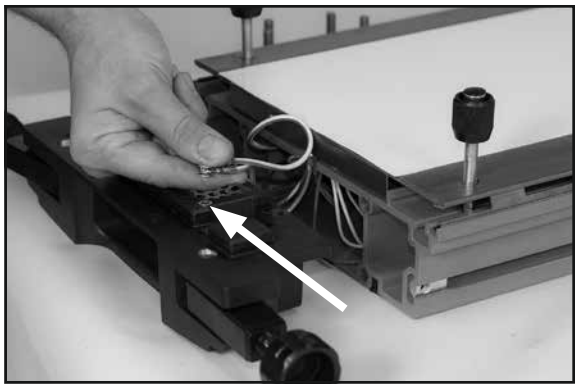
1. Locate rear end plate (end without electrical connectors). Using a 6 mm hex key, unscrew 4 screws located on rear bottom end plate.

   Pull away from extrusion.



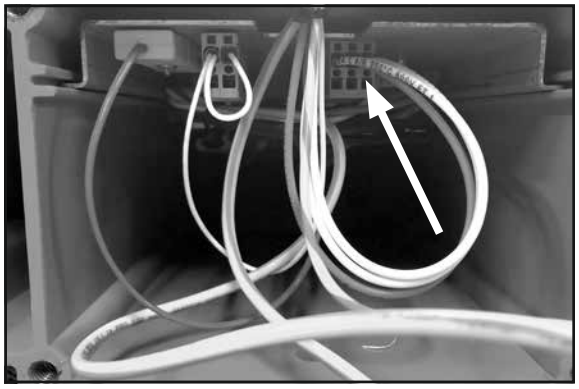
2. Disconnect ground wires from end plate.

   Remove end plate.

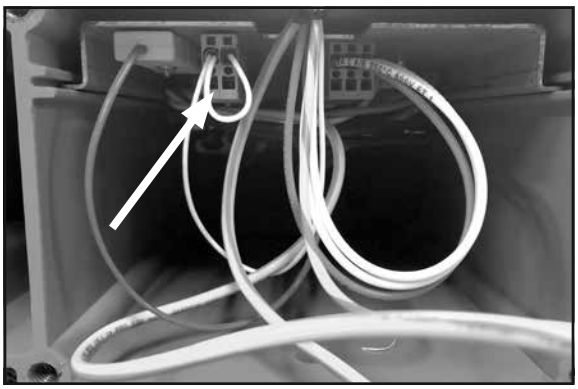


3. Disconnect by pulling three connectors straight out inside top beam of press. **NOTE**: pull on connectors not wires themselves:

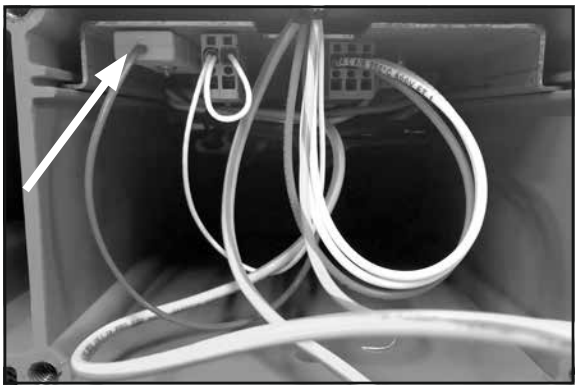
   A. Heater connector (gray): 2 white wires and 1 red wire



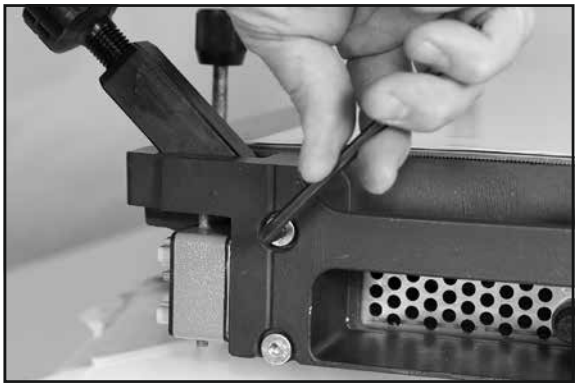
B. Thermal fuse connector (gray): white wire



C. Thermocouple connector (yellow): 2 mm hex key may be used to assist in removal



4. Using 6 mm hex key unscrew 4 screws located on front end plate.



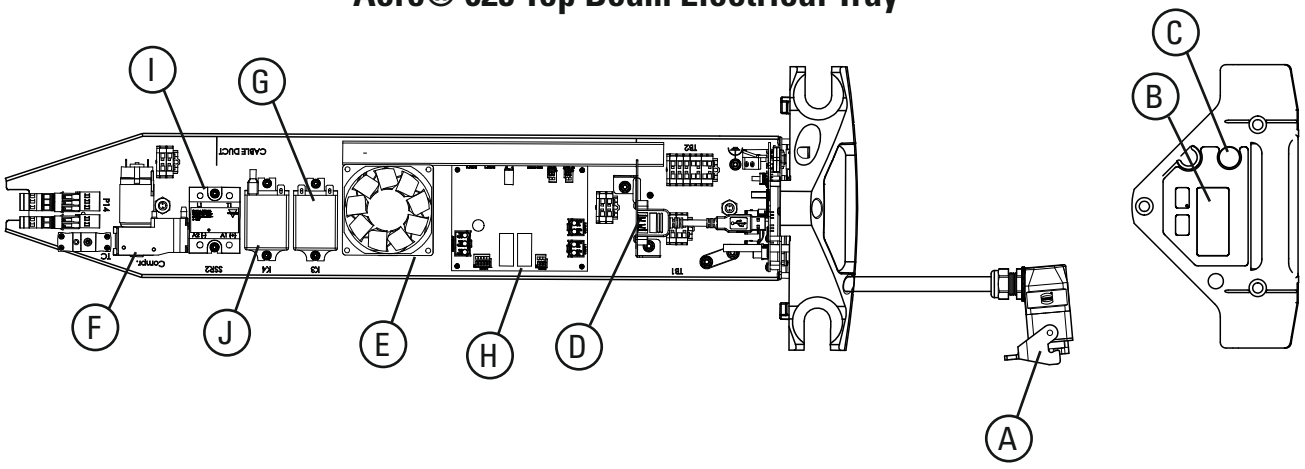
Ensure wires are free to move and not tangled. Then gently pull top end plate to slide electrical tray out of beam.

A3 Electrical Tray Contents

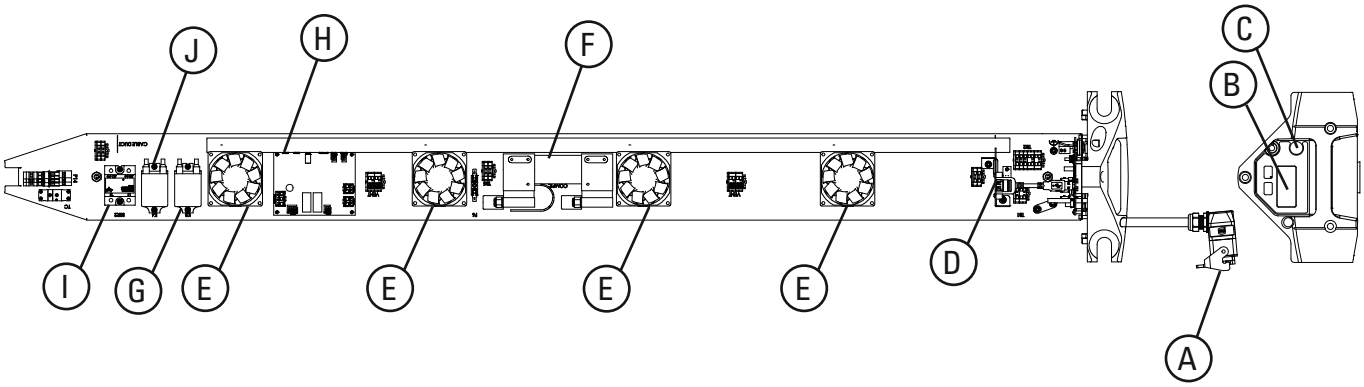
Top Beam Electrical Tray Contents:

A. Umbilical cable
B. Main controller with display and control knob
C. Press release valve
D. USB connector
E. Cooling fans
F. Compressor
G. Thermal fuse relay
H. Power control PCB
I. Solid state relay
J. S/P relay

Aero® 625 Top Beam Electrical Tray



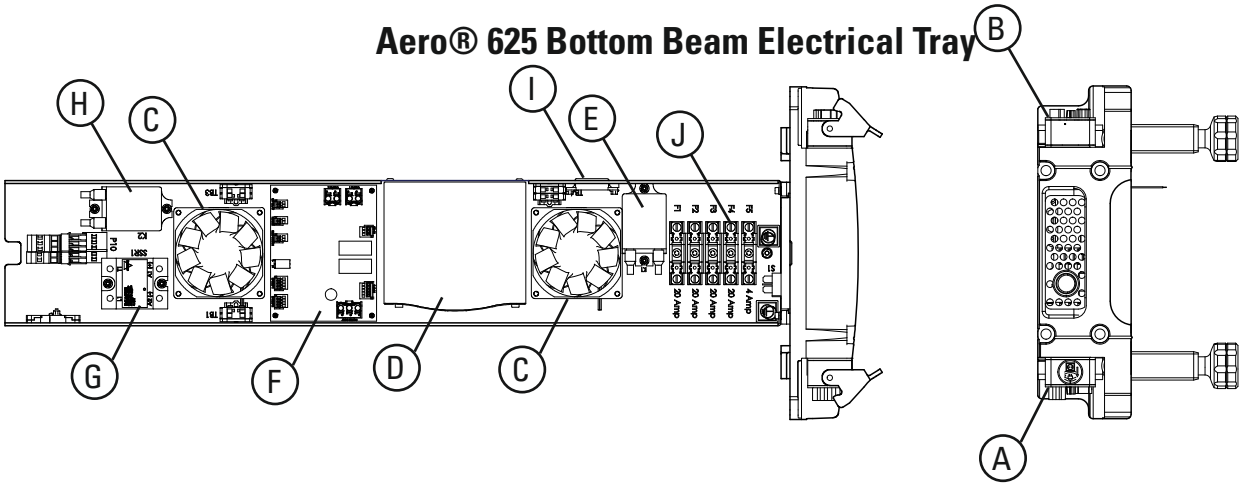
Aero® 1525 Top Beam Electrical Tray



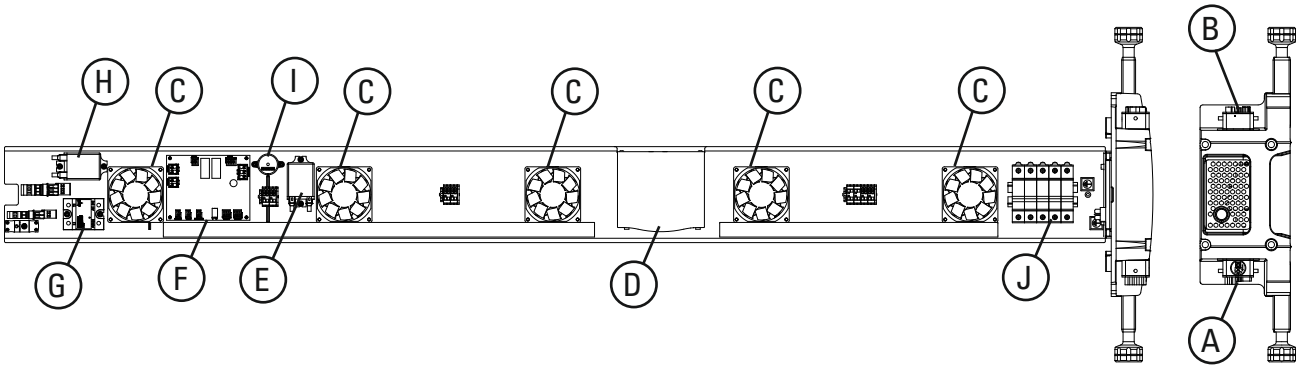
Bottom Beam Electrical Tray Contents:

A. Power connection
B. Umbilical cable connection
C. Cooling fans
D. 24VDC power supply
E. Thermal fuse relay
F. Power controller PCB
G. Solid state relay
H. S/P relay
I. Buzzer
J. Fuses

Aero® 625 Bottom Beam Electrical Tray



Aero® 1525 Bottom Beam Electrical Tray



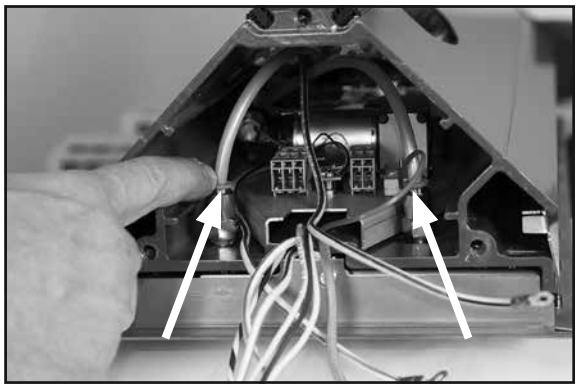
A4 Reassembly of End Plates

➲ *Top Beam End Plate Reassembly:*

1. Gently slide electrical tray into beam ensuring wires are free to move and not tangled and that there is no binding. The tray should slide in with no resistance and the end plate should fit flush to the extrusion. If there is resistance, check to make sure wires are not catching.

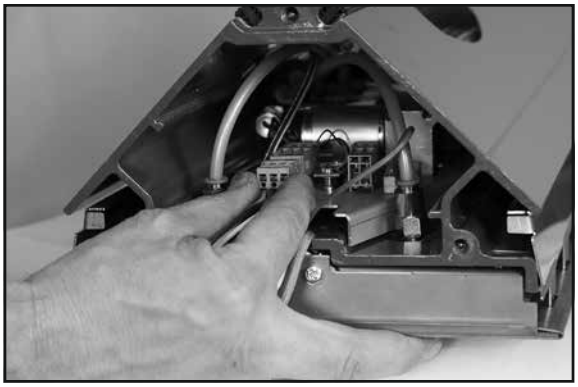
2. Using 6 mm hex key, screw 3 screws located on front of end plate starting with the two lower screws and finalizing with the top screw.

