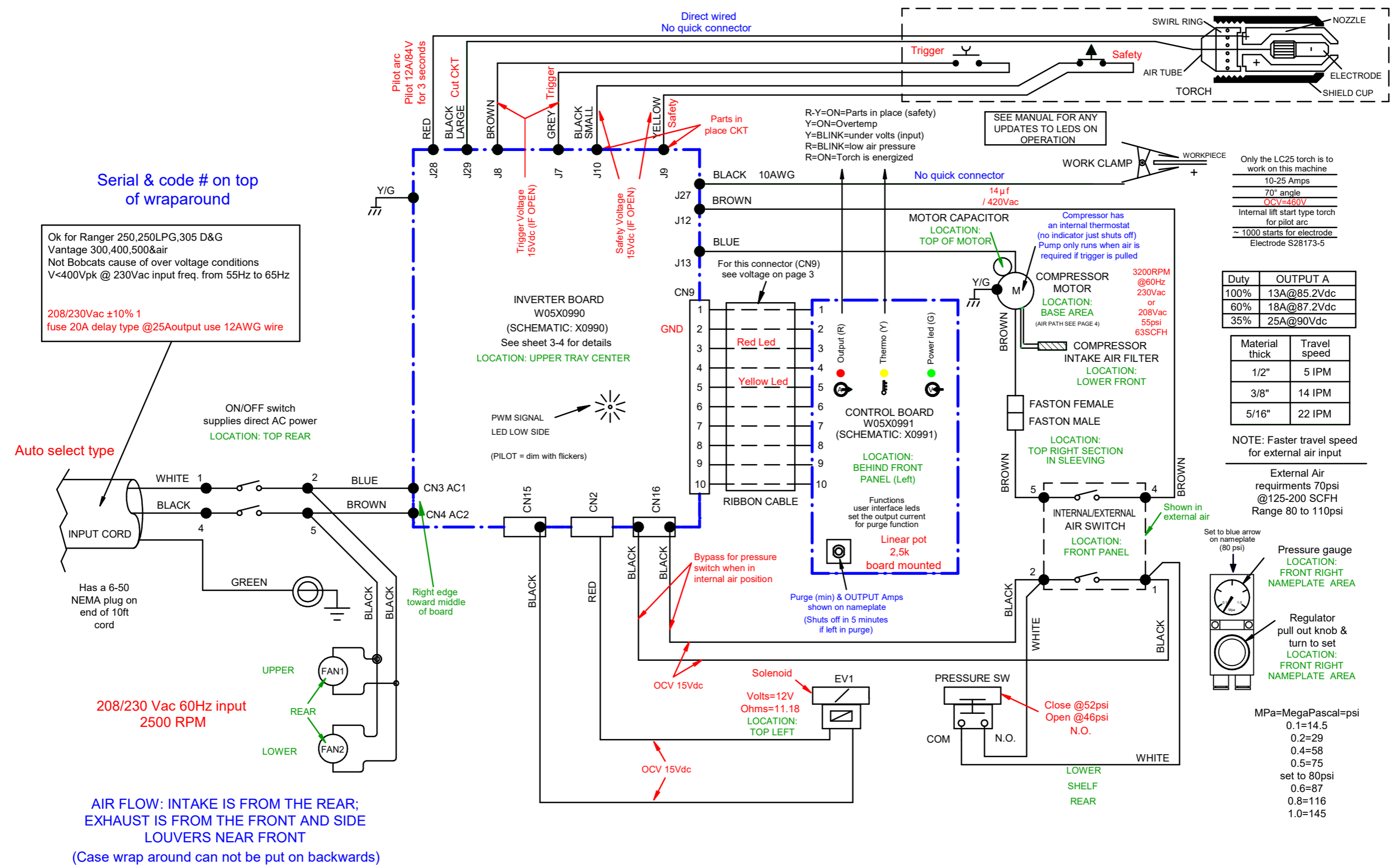
