

GAYLE CABINET

NORD

2-30D WIRE NUMBER TO VFD TERMINAL CROSS REFERENCE

PRE 99 SERIES 2-30D WIRE NUMBER	ABB BRAND VFD TERMINAL #	TELEMECANIQUE BRAND VFD TERMINAL #	99 & MKIII SERIES 2-30D WIRE NUMBER (COLOR)	REPLACEMENT INSTRUCTIONS STEP#
3L1 (or 3LL1)	L1	R/L1	6L1	10 - 11
3L2 (or 3LL2)	L2	S/L2	6L2	10 - 11
3L3 (or 3LL3)	L3	T/L3	6L3	10 - 11
23	U	U/T1	6T1	12
22	V	V/T2	6T2	12
21	W	W/T3	6T3	12
27	12	LI1	BLACK1 (CABLE1)	13
28	11	LI2	RED1 (CABLE1)	13
25	8	+24V	GREEN1 (CABLE1) & GREEN (wire to term#14 on EMT6 thermistor relay)	14
19A (From term# 14 on EMT6 thermistor relay)	15	LI5	WHITE (wire to term# 13 on EMT6 thermistor relay)	15
18	2	AI1	RED2 (CABLE2)	16
16	4	+10	WHITE2 & GREEN2 (CABLE2)	17
17	3	COM	BLACK2 (CABLE2)	18
15 (Fault)	17	R1B	11 (Fault)	19
3 (Fault)	16	R1C	4 (Fault)	20
14 (Brake)	19	R2A	10 (Brake)	21
3 (Brake)	18	R2C	9 (Brake)	22

NOTE: On the EMT6 thermistor relay be sure to move the wires from terminals 13 & 14 to terminals 21 & 22

VFD REPLACEMENT INSTRUCTIONS.

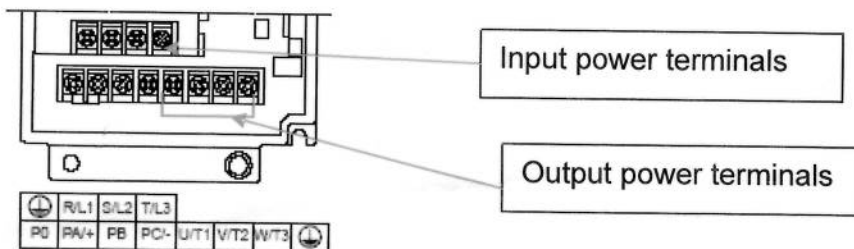
Before beginning, carefully read all instructions. Look closely at the wires attached to the old VFD, paying close attention to wire number or color and the VFD terminal they are connected to. Please note: This kit and instructions apply for converting from an ABB brand VFD (pn P000955) to a Telemecanique brand VFD (pn P004268) only. If you are converting from a different brand, some adapting / improvising will be necessary.

VFD REMOVAL & REPLACEMENT

1. Turn off control panel power and disconnect the control panel from electrical power source.
2. Remove the old VFD keypad by gently pulling outward on the top edge of the keypad.
3. Remove the old VFD housing in order to access the wiring terminals. There are 4 small rounded tabs, 2 on the top just above the heat sink, and 2 on the bottom just above the heat sink. Push in all 4 tabs at once and gently pull outward on the VFD housing.
4. Make sure all of the wires that are attached to the VFD terminals are labeled. If they are not, use the enclosed labels and a pen to label them. Use a small screwdriver to loosen all terminal screws. Remove the wires from the VFD terminals.
5. Remove the old VFD by removing the 4 mounting screws that attach it to the backpan.
6. Install the new VFD aluminum mounting plate. Use the 4 machine screws provided to mount it where the old VFD was mounted.
7. Mount the new VFD to the aluminum plate using the 2 screws provided.
8. Snap the new fuse holder onto the short piece of din rail near the top of the aluminum mounting plate.

WIRE CONNECTIONS (See sheet with wire# to VFD terminal cross reference)

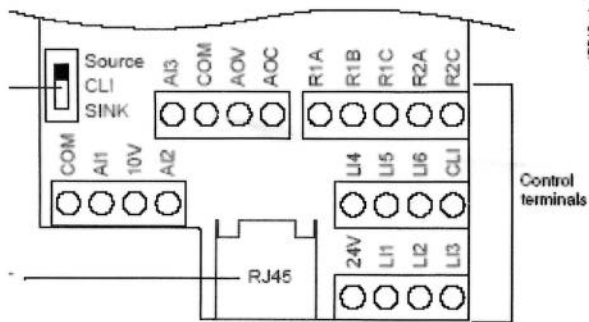
9. Open the cover of the new VFD by using a screwdriver to turn the cover latching screw from the "locked" to the "unlocked" position, then, swing open the cover to access the wiring terminals.
10. Connect the original voltage supply wires, (the wires that fed power to the old VFD), to the three open terminals on the new fuse holder.
11. Connect the three wires that came attached to the new fuse holder to the input power terminals of the new VFD (the terminals are labeled R/L1, S/L2, T/L3). Connect the input ground wire to the green screw next to the input power terminals.



VFD input/output power terminals.

12. Connect the original motor output wires to the output terminals of the new VFD (the terminals are labeled U/T1, V/T2, W/T3). Connect the output ground wire to the green screw next to the output power terminals.

- Connect the "forward" run control wire to terminal LI1, Connect the "reverse" run control wire to terminal LI2.