3. At rear of press re-connect the 2 pneumatic connections. Press hose into quick connect fitting.

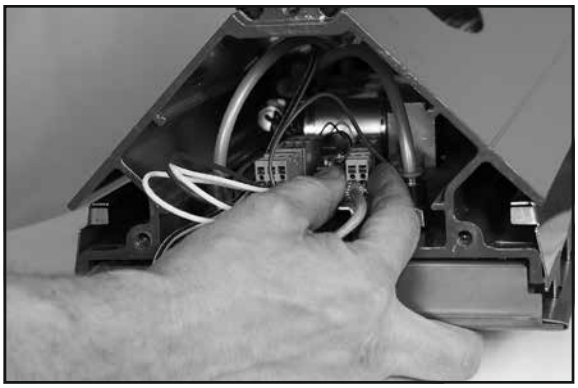


4. Reconnect three connectors inside top beam of press:

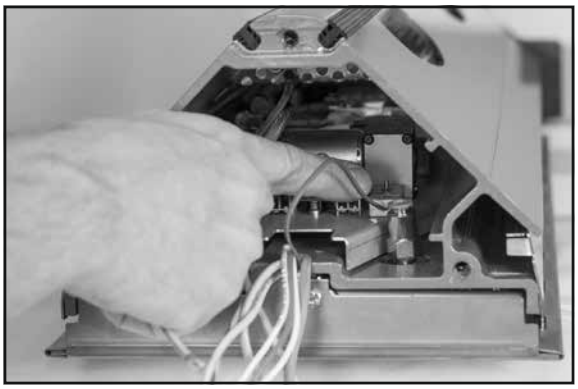
A. Heater connector (gray): 2 white wires and 1 red wire



B. Thermal fuse connector (gray): white wire



C. Thermocouple connector (yellow): brown wire. Match prongs to same size slot (typically + and - up).



5. Reconnect ground wires to end plate ensuring wires are oriented to fit within the extrusion profile.

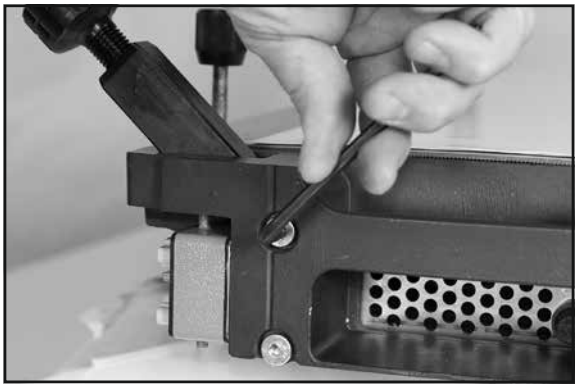
   Position head plate flush with the extrusion. Place wires within slot at end of extrusion to ensure that the wires aren't pinched between the beam and the head plate. If there is resistance a wire may be pinched and must be adjusted.

6. Using 6 mm hex key, screw the rear top end plate starting with the two lower screws and finalizing with the top screw.

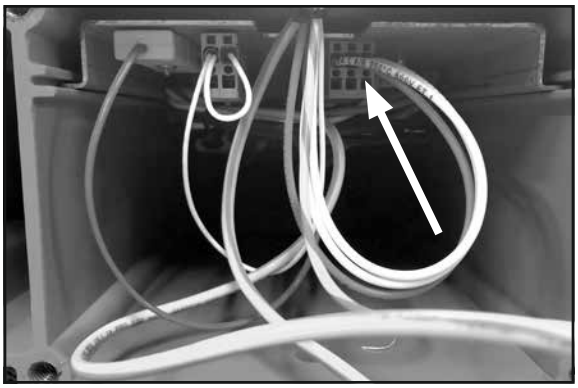
Bottom Beam End Plate Reassembly:

1. Gently slide electrical tray into beam ensuring wires are free to move and not tangled and that there is no binding. The tray should slide in with no resistance and the end plate should fit flush to the extrusion. If there is resistance, check to make sure wires are not catching. Check the bottom of the press to ensure that the air intake perforated plate is not showing.

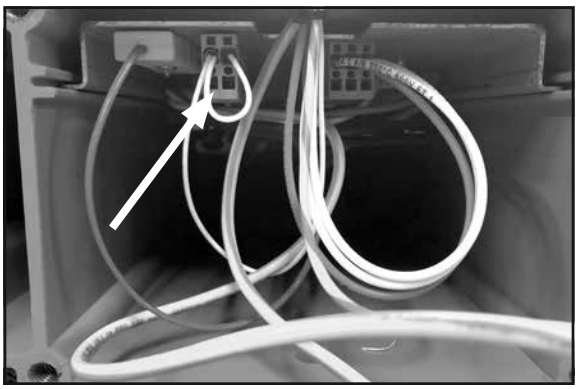
2. Using 6 mm hex key, screw 4 screws located on front of end plate.



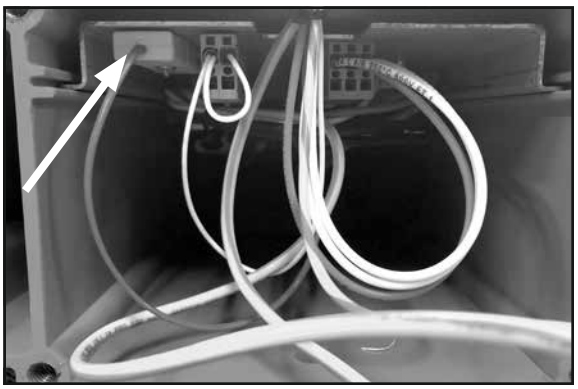
3. Reconnect three connectors inside bottom beam of press:
   A. Heater connector (gray): 2 white wires and 1 red wire



   B. Thermal fuse connector (gray): white wire

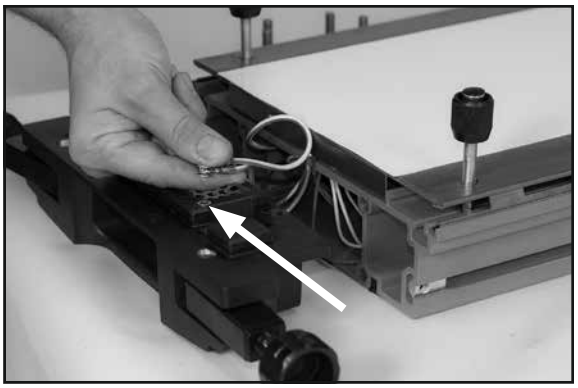


C. Thermocouple connector (yellow): brown wire

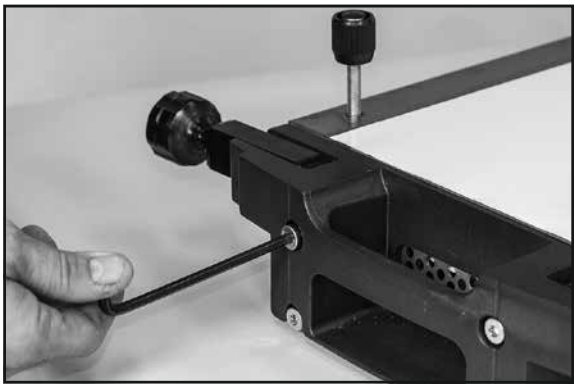


4. Reconnect ground wires to end plate ensuring wires are oriented to fit within the extrusion profile.

   Position head plate flush with the extrusion. Place wires within slot at end of extrusion to ensure that the wires aren't pinched between the beam and the head plate. If there is resistance a wire may be pinched and must be adjusted.



5. Using 6 mm hex key, screw 4 screws located on rear bottom end plate.



Inspection Items

B

B1

Inspection Task	Every Cycle	Every 100 Cycles	Every 1000 Cycles
Inspect press connector bolt condition and replace if condition is degraded.			X
Inspect platen condition and clean (G2) or replace as needed.	X		
Inspect extrusion and head plates for any signs of fatigue.		X	
Inspect power connector pins for signs of arcing or wear.			X

How to Clean the Platens

C

C1

To clean the top and bottom platens, place an all-purpose cleaner on a clean cloth and wipe platens. For area requiring further cleaning use a nylon abrasive pad.

Spare Parts List

D

D1

Item Code	Ordering Number	Description
08650	AERO-COMPRESSOR-SMALL	Compressor 625-1225
08645	AERO-COMPRESSOR-LARGE	Compressor 1525-2135
09249	SPRING-BAFFLE-AERO-G3-625	Spring baffle for 625
09250	SPRING-BAFFLE-AERO-G3-925	Spring baffle for 925
09251	SPRING-BAFFLE-AERO-G3-1225	Spring baffle for 1225
09252	SPRING-BAFFLE-AERO-G3-1525	Spring baffle for 1525
09253	SPRING-BAFFLE-AERO-G3-1835	Spring baffle for 1835
09254	SPRING-BAFFLE-AERO-G3-2135	Spring baffle for 2135
08604	AMIGO-FRICTION-TAPE-33X25	Tape for clamp bars
09262	BOLT-CLAMP-TOGGLE-AERO-G3	Press connector bolt
09342	T/C-SUBASSY-AERO-G3	Thermocouple
09343	FUSE-ASSY-THERMAL-AERO-G3	Thermofuse
09351	FUSE-ASSY-CERAM-FL-0326020.MSP	Main power fuse 625-1225
09374	CARTRIDGE-FUSE-F-20A-RS-3375256	Main power fuse 1525-2135
08700	AERO-FUSE-CERAMIC-4A	Power supply fuse/Large compressor fuse 1525-2135

Contact Flexco's Customer Service if other parts are required: www.flexco.com.

