12 AWG MINIMUM UP TO 10 FT, 10 AWG MINIMUM OVER 10 FT. (THHN)

SAFETY ON/OFF 115 VAC OUTPUT MODULE ☐AC5 (BLK)

TB1-1 / TB1-2

PLANT INTERFACE BOARD

YEL BLU RED BLK

POWER SUPPLY ENCLOSURE

+12VDC -12VDC +5VDC GND L2 L1

WHT BLK BLU GRN BRN

HARDWARE POWER ON/OFF

2 AMP

INDICATES WHEN L1 FROM COLLECTOR IS SUPPLIED.

INDICATES WHEN L1 IS SUPPLIED TO BOARDS

6K

SNUBBER 0.1 & 22ohm

3K 10W

SNUBBER 0.1 & 22ohm

0.05 0.05

K1

LINE 2 LINE 1 10AMP EMI/RFI FILTER LOAD 2 LOAD 1

TBX-3 TBX-2 TBX-1 TBX-0 TBX-6 TBX-5 TBX-4

L2/N GND L1

L2 (neut) GND L1 (120vac hot) PLANT CONTROL POWER (SEPARATE BREAKER)

(NEUT from UPS) (120vac hot from UPS) L1 WHEN COLLECTOR IS RUNNING

OPTIONAL POWER DROP-OUT ALARM 115V SONA-LERT L2

L1 SUPPLIED TO BOARDS (REQUIRES L1 WHEN COLLECTOR RUNNING AND SIGNAL FROM PC)

CONNECTIONS WITH-IN DASHED LINES ARE PRE-WIRED

L1 WHEN COLLECTOR RUNNING & COMPUTER OKAY

EZ-BLEND/FEED PLANT INTERFACE NEMA BOX

TB1-1 CABINET GROUND

This is the "data link" return ground plane wire. It is not an option, it is REQUIRED. Each data link in the system must have it's own. Each must be terminated at both ends with ring terminals either soldered or gas tight crimped. One end of EACH must be attached to the MAIN CONTROL computer's power supply case screw and the other to EACH plant interface board's auxiliary ground terminal. Do not tie them together except at the computer power supply case screw.

TACH POWER SUPPLY OPTIONAL +X VDC

*** CAUTION ***

SOME SHIELD WIRES ARE ELECTRICALLY "HOT" TO GROUND, IT IS THEREFORE NECESSARY TO INSULATE THE PIGTAILS

NOTE #2:

USE SHIELDED CABLES BETWEEN MOTOR SPEED CONTROLS & EZ-FEED WHERE SHOWN. ROUTE THE CABLE IN SEPERATE CONDUIT AWAY FROM POWER WIRES (18" MIN).

B & B LIGHT INDUSTRIES
Claremore (Tulsa), OK 74019

EZ-BLEND

MAIN INTERFACE BOARD/PLANT FIELD WIRING
Northern Improvement ?? drum mixer, ??, WY

SCALE: DWN. BY: RY | DATE: 09-25-15 | SHEET 3 of 3 | DRAWING NUMBER D364-16-03 | REV A

CHKD BY: APP BY:

PLANT INTER-FACE BOARD.

TB2-12 TB2-11 L1

TB2-12 TB2-11 TB2-9 L2 TB2-10

SECT. C

TB1-22 BLK TB1-23 WHT TB1-24 RED TB1-19 TB1-21 BLK TB1-20 WHT

L1 when coil. running

16/4 SO SHIELDED FOR UP TO 150 FT. 14/4 SO SHIELDED FOR 151 TO 250 FT.

SERIAL CABLE TO COMPUTER

CARDINAL SCALE INTEGRATOR

L.C. - EXC L.C. + EXC L.C. + SIG L.C. - SIG

LOAD CELL CONNECTIONS AND SHIELDING MUST BE EXACTLY AS SHOWN AND ROUTED AT LEAST 18 INCHES FROM ANY POWER WIRING FOR PROPER OPERATION.

LOAD CELLS "J" BOX L.C. # 1 L.C. # 2 L.C. # 3

POD AERATION MOTOR STARTER SILO AERATION MOTOR STARTER DELIVERY SYS. MOTOR STARTER MOTOR STARTER L2

CHARGE VALVE EXTEND RETRACT

ELECTRIC OVER AIR VALVE L2 AIR SUPPLY EXHAUST

AIR CYCLINDER

FILTER

VANE FEEDER AND AIRLOCK

BLOWER AIR M.F.