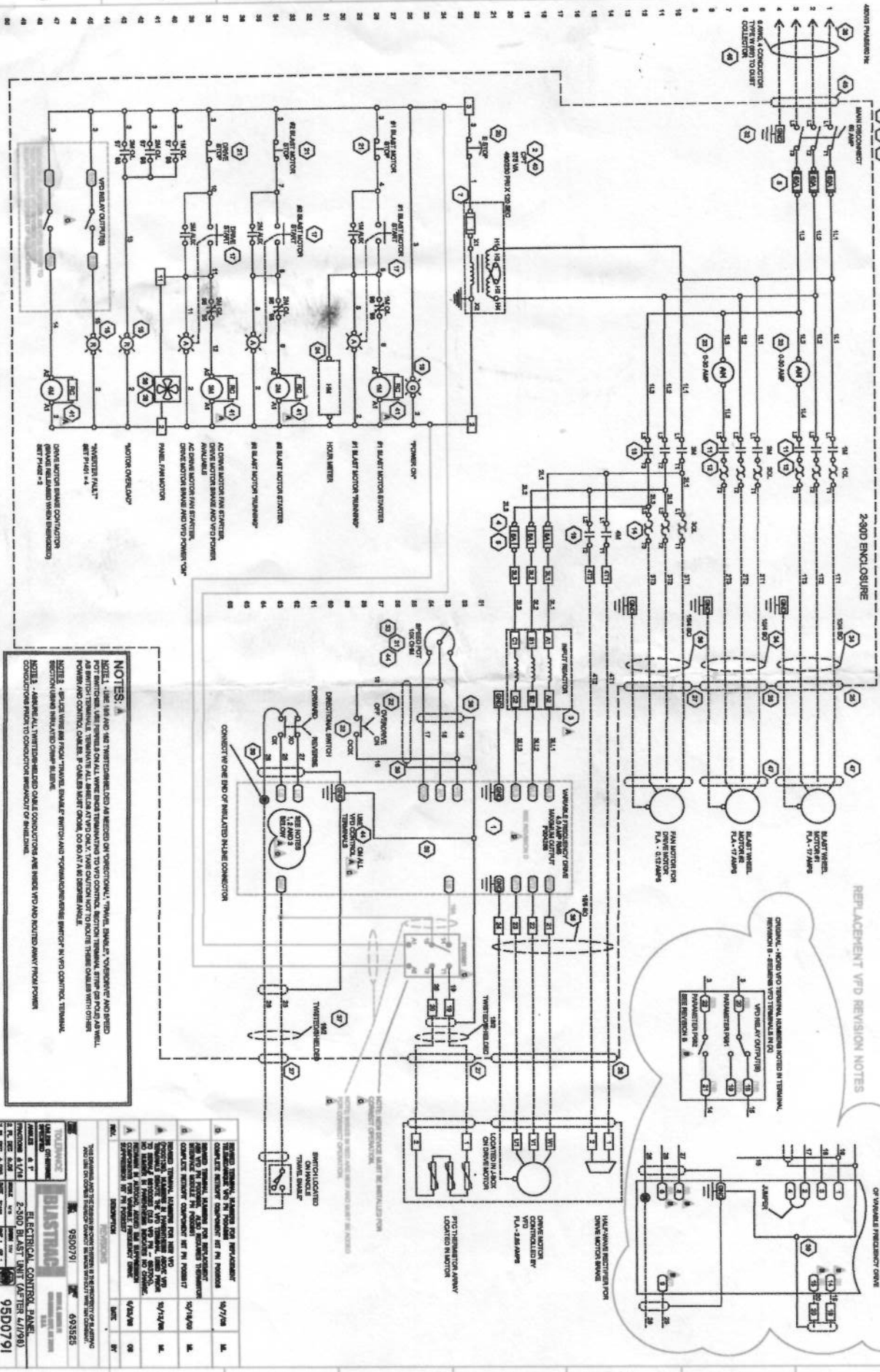


VFD control terminals.

- Connect the wire(s) that feed one side of the travel enable switch and terminal 14 on the EMT6 thermistor relay to terminal +24V.
- Connect the other wire from terminal 13 on the EMT6 thermistor relay to terminal LI5.
- Connect the wire from the center leg of the speed potentiometer and one side of the overdrive switch to terminal AI1.
- Connect the wire from one side of the speed potentiometer and the other side of the overdrive switch to terminal +10.
- Connect the remaining wire from the speed potentiometer to terminal COM.
- Connect the drive "fault" light wire to terminal R1B.
- Connect the other wire for the drive "fault" light to terminal R1C.
- Connect the wire that powers the brake contactor to terminal R2A.
- Connect the other wire for the brake contactor to terminal R2C.
- On the EMT6 thermistor relay, move the wires from terminals 13 and 14 to terminals 21 and 22.

BLASTRAC MODEL 2-30D BLAST UNIT REVISION D

REPLACEMENT VFD REVISION NOTES



NOTES:

NOTE 1 - SEE 18 AND 19 FOR THE LOCATION OF THE VFD RELAY SWING SECTION. TERMINAL BLOCKS, CONTACTORS AND OTHER COMPONENTS ARE SHOWN IN THIS SECTION. ALL WIRING IS TO BE DONE IN ACCORDANCE WITH THE WIRING DIAGRAM AND THE VFD RELAY SWING SECTION. THE VFD RELAY SWING SECTION IS TO BE INSTALLED IN THE VFD RELAY SWING SECTION. THE VFD RELAY SWING SECTION IS TO BE INSTALLED IN THE VFD RELAY SWING SECTION.

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NO.	DESCRIPTION	DATE	BY
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BLASTRAC

9500791

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ELECTRICAL CONTROL PANEL

2-30D BLAST UNIT (A/T/R 4/1/98)

9500791