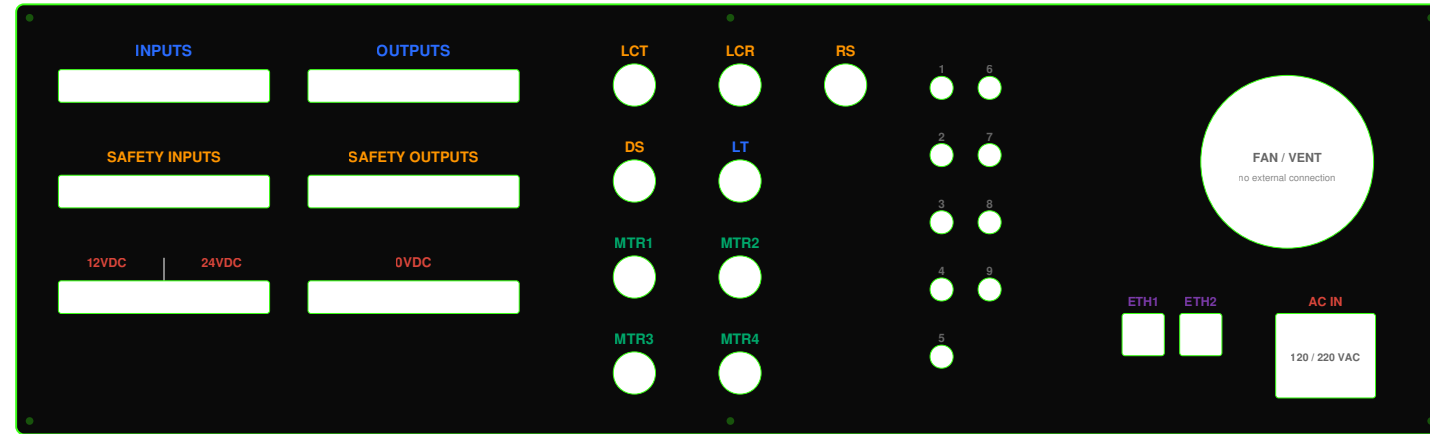


**SCOPE** Field-wiring reference. Six 14-pin connectors, nine M12 ports, two Ethernet jacks, and the AC inlet are the only points the integrator wires. Match each card to its panel port by color category. Internal panel wiring excluded — see parent schematic for full detail.

**CONTROL BLOCK · BACK PANEL · VIEWED FROM REAR**



PF-3945-T24-120-CB · REV R00 · AS BUILT 9/1/25 · TYPE 1 ENCLOSURE · 10 KA SCCR

**CONNECTOR CATEGORIES**

- **Power**  
AC IN · 12V/24V · 0VDC
- **Motion**  
MTR1 · MTR2 · MTR3 · MTR4
- **Safety**  
SAFETY IN/OUT · LCT · LCR · DS · RS
- **Signals / I/O**  
INPUTS · OUTPUTS · LT
- **Network**  
ETH1 · ETH2
- **Service**  
Fuses 1–9

**AC POWER INPUT** AC IN

**AC IN** Panel inlet (P10904) · 3-pin  
**120 VAC** 1 PH · 60 Hz **15 A FLA**  
**220 VAC** 1 PH · 50/60 Hz **8 A FLA**

L1 Line · N Neutral · GND Protective earth. Customer-supplied power cord matched to site voltage. Acts as **main disconnect** for the enclosure (Note 2, sheet 109).

**ETHERNET PORTS** ETH1 / ETH2

**ETH1** RJ45 · 10/100 PoE **User device**  
**ETH2** RJ45 · Uplink / device **Plant LAN**

Wired to internal 5-port PoE switch NTWK11352. Pendant and PLC consume the remaining internal ports. Use ETH2 as the plant uplink for AutoCode / Web HMI access.

**FIELD I/O · DIGITAL** INPUTS / OUTPUTS

**INPUTS** 14-pin · Digital + analog **I0–I9 + AI0/AI1**  
**OUTPUTS** 14-pin · Digital out **O0–O11**

Inputs share CNTRL DEVICE 0 VDC common. Two analog inputs (AI0 / AI1) share the INPUTS connector. Outputs are TTL sourcing — total branch limit 8 A behind FU9.

**FIELD I/O · POWER** 12V/24V · 0VDC

**12V/24V** 14-pin · Split supply for field  
**0VDC** 14-pin · 0 VDC common

Single 12V/24V connector carries both 12 VDC (FU7, 4 A buck) and 24 VDC (FU9, 10 A) rails. Share 0 VDC commons when using external DC I/O signals (Note 2, sheet 156).

**MOTOR PORTS** MTR1 · MTR2 · MTR3 · MTR4

**MTR1/2** M12 4-pos F · Group 1 → **Absolute Motor**  
**MTR3/4** M12 4-pos F · Group 2 → **Absolute Motor**

Pinout: **1** 0 VDC · **2** 24 VDC · **3** CAN-L · **4** CAN-H. **4 A max per port**; daisy-chain additional motors within that budget. Each group has its own MCR and 15 A fuse. CAN-bus termination is handled internally to the Control Block — no external resistor required.

**LIGHT TOWER** LT

**LT** M12 4-pos · 3-segment tower light **SEG 1/2/3**  
**Supply** 24 VDC · 500 mA max **LED only**

Segments driven by Keyence + PLC program (Note 3, sheet 117). Pinout: SEG 1, SEG 2, SEG 3, common 0 VDC. **Use 24 VDC LED stacks only** — the port is current-limited to 500 mA per segment; incandescent or filament stacks will exceed the budget. Any Autoblocks-compatible 3-stack LED tower with M12 4-pos pigtail.

**SAFETY DEVICES** LCT · LCR · DS · RS

**LCT** M12 · Light Curtain TX **Keyence cable**  
**LCR** M12 · Light Curtain RX **Keyence cable**  
**DS** M12 · Door Switch (GSM) **Keyence cable**  
**RS** M12 · Remote Safety (expansion)

Connect to Keyence SR safety-controller GC-Link bus. **Use standard Keyence factory cables** for light curtains and door switches — contact factory for current cable part numbers. RS expands the bus for additional safety devices; map channels through the SR controller (sheet 118).

**SAFETY INPUTS** SAFETY INPUTS

**SAFETY IN** 14-pin (P11741) · E-stop + Si

**1** E-stop CT1 · **2** E-stop CT2 · **3** CT1 pwr · **4** CT2 pwr · **5** Si0 · **6** Si1 · **7** Si2 · **8** Si3 · **9** Si4 · **10** Si9 · **11** Si10 · **12** Si11 · **13–14** Spare. Remote E-stops + safety devices land here. E-stop cuts motor power via K11724 MCR.

**SAFETY OUTPUTS** SAFETY OUTPUTS

**SAFETY OUT** 14-pin (P11759) · SR outputs

**1** SO1 · **2** SO2 · **3** SO3 · **4** SO4 · **5** SO5 · **6** AO0 · **7–14** Spare. Routes Keyence SR safety-controller outputs to remote contactors, MCRs, or downstream safety chains.

**FUSES** 1–9

<b>1</b>	15 A · Main AC (FU1)
<b>2</b>	15 A · Motor PWS (FU3)
<b>3</b>	15 A · Motor Grp 1 (FU5)
<b>4</b>	15 A · Motor Grp 2 (FU6)
<b>5</b>	4 A · 12V Field IO (FU7)
<b>6</b>	2 A · Cntrl Dev (FU8)
<b>7</b>	10 A · 24V Field IO (FU9)
<b>8–9</b>	Spare