Technical Assistance

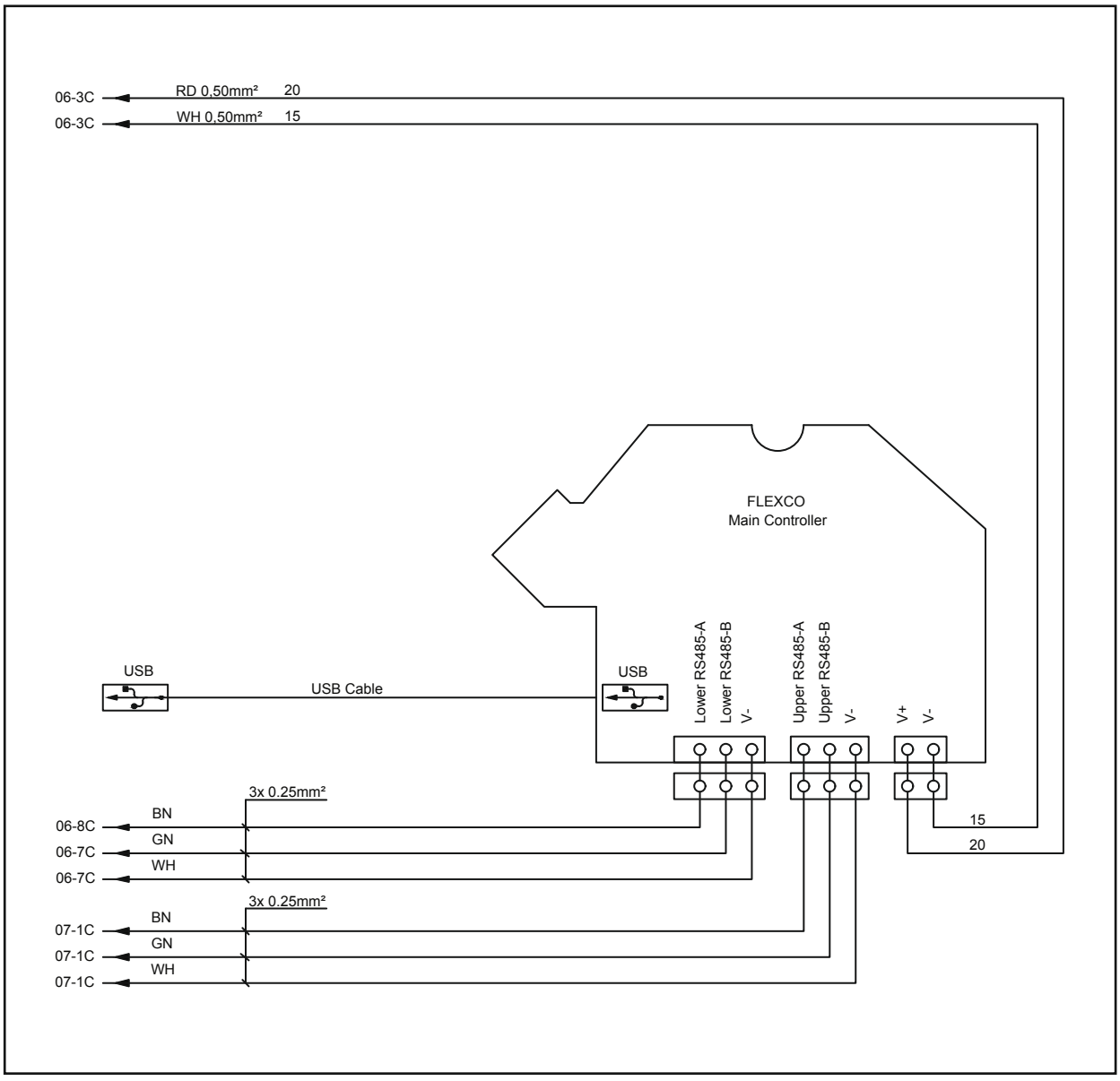
E

E1

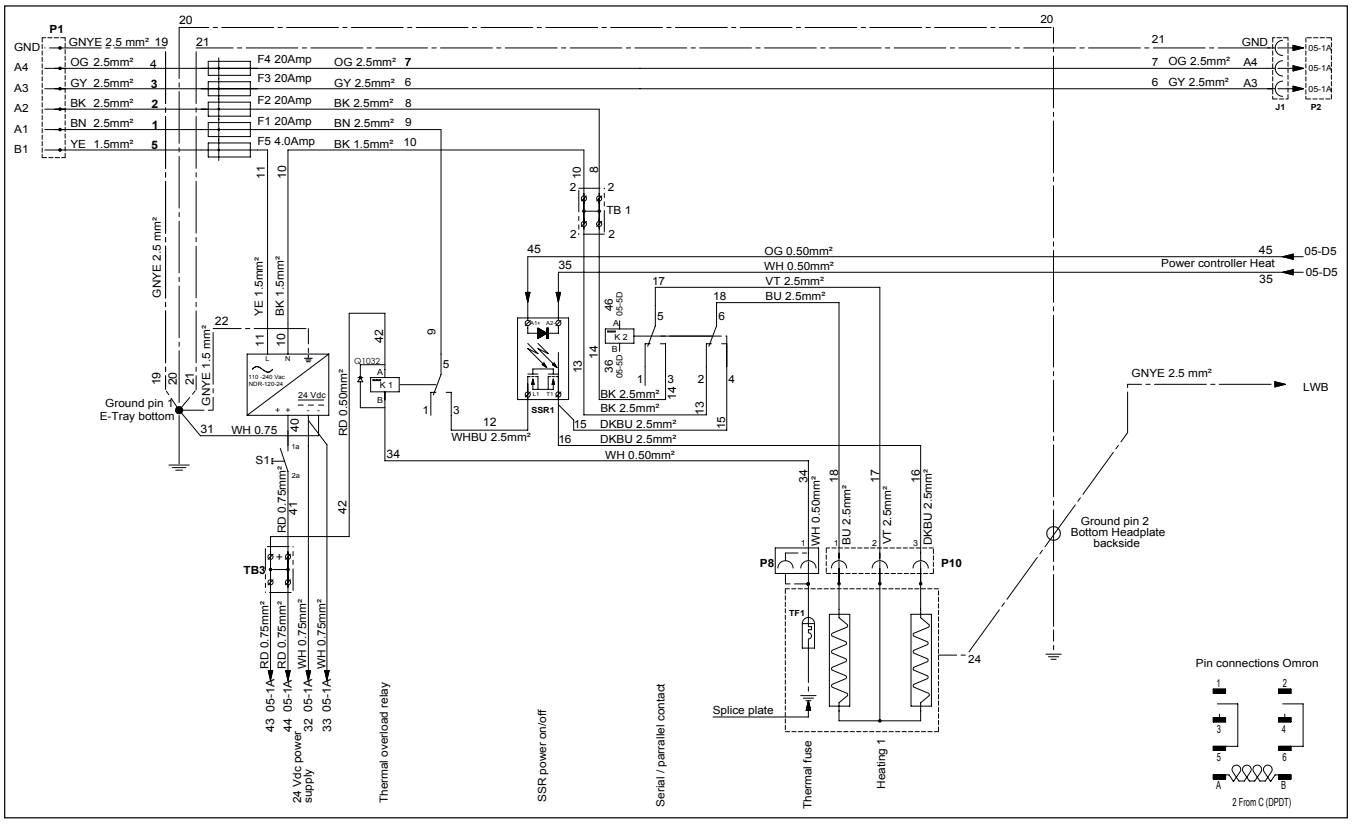
Contact Flexco's Customer Service if technical assistance or repair is needed: www.flexco.com