MOTOR A2 A1 F1 F2

RED LION RPGD 5001000 RED BLK WHT +VDC COMMON SIGNAL SHIELD (N/C)

BINDICATOR LIME SILO BINDICATOR L1

(3 eq.) LOAD CELLS WITH LIGHTNING ARRESTORS ON BOTH SIDES

VENT

WEIGH POT

DUST SURGE BIN

POD FILL SELECTION SW. AUTO OFF MANUAL

POD FILL

START/STOP CTRL SELECTION SW.

MINERAL FILLER RUN

L1 WHEN COLLECTOR IS RUNNING

LI WHEN MINERAL FILLER DELIVERY SYSTEM IS RUNNING

MANUAL PANEL

237 238 239 231 232 6 739 730 731 732 733 734

SHIELD (N/C)

BRONCO II TB2-8 TB2-7 TB2-3 TB2-1 TB2-9 drive common (only) TB2-6 min spd pot TB2-5 signal TB2-4 +10VDC TB2-10 L1 L2 A2 A1 F1 F2

Red Lion DITAK-8 1.25 GPM LI3

12 VDC POWER SUPPLY -V +V

1uf NP 2.2K

5K MANUAL SPEED SPEED CONTROL SELECTION SW.

RED BLK WHT

SECT. B

TB2-8 TB2-7 TB1-15 BLK TB1-16 WHT TB1-17 RED TB1-12 TB1-14 BLK TB1-13 WHT

SHIELD

WATER RUN

L1 WHEN COLLECTOR IS RUNNING

START/STOP CTRL SELECTION SW.

391 392 6 899 890 891 892 893 894

TYPICAL WIRING, MODIFY AS NECESSARY

WEG CFW-08 INVERTER DRIVE XC1

4 RUN/STOP *close to run*

1 GENERAL ENABLE

2 FWD/REV

THIS CONFIGURATION IS VALID FOR FACTORY DEFAULT PROGRAMMING, REMOTE MODE & v3.6X SOFTWARE.

COMMON

5 6 ANALOG IN SIGNAL 7 +10 vdc

R S T Ø1 Ø2 AC INPUT Ø3

U V W X MOTOR

WATER FROM TANK WATER PUMP WATER METER TACH WATER TO PROCESS

SHIELD (N/C)

POT-SIM BRD #3
6 CF's (WEG CFW-08 drives)

TB1-36 L.C. - EXC

+10 VDC TB1-37 L.C. + EXC

THERMOCOUPLE BREAK DETECT SWITCHES ON FOR T.C.'s OFF FOR L.C.'s TB1-35 TB1-34 L.C. + SIG L.C. - SIG

PLANT INTER-FACE BOARD.

TB2-10 TB2-9 L1

TB2-16 TB2-15 TB2-13 L2 TB2-14

SECT. D

TB1-29 BLK TB1-30 WHT TB1-31 RED TB1-26 TB1-28 BLK TB1-27 WHT

TO OTHER INTER-FACE BOARDS AS REQUIRED.

16/4 SO SHIELDED FOR UP TO 150 FT. 14/4 SO SHIELDED FOR 151 TO 250 FT.

LOAD CELL CONNECTIONS AND SHIELDING MUST BE EXACTLY AS SHOWN AND ROUTED AT LEAST 18 INCHES FROM ANY POWER WIRING FOR PROPER OPERATION.

POD FILL SELECTION SW. AUTO OFF MANUAL

POD FILL

START/STOP CTRL SELECTION SW.

MINERAL FILLER RUN

L1 WHEN COLLECTOR IS RUNNING

LI WHEN MINERAL FILLER DELIVERY SYSTEM IS RUNNING

MANUAL PANEL

217 218 219 211 212 6 719 710 711 712 713 714

SHIELD (N/C)

BRONCO II TB2-8 TB2-7 TB2-3 TB2-1 TB2-9 drive common (only) TB2-6 min spd pot TB2-5 signal TB2-4 +10VDC TB2-10 L1 L2 A2 A1 F1 F2

Red Lion DITAK-8 1.25 GPM LI3

12 VDC POWER SUPPLY -V +V

1uf NP 2.2K

2K MANUAL SPEED SPEED CONTROL SELECTION SW.

RED BLK WHT

POD AERATION MOTOR STARTER SILO AERATION MOTOR STARTER DELIVERY SYS. MOTOR STARTER MOTOR STARTER L2

CHARGE VALVE EXTEND RETRACT

ELECTRIC OVER AIR VALVE L2 AIR SUPPLY EXHAUST

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MOTOR A2 A1 F1 F2

RED LION RPGD 5001000 RED BLK WHT +VDC COMMON SIGNAL SHIELD (N/C)

(3 eq.) LOAD CELLS WITH LIGHTNING ARRESTORS ON BOTH SIDES

VENT

WEIGH POT

DUST SURGE BIN