

PARTS LIST

IP OPTION	INTEGRATED PRESSURE SENSE BOARD (PCB10)	TS13-113 CABLE ASSEMBLY	P13 (PART OF PROPORTIONAL VALVE)	TS3AC-2/3 HARNESS ASSEMBLY	VALVE TRANSFORMER (T3)	IMU CONTROL	PROPORTIONAL VALVE	DIFFERENTIAL PRESSURE SENSE BOARD
1	1	1	1	1	1	1	1	1
DESIG.	PCB10	TS13-113	P13	TS3AC-2/3	T3	IMU	PV	PSD
PART NO.	410354	410354-002	571005	322369-023	322490	322369-023	571005	322603
DESCRIPTION	Assem. PCB, Integrated Pressure Sense & Control Bd. (IPSC)	Assem. PCB, Integrated Pressure Sense Bd. (IPS)	Assem. Cable, IPSC	Assem. Cable, IPSC	Assem. Valve Transformer, 24V	Assem. IMU Control	Assem. Valve, Proportional	Assem. Cable, Differential Pressure Sense

NOTES:

- This Integrated Pressure Control System Option Wiring Diagram represents interconnection wiring between the Optional Pressure Control System and either EN1000 or EN1001 control. The wiring application of the Optional Integrated Pressure Control System to EN1000 or EN1001 controls is made from this Wiring Diagram ONLY. EN1000 & EN1001 Wiring Diagrams do NOT show interconnection wiring to the Optional Integrated Pressure Control System. This Integrated Pressure Control System Wiring Diagram is to be used in conjunction with EN1000 & EN1001 Wiring Diagrams in "B", "S", "E", "D", "T", "LS", & "LF" Cabinets. For EN1000 & EN1001 control functions, refer to appropriate EN1000 or EN1001 Control Wiring Diagram and its related manual.
- The Integrated Pressure Control System requires the use of either a Proportional Valve (PV) and/or Pressure Sense (PS). Pressure Control wiring & components are installed per correct application of either a Proportional Valve and/or a Pressure Sense.

PROPORTIONAL VALVE:
When PV is required, customer is to specify an Internal Thread size of either 1/2" or 1-1/4" NPT for the Air Pressure Ports. Customer is required to determine the mounting location and provide for the installation of the PV. See installation instructions that are supplied with the Proportional Valve (PV).

TS13-113 CABLE ASSEMBLY:
TS13-113 Cable Assembly is to be installed when a Proportional Valve is specified. Customer to install TS13-113 Cable Assembly per applicable Proportional Valve Wiring Diagram view. Connect the three (3) wires per each wire color into TS13 connector located on PCB10. Also connect the J13 connector of TS13-113 Cable Assembly into P13 connector of the Proportional Valve (PV). See View "A" or "B" for P13 connector.

CAUTION: The Proportional Valve should NOT alone cause activation of Air Cylinder. A Valve should be used between the Proportional Valve and the Air Cylinder. Use a Valve to bring Air Pressure to the Cylinder connected on Terminal Strip Board (PCB2) terminals TS1-SV1 & TS1-SV2 (see either EN1000 or EN1001 Wiring Diagram). This Valve output incorporates a control relay to prevent spurious operation. (SEE MANUAL 700178).

PRESSURE SENSE:
Customer is required to determine the mounting location and provide for installation of the PS. The Pressure Sense Air Pressure Port has an External Thread size of 1/4" NPT. Customer is to install the PS (Blue/White) & White (or White/Blue) wires of the Pressure Sense Assembly into the TS13 connector located on PCB10. Connect PS-BLK (or BLU/WHI) to TS13-5 & also connect PS-WHT (or WHT/BLU) to TS13-2. Refer to correct Pressure Sense Wiring Diagram view for Pressure Sense wiring.

TS3AC-2/3 HARNESS:
TS3AC-2/3 Harness is factory installed per applicable cabinet size. TS3AC-2/3 Harness is connected from the Integrated Pressure Sense and/or Control Board (PCB10) to Valve Transformer (T3). Connect connector terminal TS3AC-1 to Valve Transformer T3-X1. Also connect connector terminal TS3AC-2 to Valve Transformer T3-X2. For TS3AC-2/3 Harness wiring in an IMU Control, see Note 6.