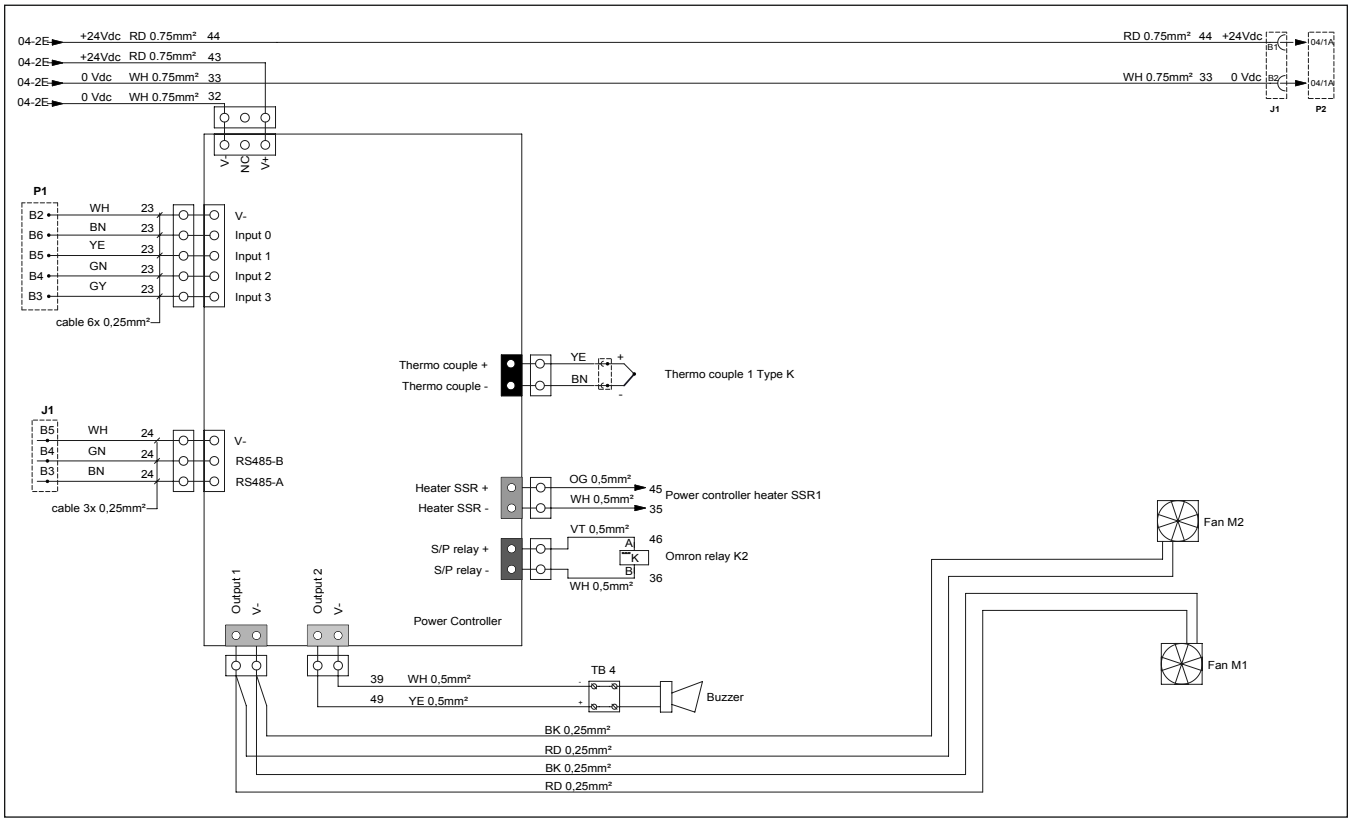
Schematics

Schematics Main Controller 625, 925, 1225, 1525, 1835, 2135

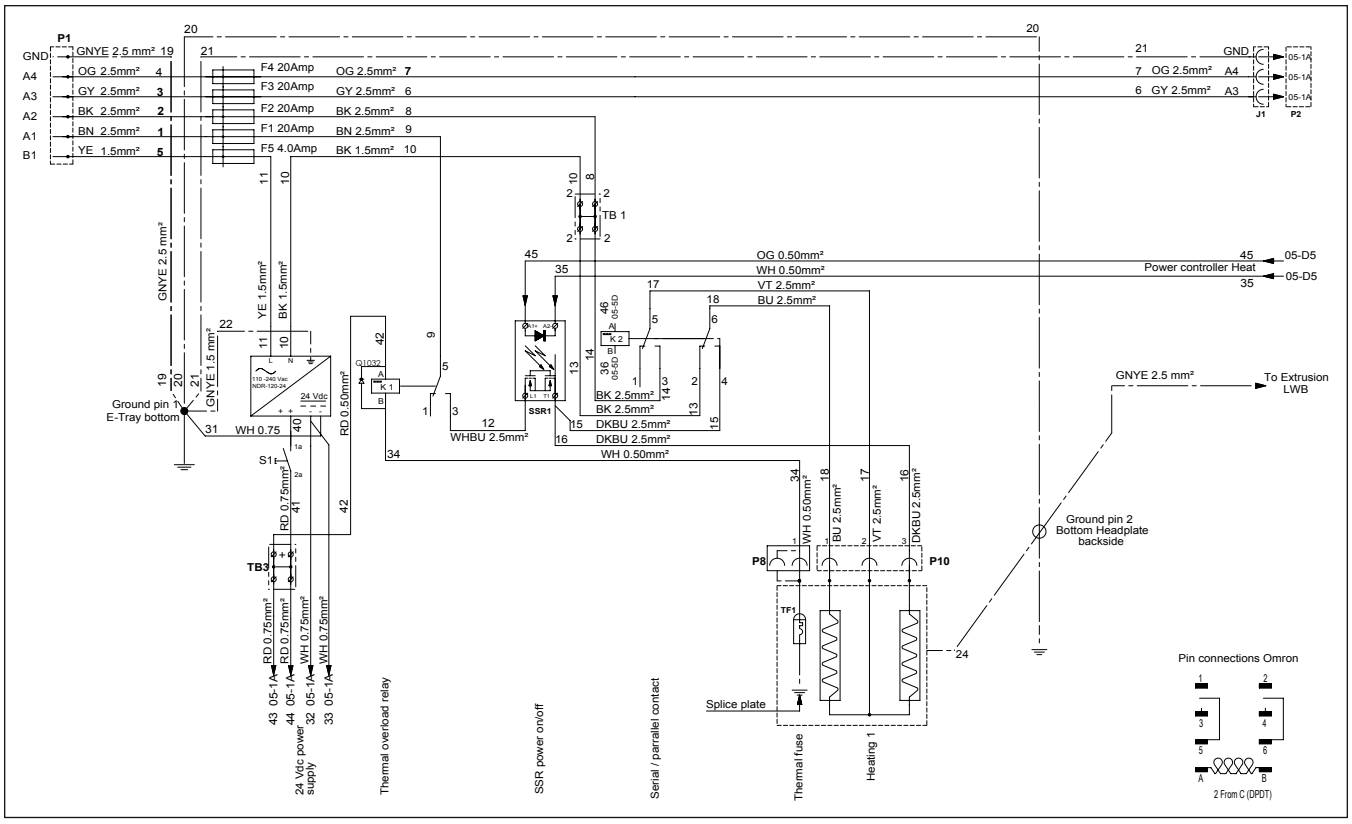


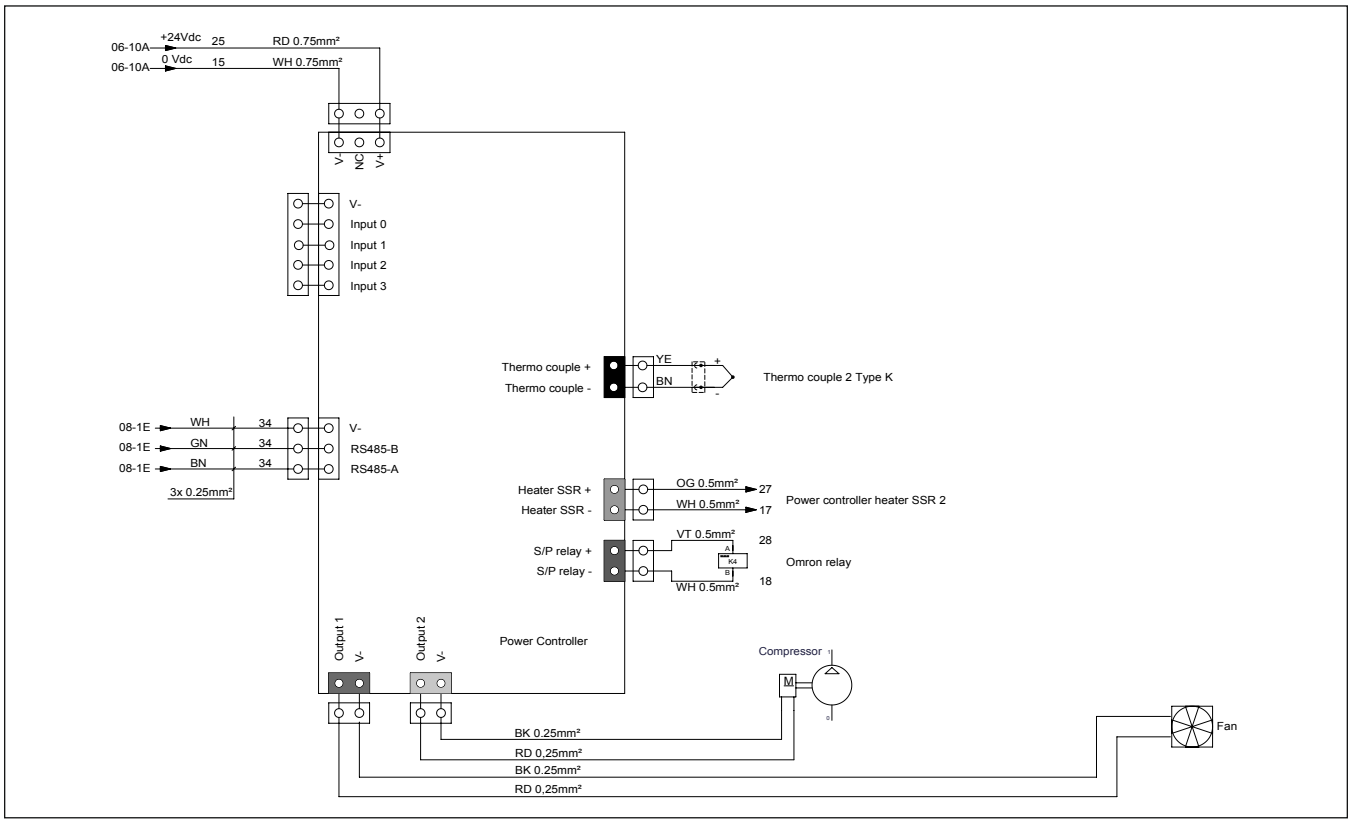
Schematics Lower Press 625



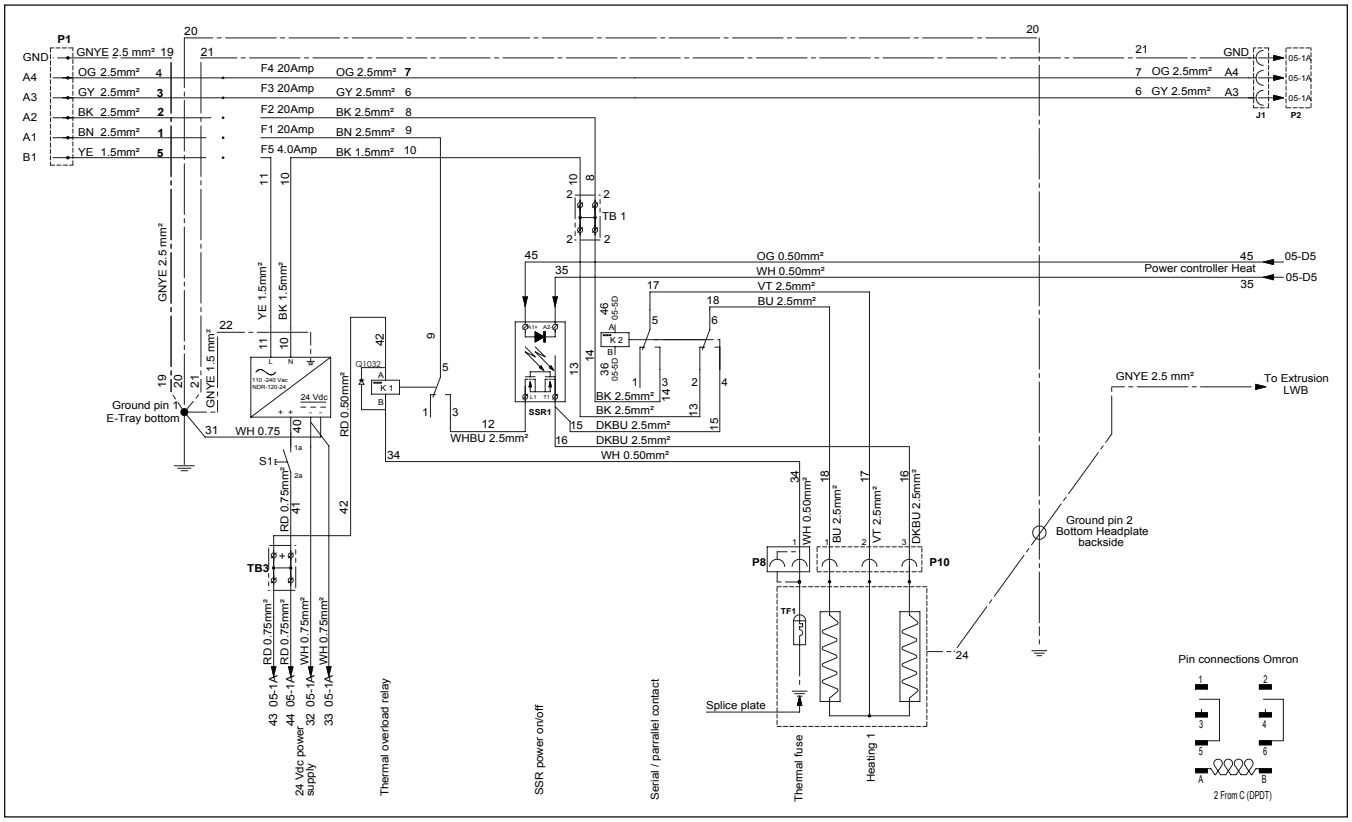


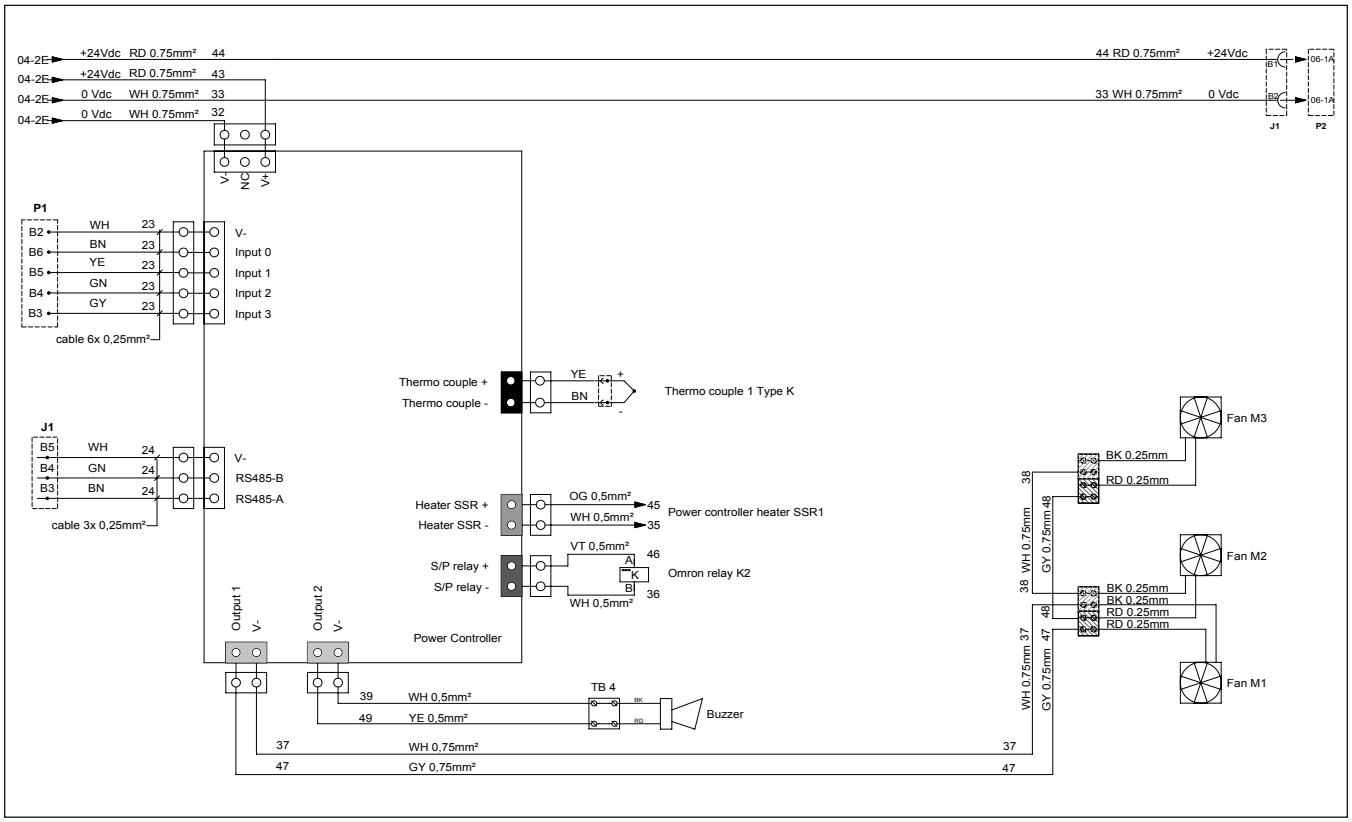