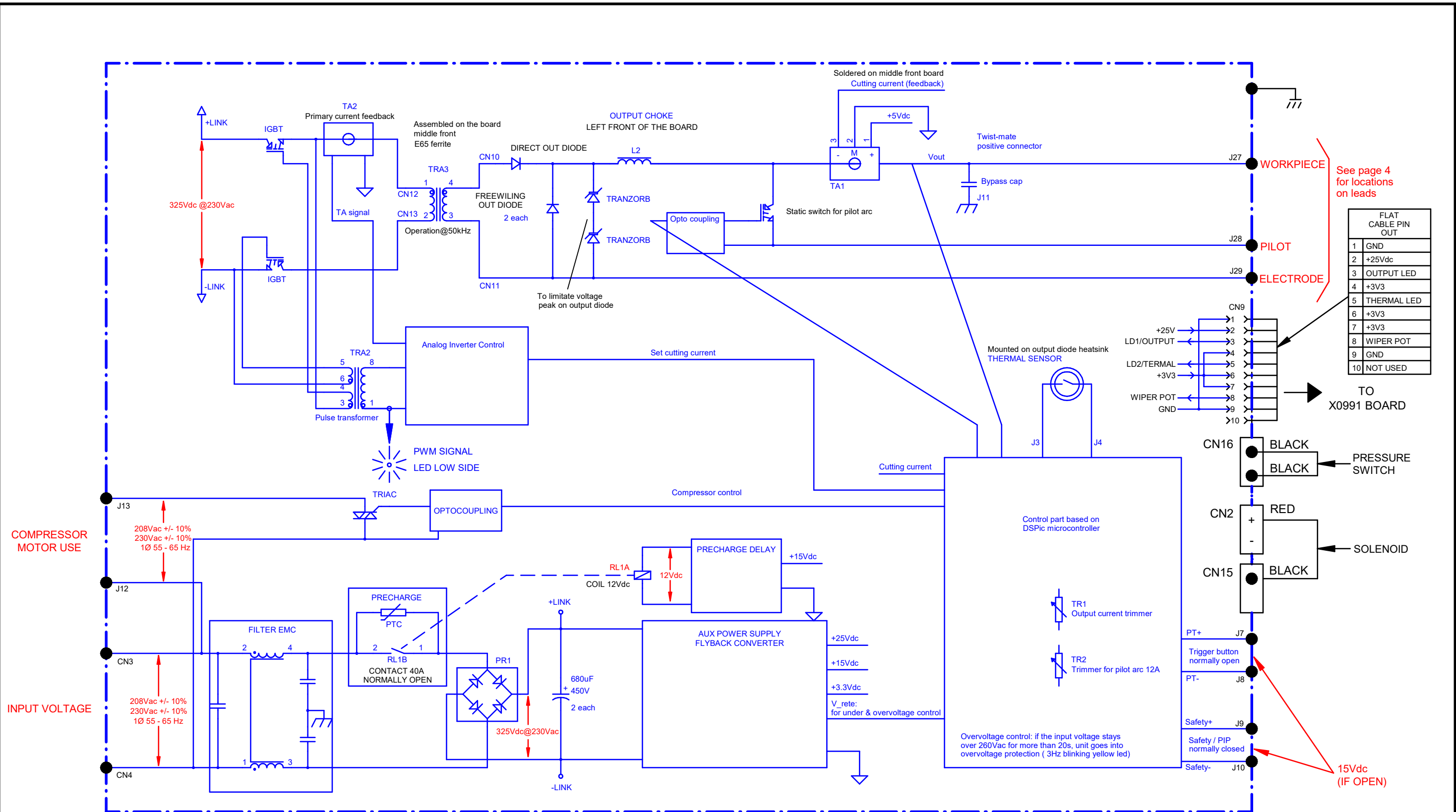