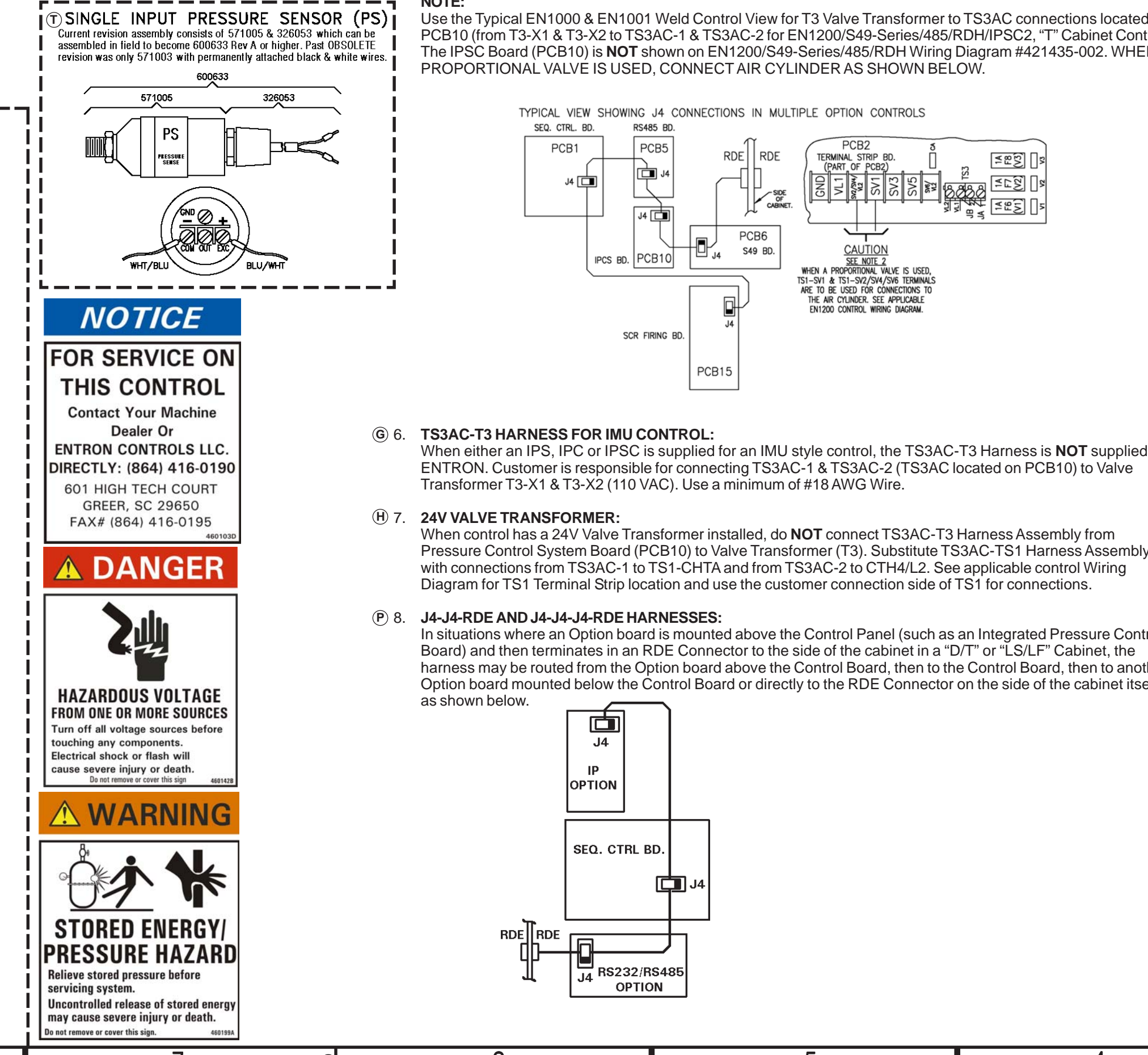
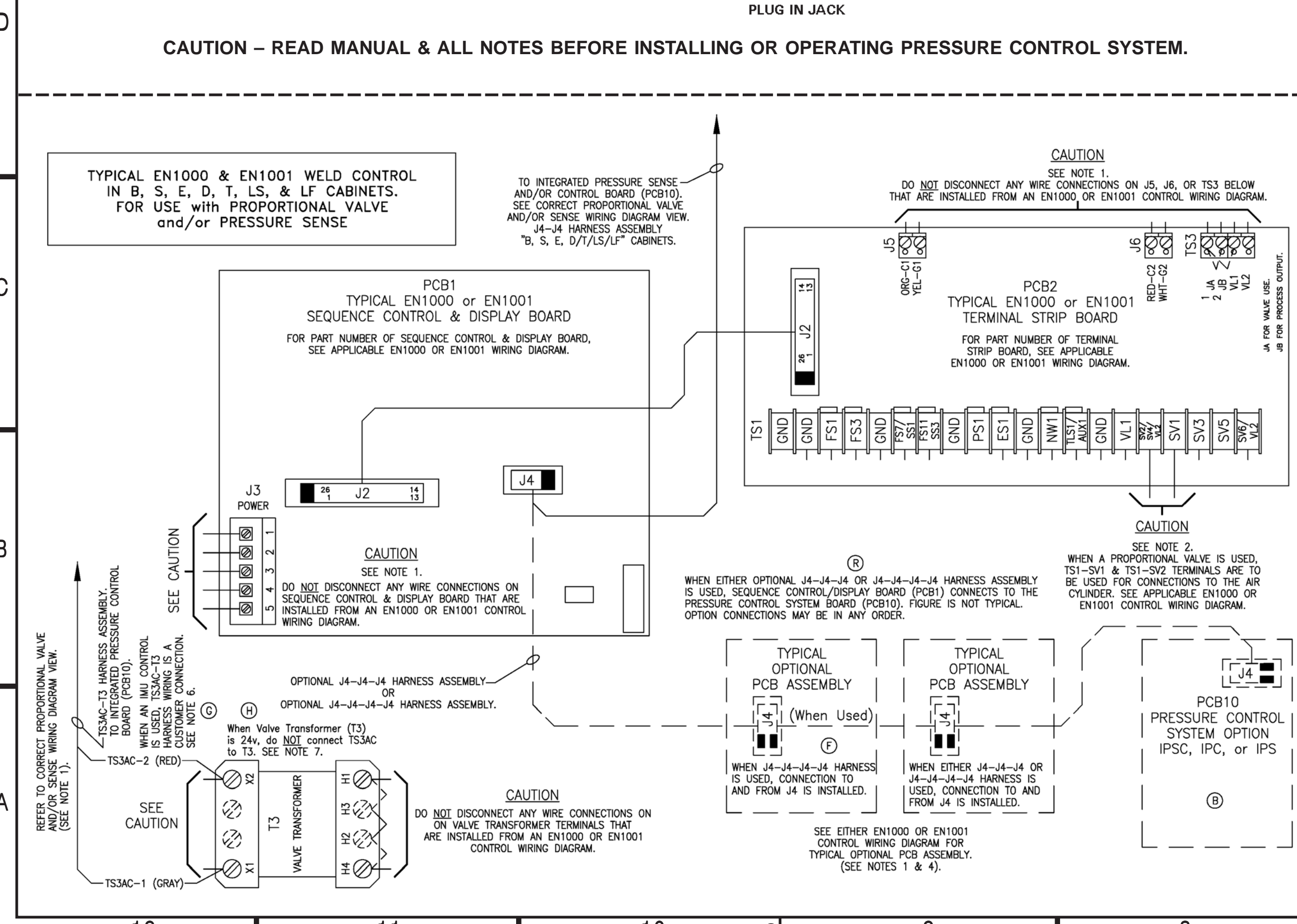
J4-J4 HARNESS:
J4-J4 Harness is factory installed per applicable cabinet size. The J4-J4 Harness is connected between the J4 connectors from the Sequence Control Board to the Integrated Pressure Sense and/or Control Board (PCB10).