Schematics Upper Press 625



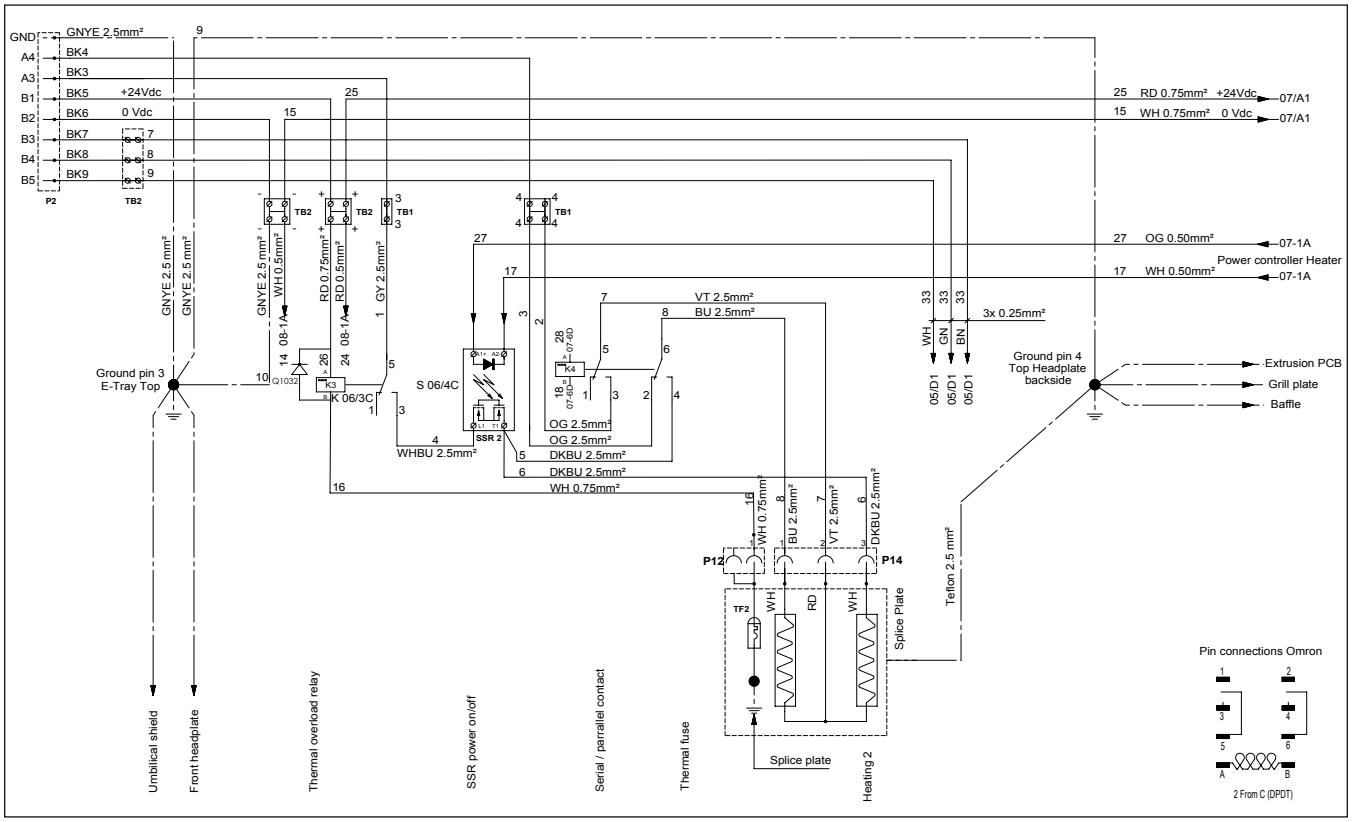


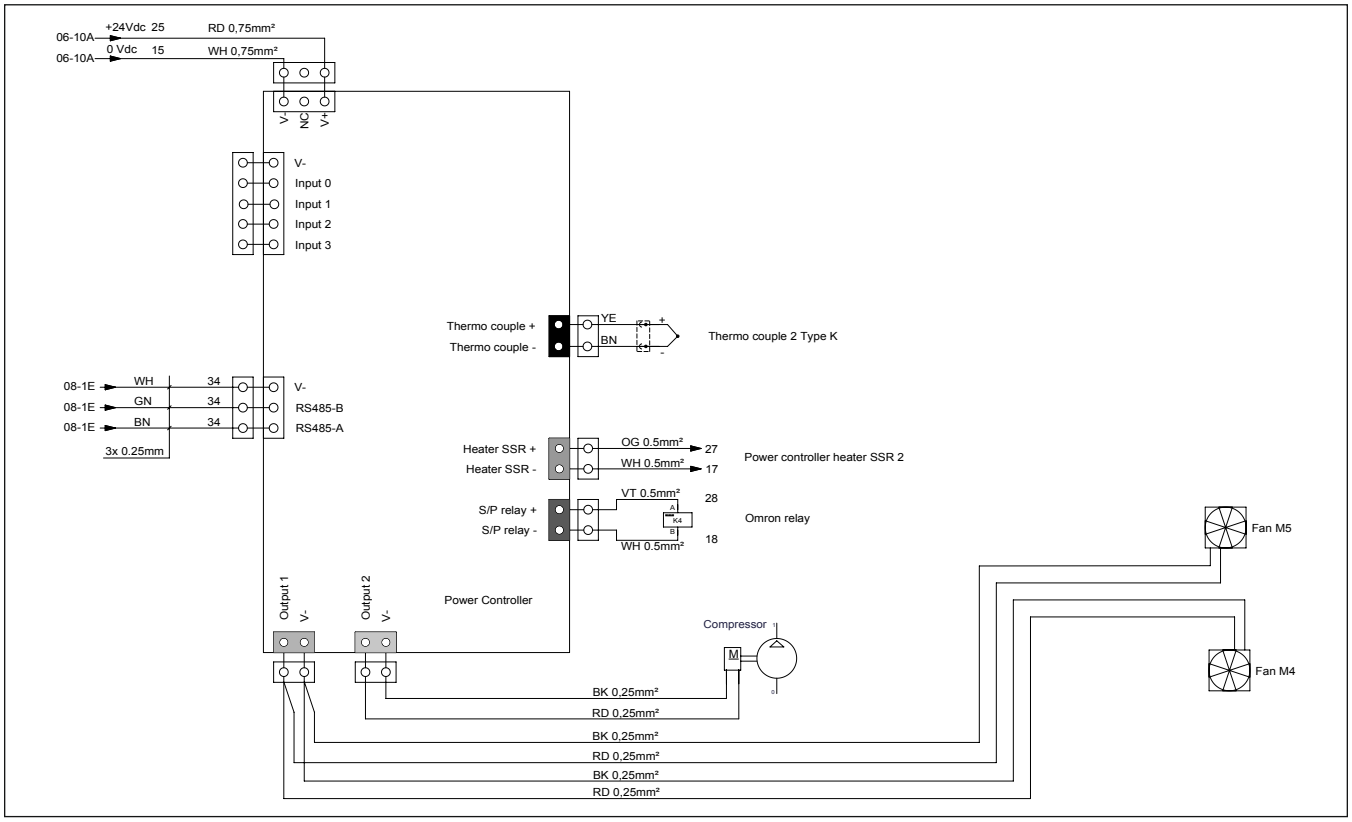
Schematics Lower Press 925



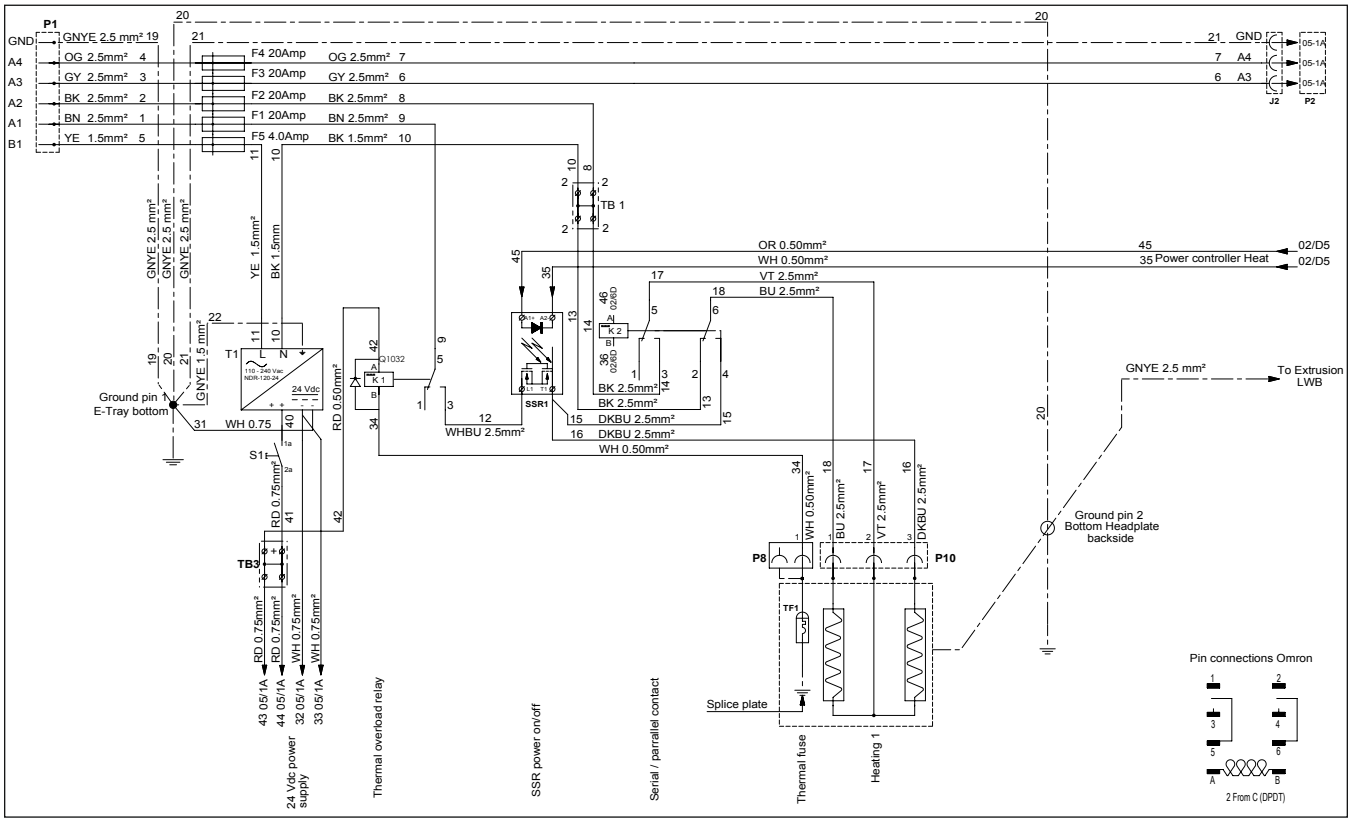


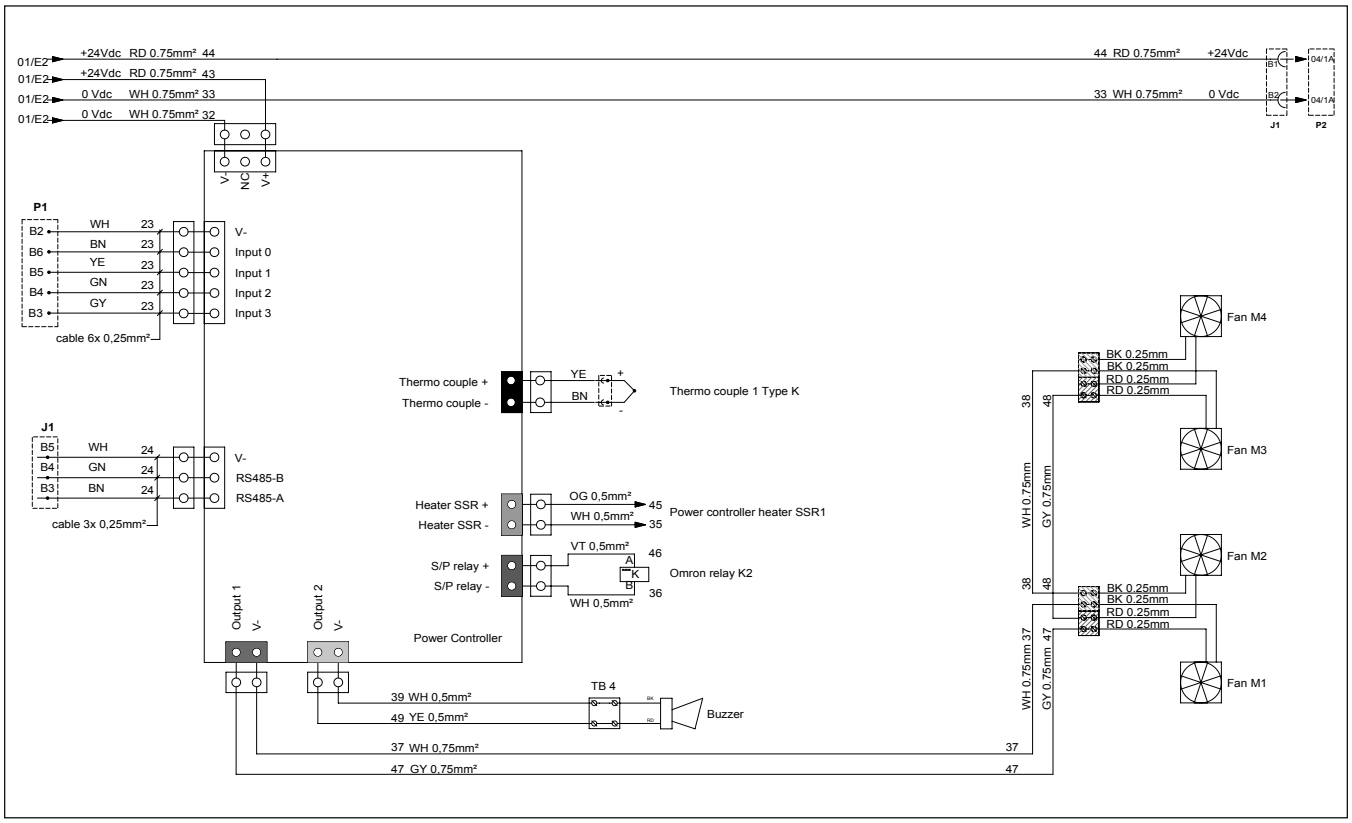
Schematics Upper Press 925



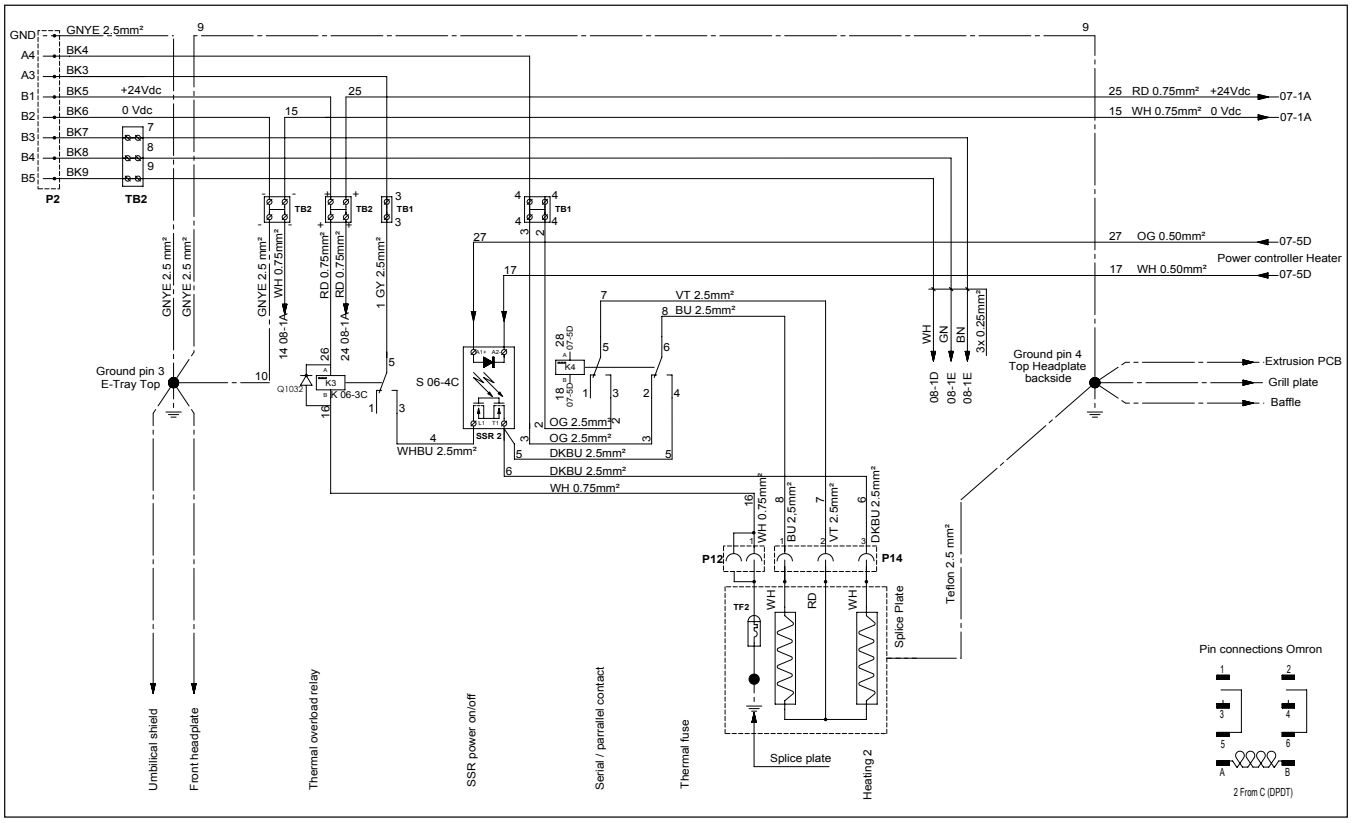