TOMAHAWK 375 AIR MACHINE SCHEMATIC M22291 REV:A



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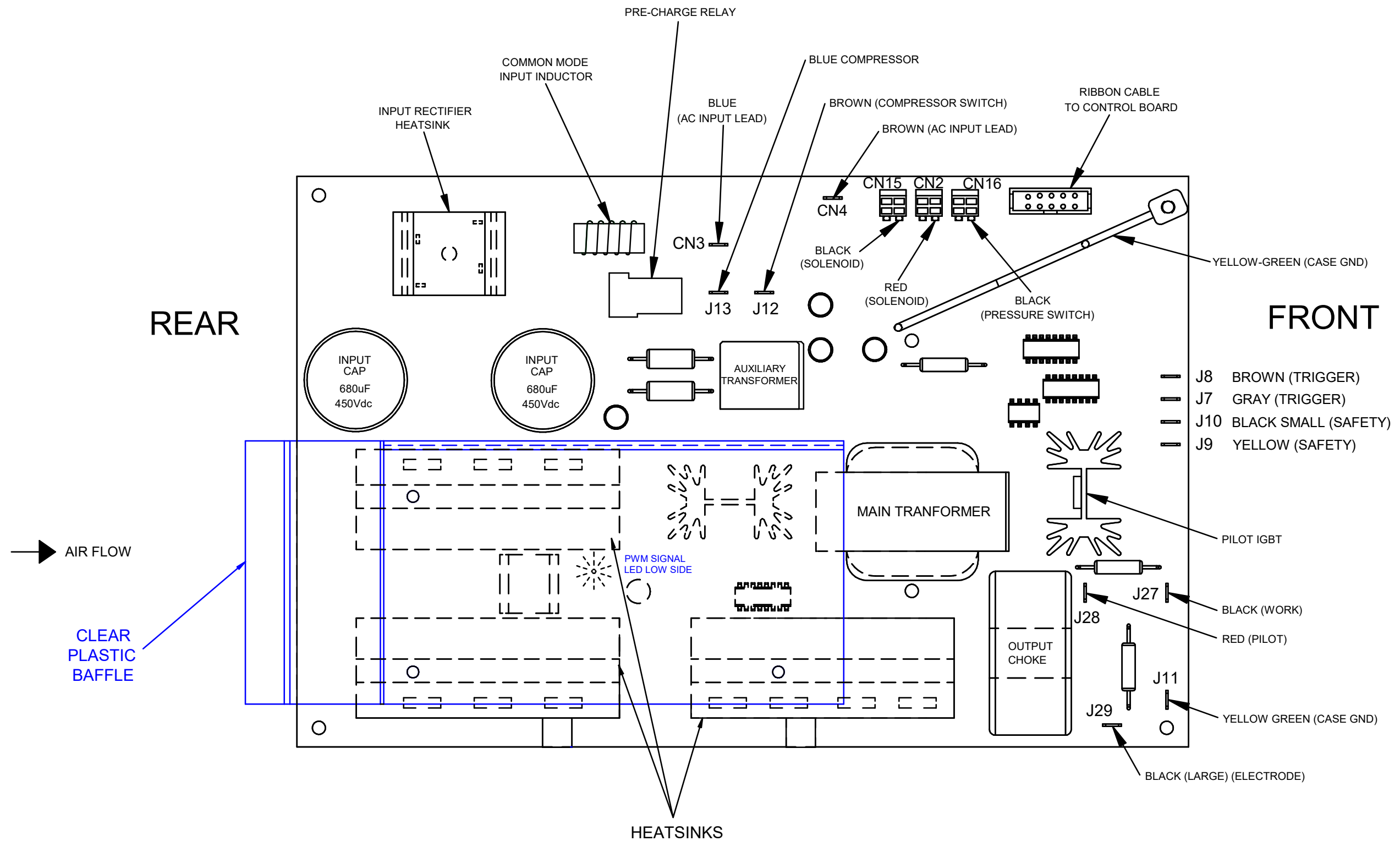
See page 4 for locations on leads