NOTE:
An Optional J4-J4 Harness Assembly is used when either the EN1000 or EN1001 Control Wiring Diagram specifies that the J4 connector on the Sequence Control Board be connected to a J4 connector on an Optional PCB Assembly. EN1000 & EN1001 Wiring Diagrams do NOT show the routing of the J4-J4-J4 Harness to the Pressure Control System Board. See Typical EN1000 & EN1001 Weld Control View for J4-J4-J4 Harness. The dashed lines represent harness wiring routed to an additional J4 connector to an Optional PCB Assembly.

J4-J4-J4-J4-RDE HARNESS/OTHERS:
These Harnesses are used on multiple option controls such as EN1200/S49-Series/485/RDH/IPSC2, "T" Cabinet Control. For J4-J4-J4-J4-RDE Harness do NOT use the Typical Weld Control View, see configuration below. Substitute J4-J4-J4-J4-RDE Harness A/N 322369-016 for existing J4-J4-J4-J4-RDE Harness on EN1200/S49-Series/485/RDH Wiring Diagram. The sequential order of connecting the J4 Harness connectors into the PCB Assembly J4 connectors is arranged as follows:

SCR Firing Bd (PCB15) to Sequence Control/Display Board (PCB1) to RS485 Driver Board (PCB5) to Pressure Control System Board (PCB2) to S49 External Schedule Select Board (PCB6) to Remote Data Harness (RDE).

For multiple option controls not covered on this print use cable routing similar to drawing below. See also Manual 700178 and 322369.



USED ON

NOTE: For correct control model number, substitute appropriate Integrated Pressure Control System Option application for the "OPTION" reference below.

EN1000-Series/OPTION, "B" Cabinet Controls
EN1000-Series/OPTION, "S", "E", "D", "T", "LS", & "LF" Cabinet Controls
EN1000(TGA)-Series/OPTION, "E" & "D"/LS/LF Cabinet Controls
EN1000(CES)-Series/OPTION, "E" & "D"/LS/LF Cabinet Controls
EN1001-Series/OPTION, "S", "E", "D", "T", "LS", & "LF" Cabinet Controls
EN1001-IMU(SCR) Controls
EN1001-IMU(SCR) Controls

REF: For the EN1000 or EN1001 control application to an Integrated Pressure Control System model number, see appropriate Wiring Diagram below.

REV	AUTH	DESCRIPTION	DATE	CHKD BY	DATE
1		ORIGINAL RELEASE			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

ENTRON

SCALE: DATE: DRAWN BY: CHKD BY: APPROVED BY:

2/300 DEC

TOLERANCE UNLESS SPECIFIED: REVISIONS: REVISIONS: APPROVED BY: DATE: 7/5/13 DCS

WIRING DIAGRAM, OPTIONAL INTEGRATED PRESSURE CONTROL SYSTEM for use with EN1000 & EN1001 CONTROLS

REV AUTH DESCRIPTION DATE DATE

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