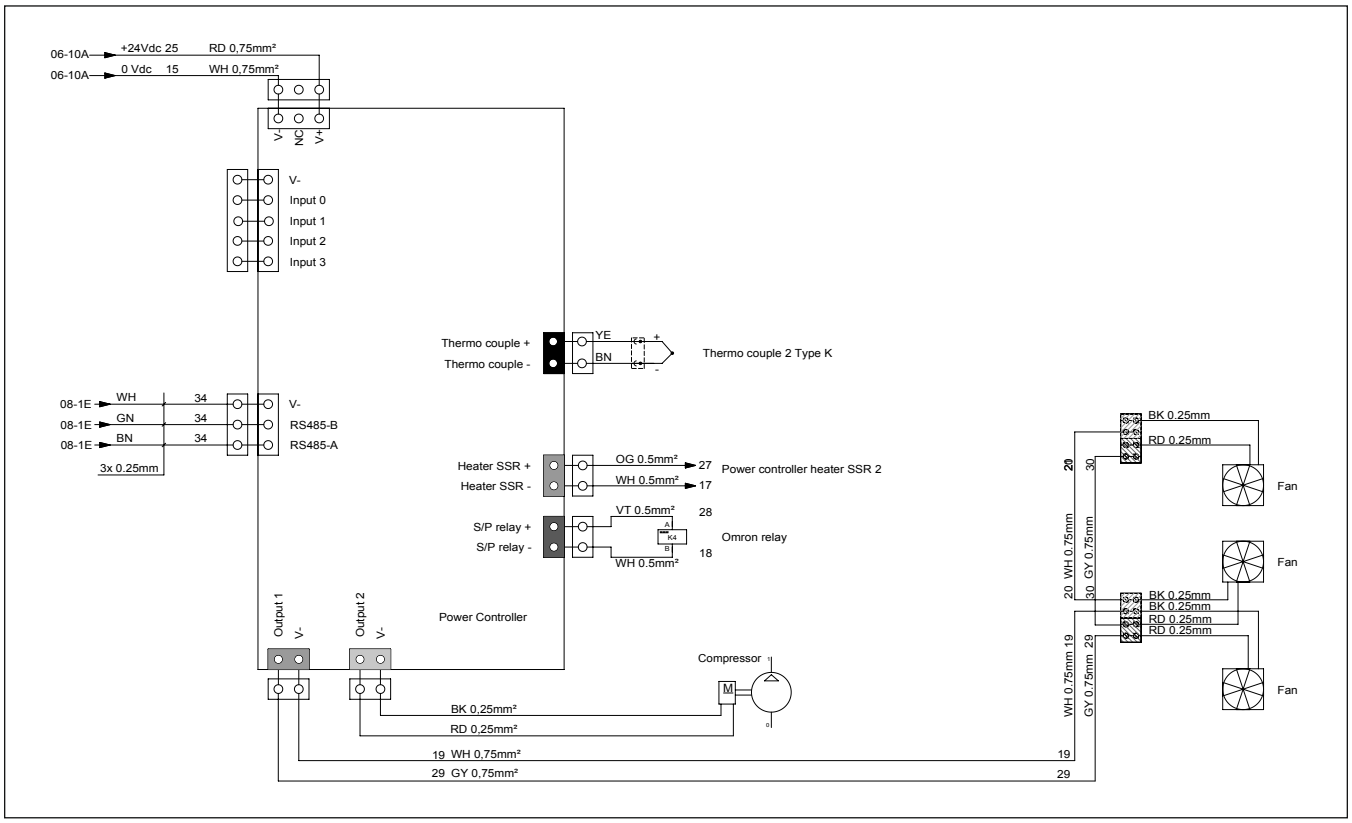
Schematics Lower Press 1225



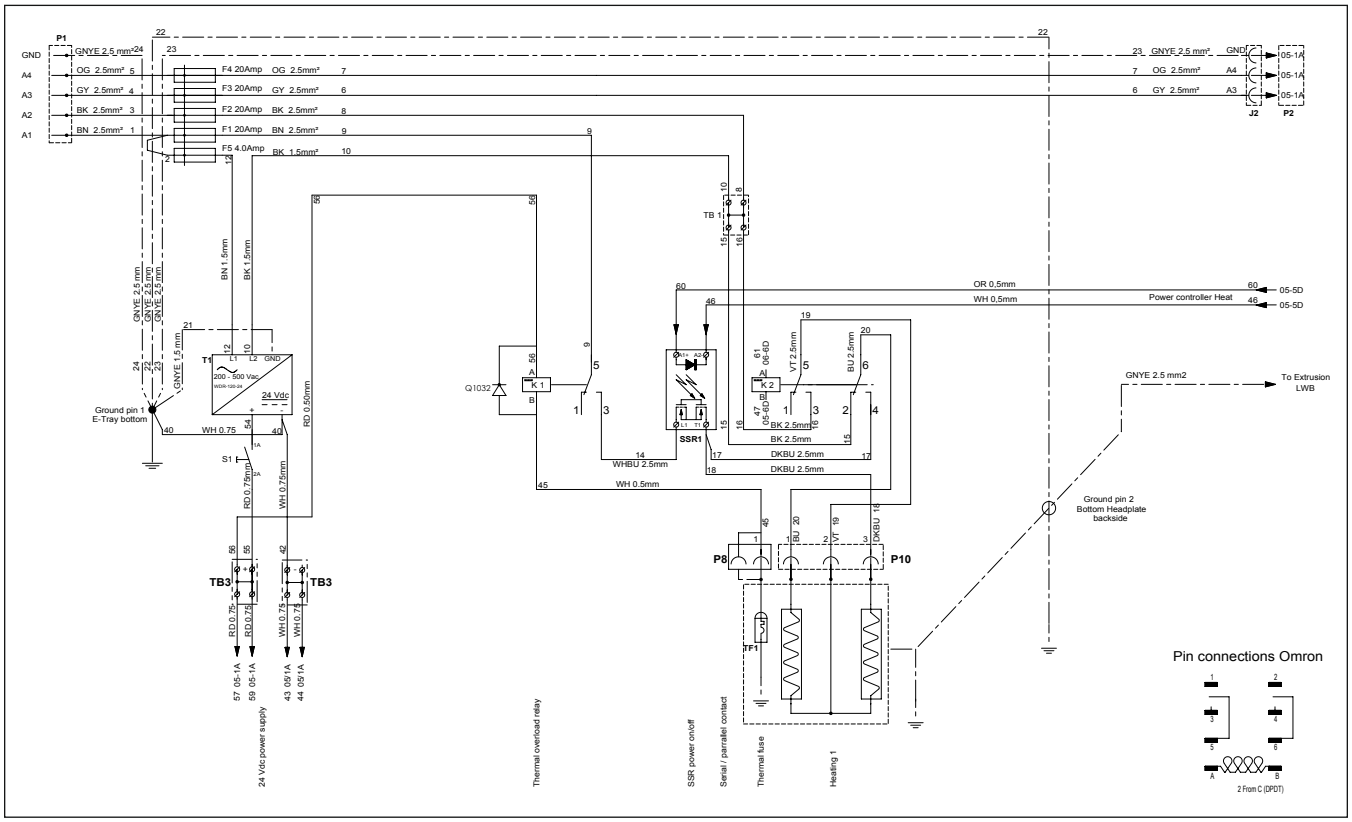


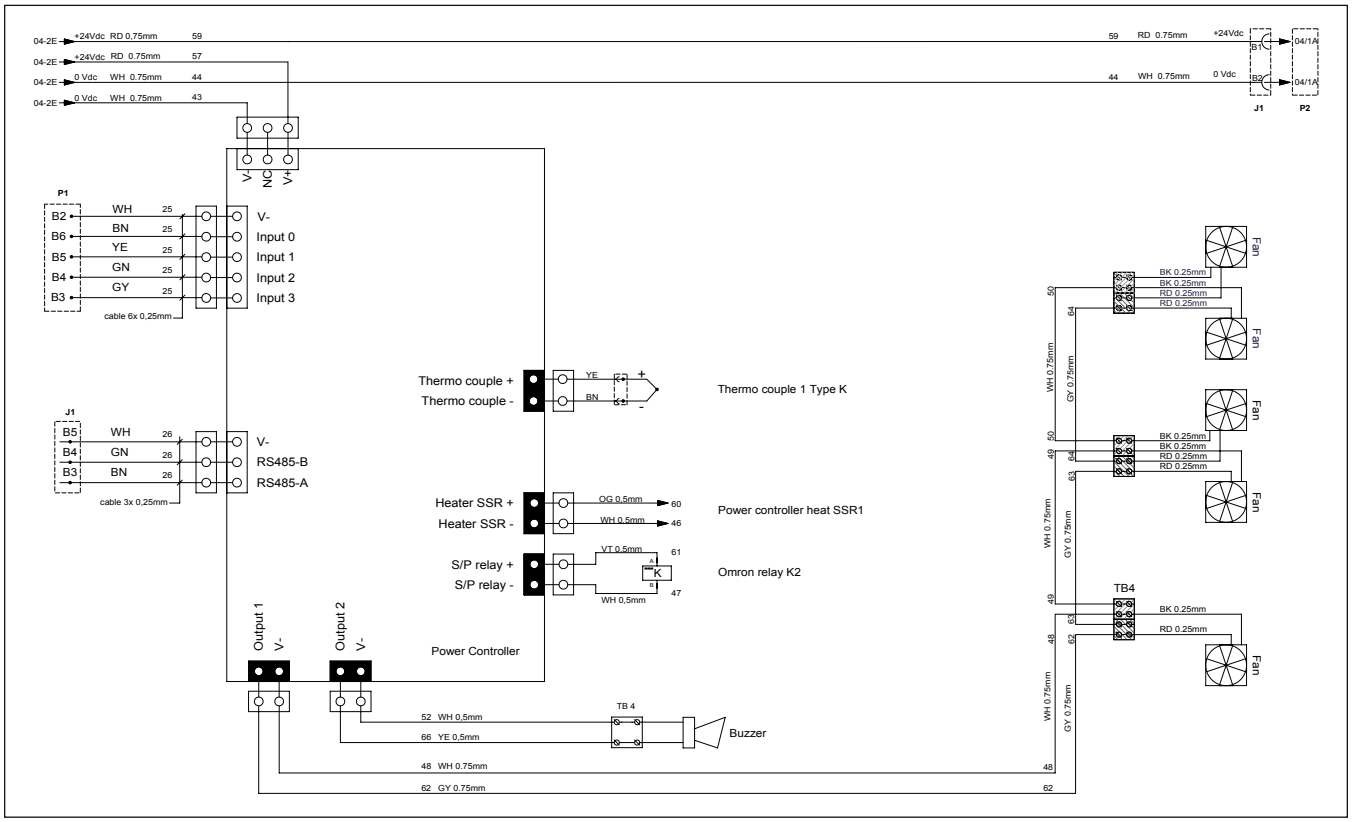
Schematics Upper Press 1225





Schematics Lower Press 1525





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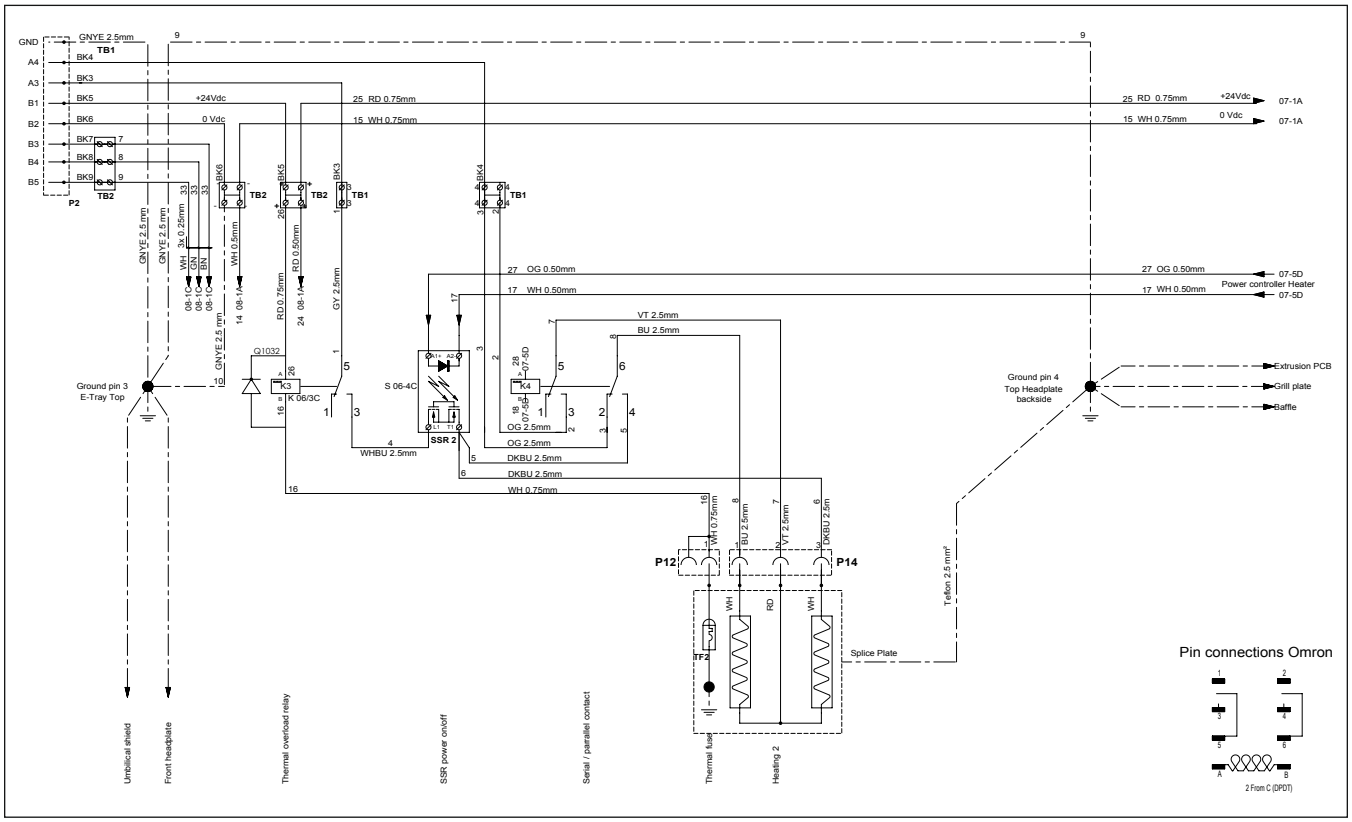