FLAT CABLE PIN OUT	
1	GND
2	+25Vdc
3	OUTPUT LED
4	+3V3
5	THERMAL LED
6	+3V3
7	+3V3
8	WIPER POT
9	GND
10	NOT USED

Inverter Board functions:

- The board manage the precharge system; create a 325Vdc for the half bridge inverter configuration; create by flyback conf all auxiliary voltage supply;
- receive a PWM control signal for output cutting current; manage lift torch strike and avoid the arc to switch off when you're going out of the work piece;
- Manage all errors and alarms signals; manage air compressor working;

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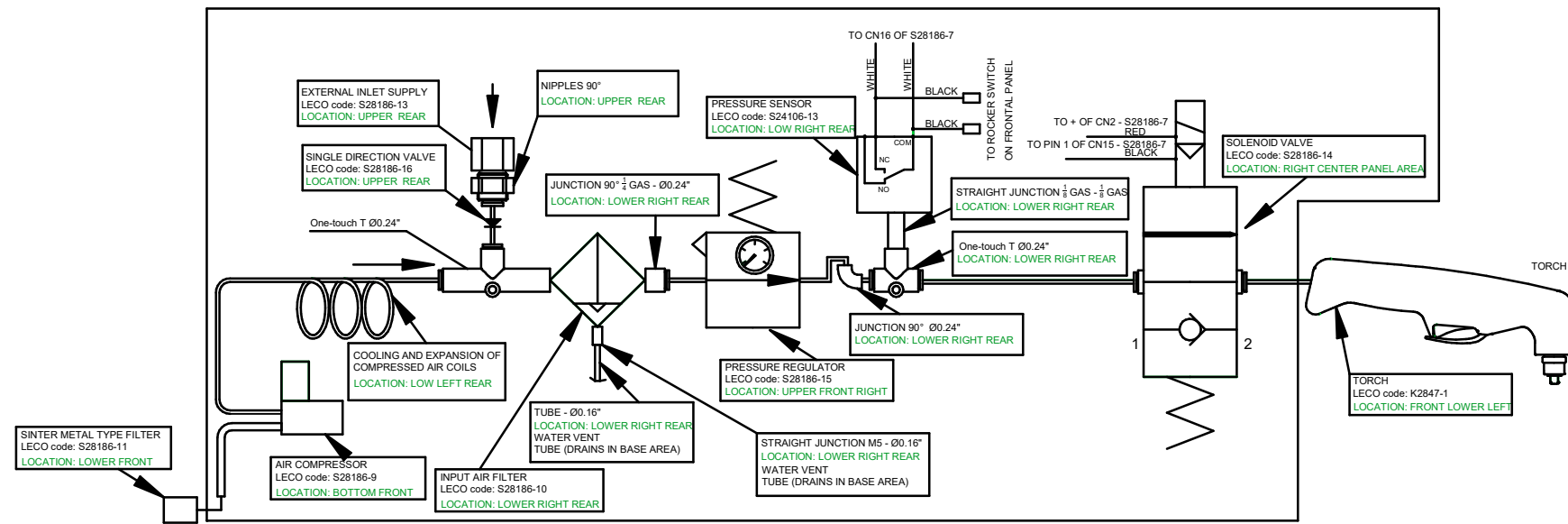


