TCPD Power

External 115/230 V ac power and 125 V dc power is brought in via TB1 mounted on the <PD> core and hard wired to the TCPD board. If ac power is provided, it is converted to the 125 V dc in a DACA (ac to DC) via the JZ2 connector. Power is distributed from <PD> to the various cores and boards via the connectors listed above. An optional JZ3 connection is available for applications requiring reduced voltages for contact #18 on the DTBC board in the <Q51> core. The power distributed to the TCEA boards in the <P1> core is additionally conditioned across resistors via the JZ1 connector. If ac power is provided, the JZ5 connector provides ac power to the ignition transformer outputs.

DS200TCPS – Power Supply Board

The Power Supply Board (TCPS) is located in <R> and each of the four IO cores to convert 125 V dc power from <PD> to the voltage levels required. These include, but are not limited to such things as, microprocessor power supply voltages, mA output power supply voltages, RTD power supply voltages, and servo valve current outputs.

TCPS Connectors

2PL – Distributes the power supply voltages to the various boards in a daisy chain fashion.

J1 – Connector that brings in the 125 V dc power into the TCPS board from the TCPD board in the <PD> core.

JC – Distributes power supply voltages for the power supply diagnostics on the TCQC board in cores <R1>, <R2> and <R3> and the TCCA board in the <R5> core.

JP1 – Distributes power supply voltages to the TCDA board in the digital cores <Q11>, <Q21> and <Q51> and to the AAHA boards in the <R> core.

JP2 – Same as JP1. Either JP1 or JP2 could be used.

X1 – CCOM bus connection.

The hardware document in Appendix B contains more information on core power distribution.

TCPS Configuration

There are no hardware jumper or software configurations for the TCPS boards.