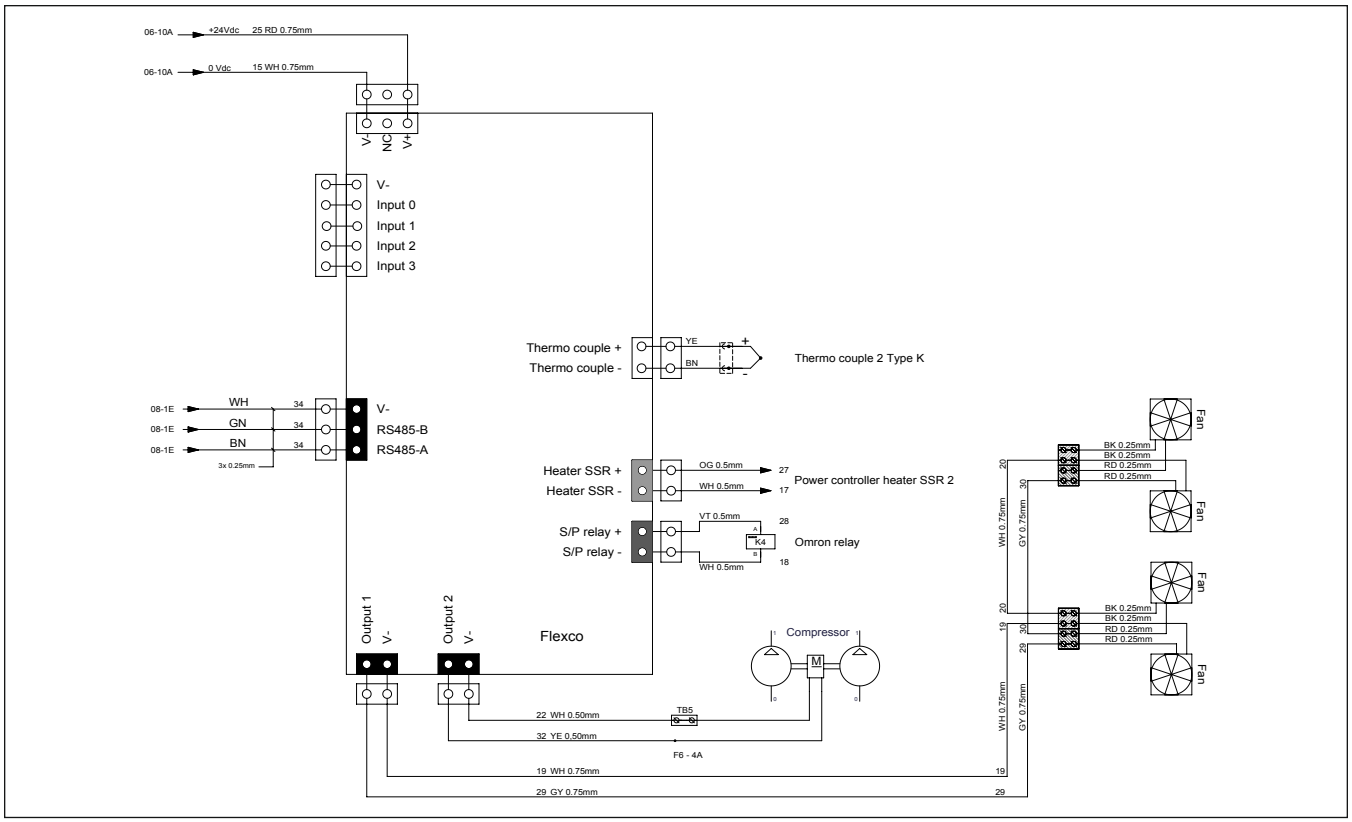

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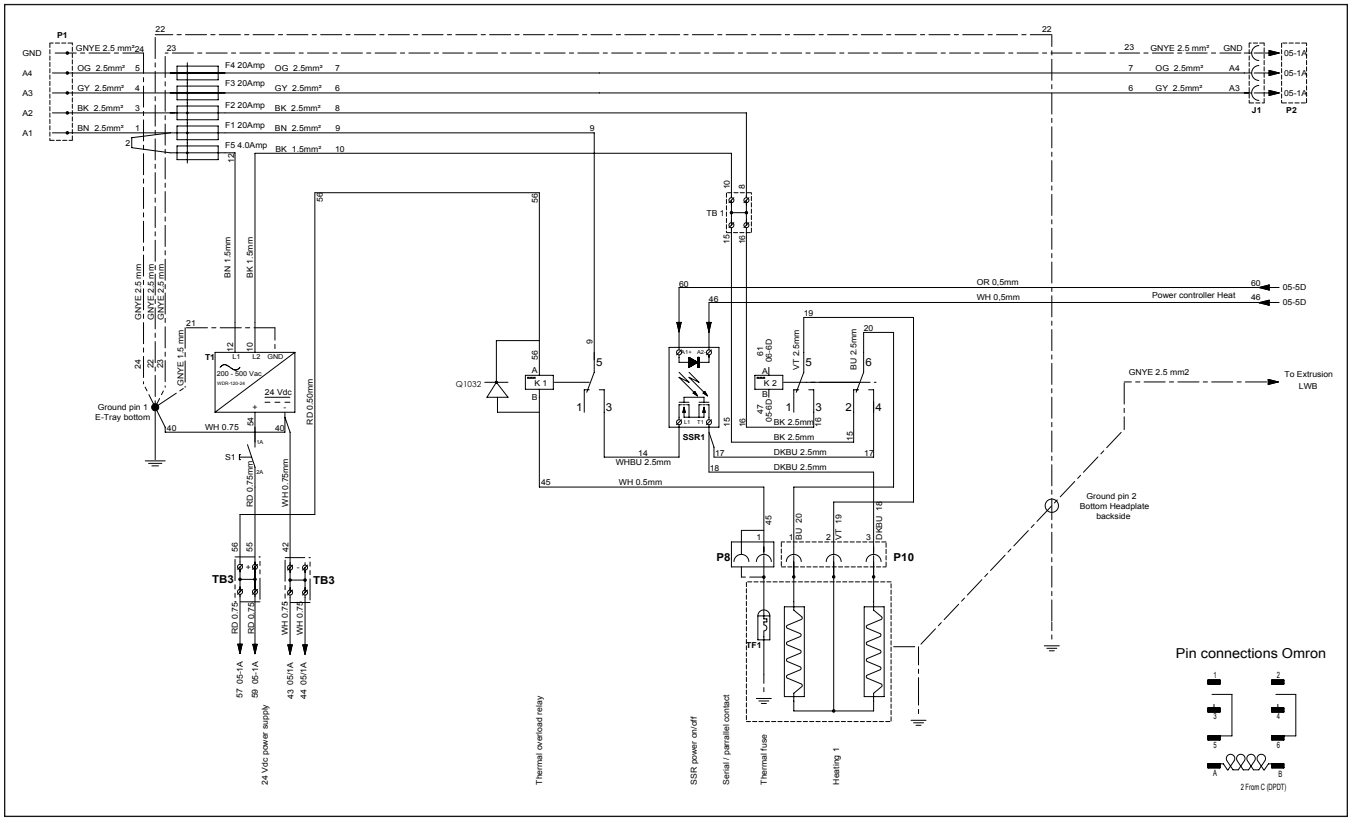
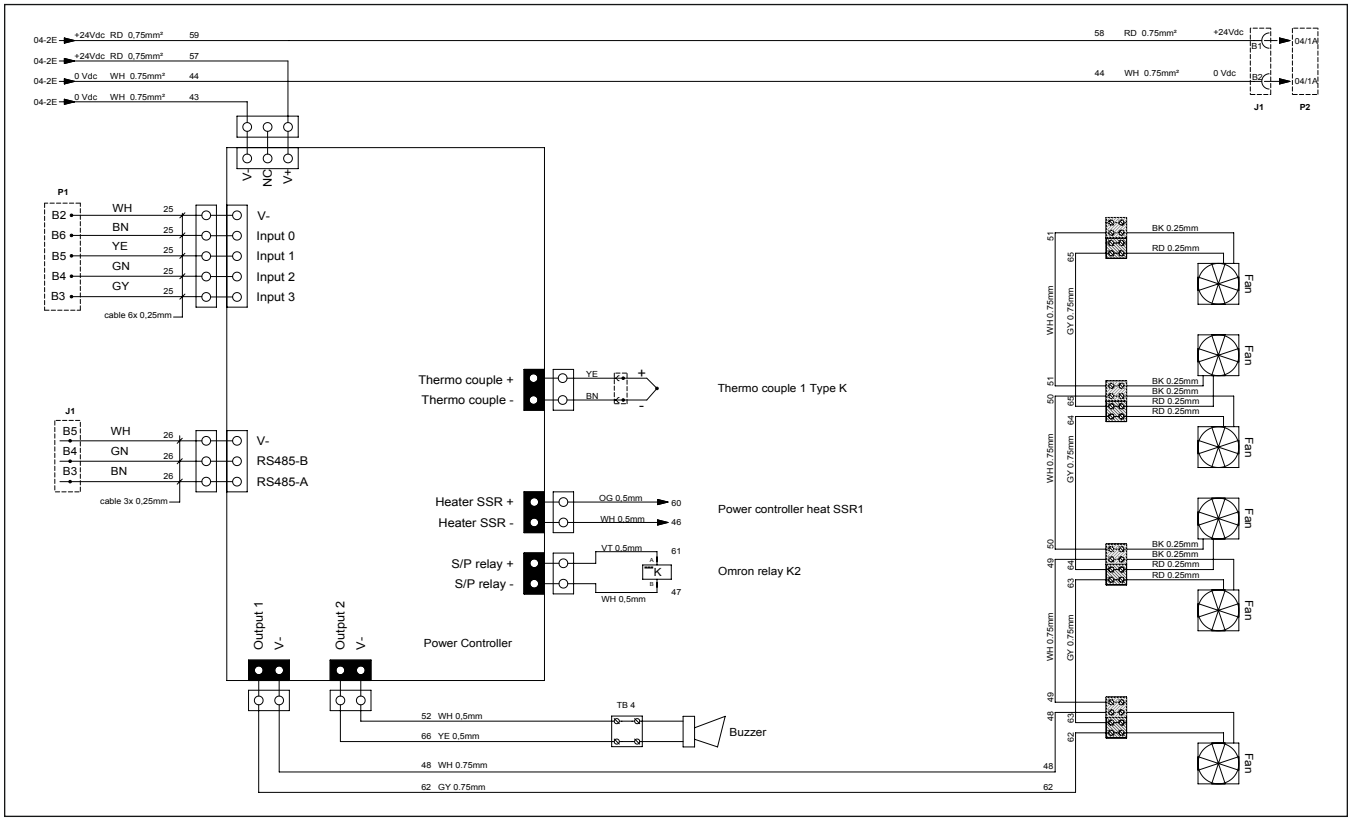
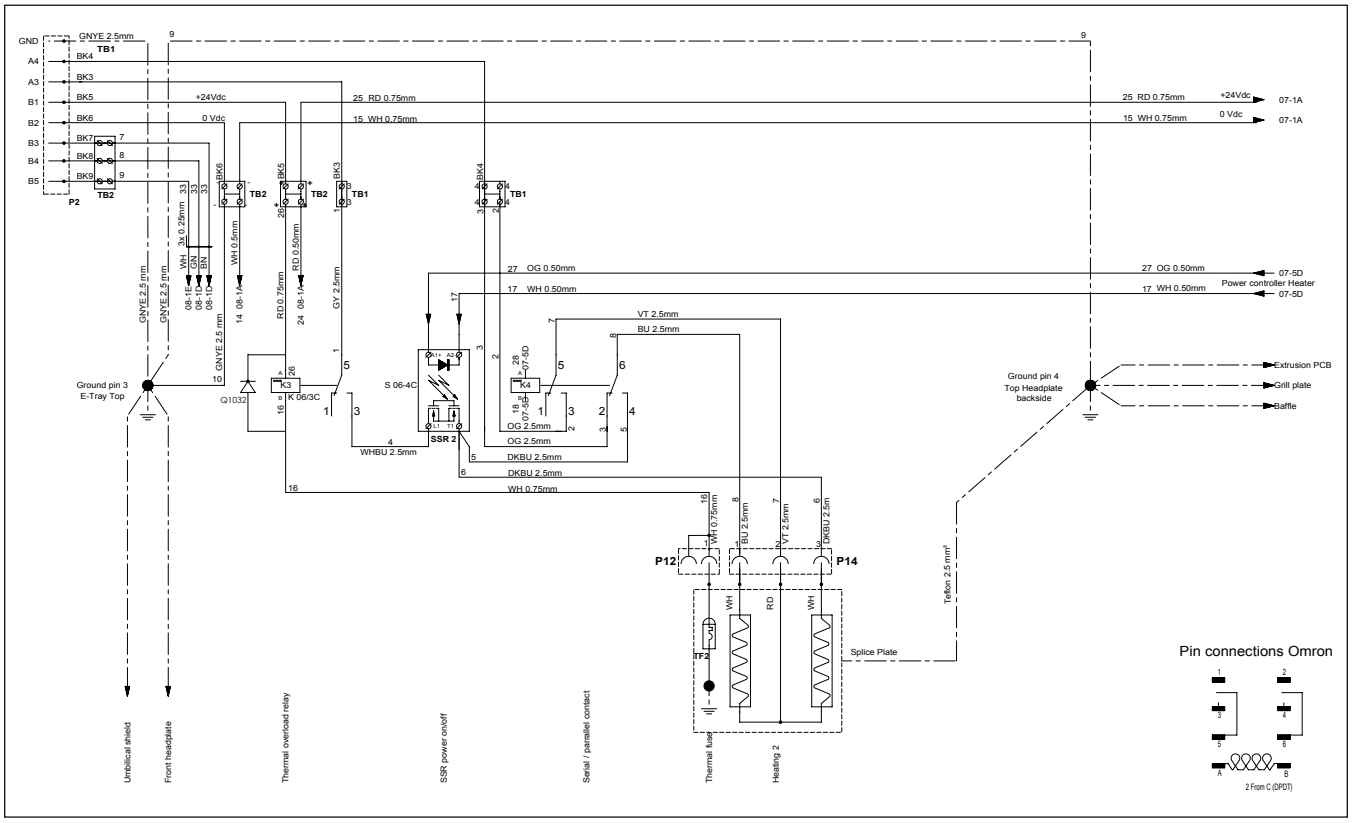
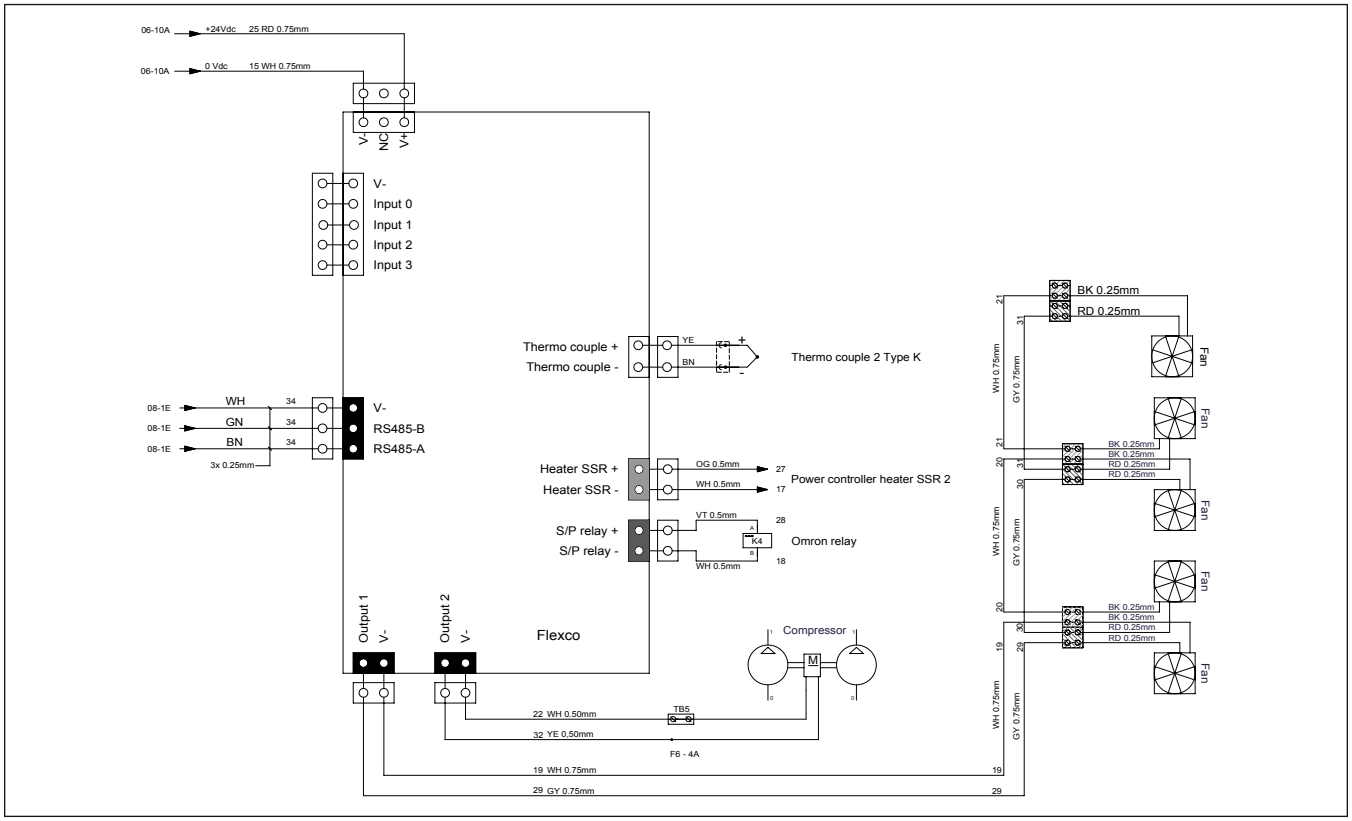