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AIR SYSTEM PATH

AIR TUBE: POLYURETANE TUBE Ø0.24"x0.16"
LEI code: W8800320

DRAIN TUBE: POLYURETANE TUBE Ø0.16"x0.1"
LEI code: W8800205



INPUT FILTER FUNCTIONS AND REQUIREMENTS

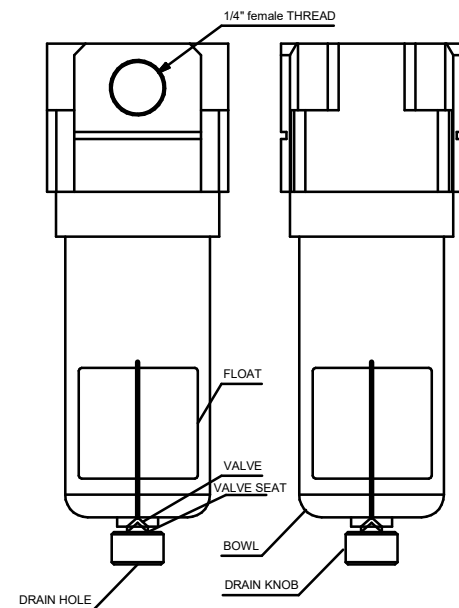
Nominal filtration rating: 5µm
Maximum input pressure: 1Mpa (145 psi); set pressure range: 0.05 - 0.8Mpa (7.2 - 116 psi)

Drain off; normally close type (see below)

The input filter has double function: filter the dust and dry the water present into the air supply, auto drain system.

Working principle: float type auto drain. When there is an accumulation of the condensate water inside the bowl the FLOAT rises due to its own buoyancy and the seal at valve seat is interrupted. The condensate inside the bowl drains out through the knob.

Turning knob manually cw lowers it causes the sealing action of valve seat to be interrupted, thus allowing the condensate to drain off.



PRESSURE REGULATOR FUNCTIONS AND REQUIREMENTS

Compact manifold regulator with adj. relief mechanism and manometer

Maximum input pressure: 1Mpa (145 psi); set pressure range: 0.05 - 0.7Mpa (7.2 - 101 psi)

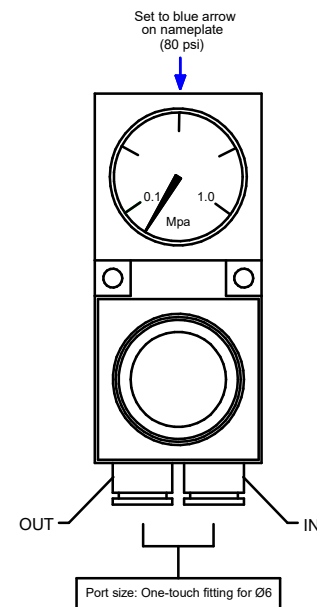
Ambient and operating fluid temperature: +5 to 60°C

Typical flow rate with inlet 0.7Mpa (101 psi); outlet: 0.4Mpa (58 psi) @ 115 l/min

Mpa = Mega Pascal

PSI = pound per square inch

Mpa = PSI see page1 for conversion



PRESSURE SWITCH FUNCTIONS AND REQUIREMENTS

Type: N.O. and N.C. contacts - USED COM + N.O.

Max. electric ratings: N.C. 15A 250Vac N.O. 9A 250Vac

Electrical entry: FAST-ON 6.3 X 0.8 mm

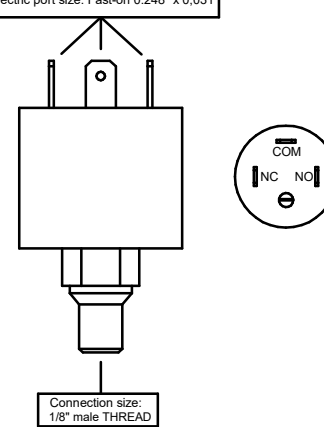
Max. working temperature: +90°C (UL)

Pressure range: 0.2 - 0.8 Mpa (29 - 116 psi)

High setting pressure: 0.36 Mpa (52 psi) ± 5%

Low setting pressure: 0.32 Mpa (46 psi) ± 5%

Electric port size: Fast-on 0.248" x 0.031"



SOLENOID VALVE FUNCTIONS AND REQUIREMENTS

Type: 2 way

Nominal electric ratings: 12Vdc, Inrush: 2.9W, Holding: 0.6W

Electrical entry: Grommet + AWG 22 red and black wire.

Coil insulation type: Class B

Ambient and fluid temperature working: -10 + 50°C

Min. operating pressure: 0.01Mpa (1.45 PSI)

Max. operating pressure: 0.6 Mpa (87 PSI)