Schematics Upper Press 1835





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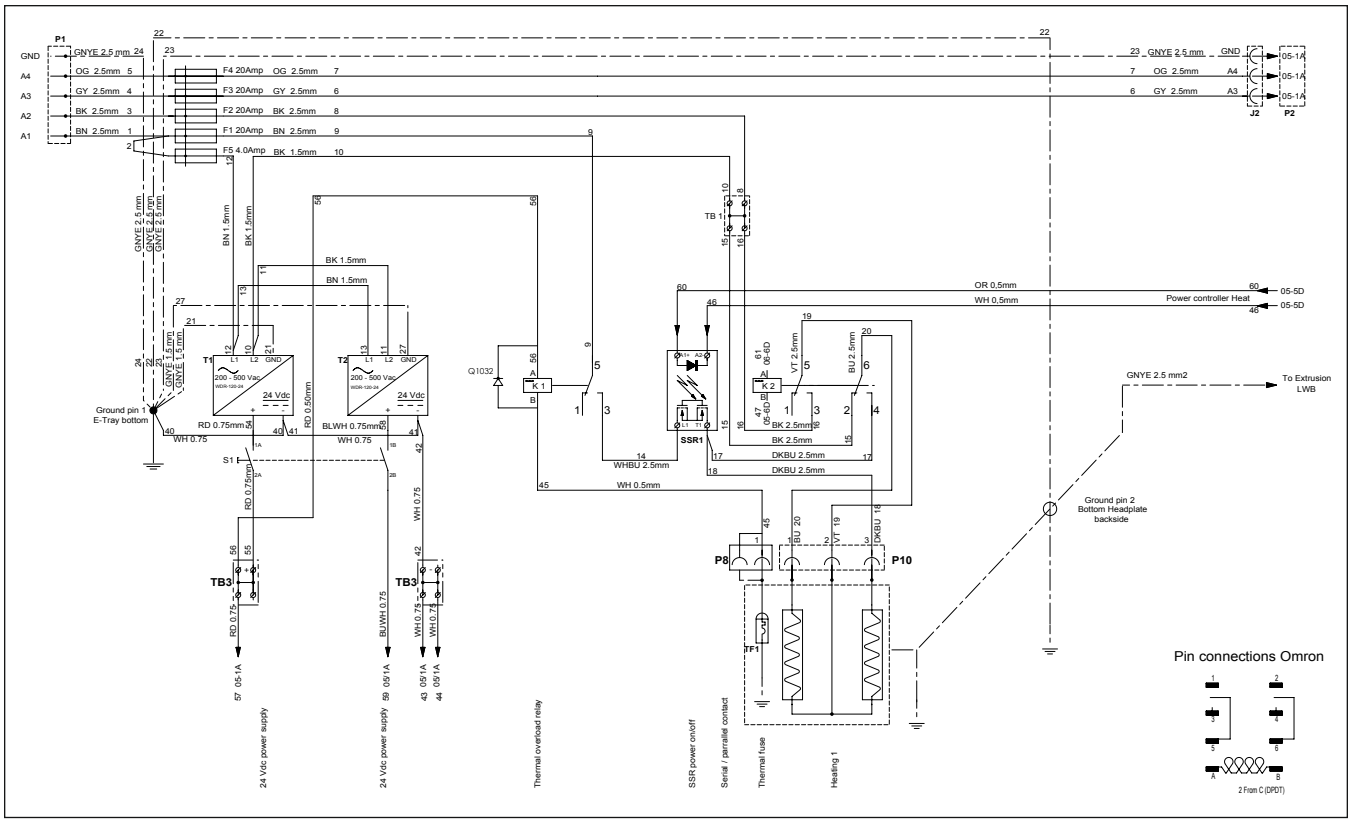

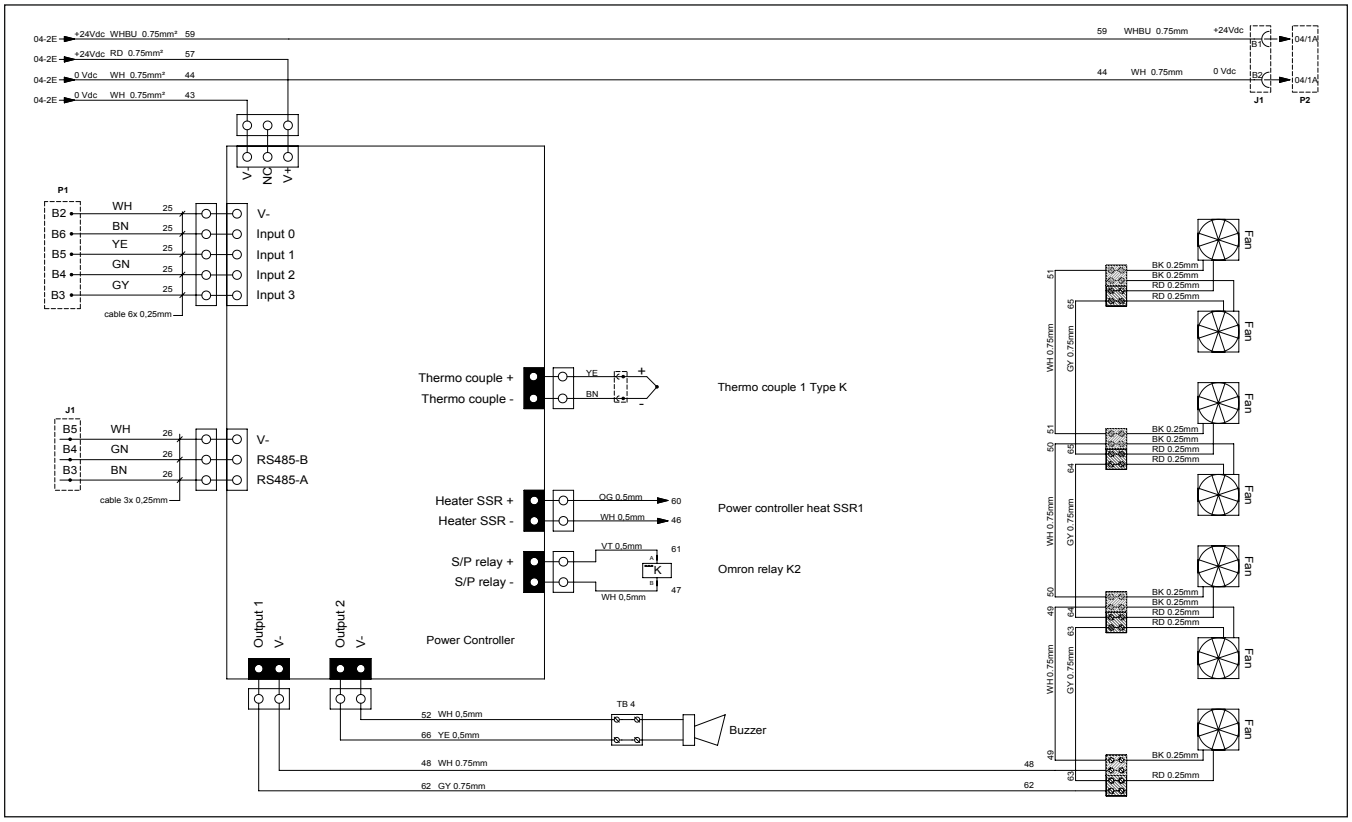

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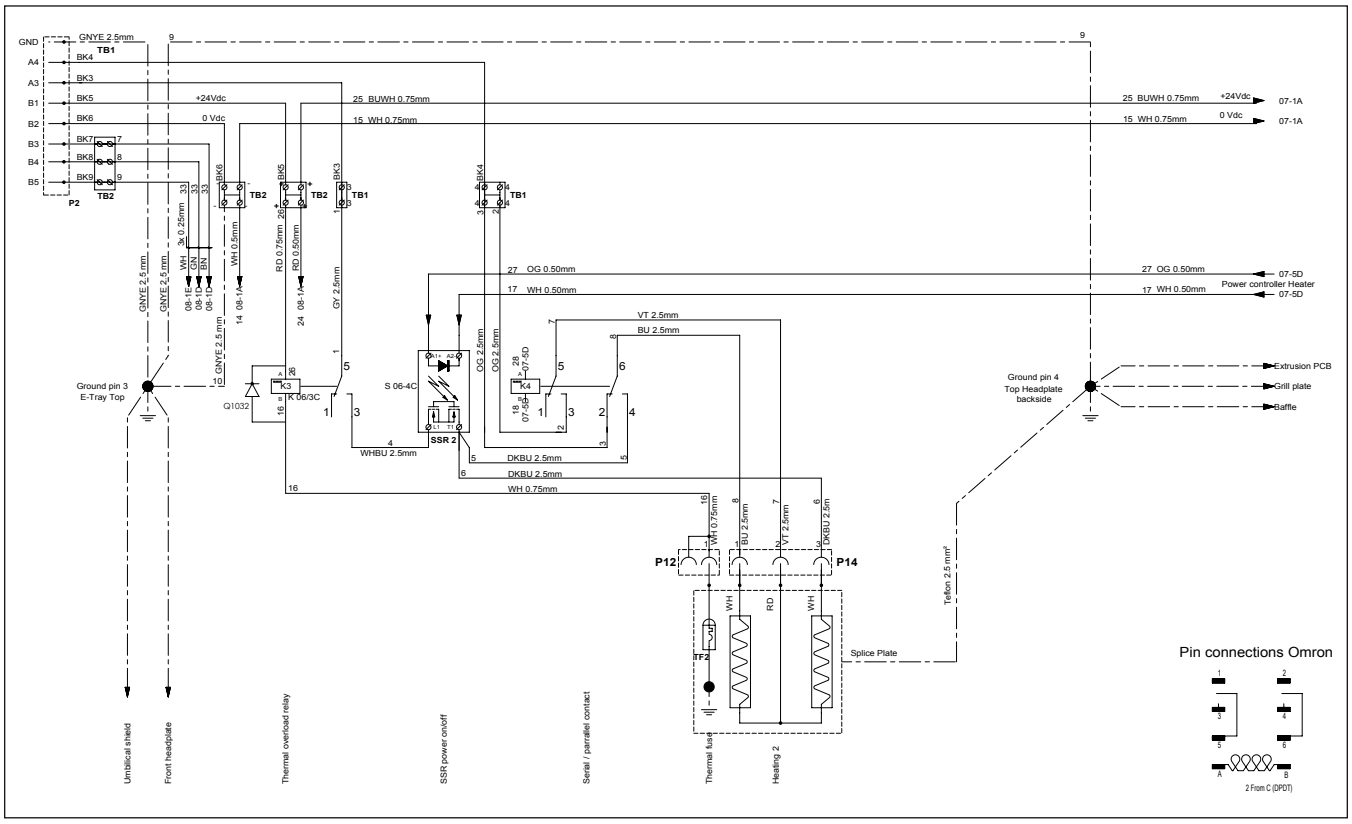

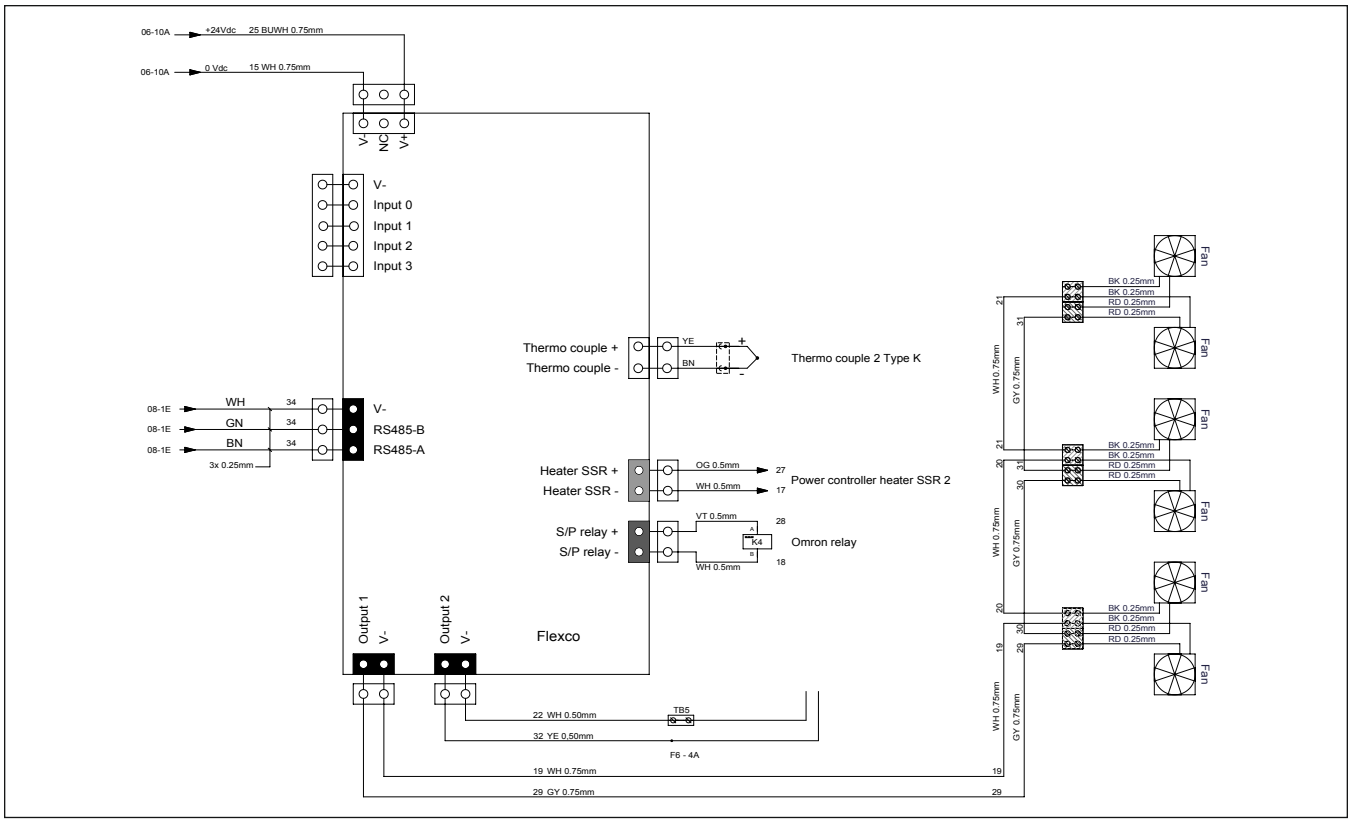

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