

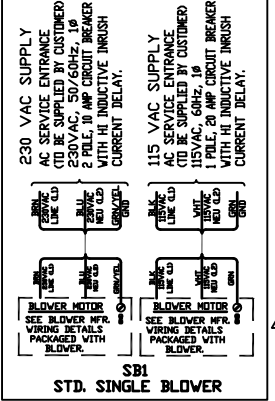
REVISIONS

ZONE	SYM.	DESCRIPTION	DATE	APPD.
A		PER DCN #1900-0004A	7-1-02	ELM
B		NO CHANGE THIS SHEET	9-20-02	ELM
C		PER DCN 1900-0004C	4-22-03	ELM
D		PER DCN 1900-0004D	11-19-03	DMB
E		PER DCN 1900-0004E	6-1-07	ELM
F		NO CHANGE THIS SHEET	10-10-13	I.E.

⚠ MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.

⚠ ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.

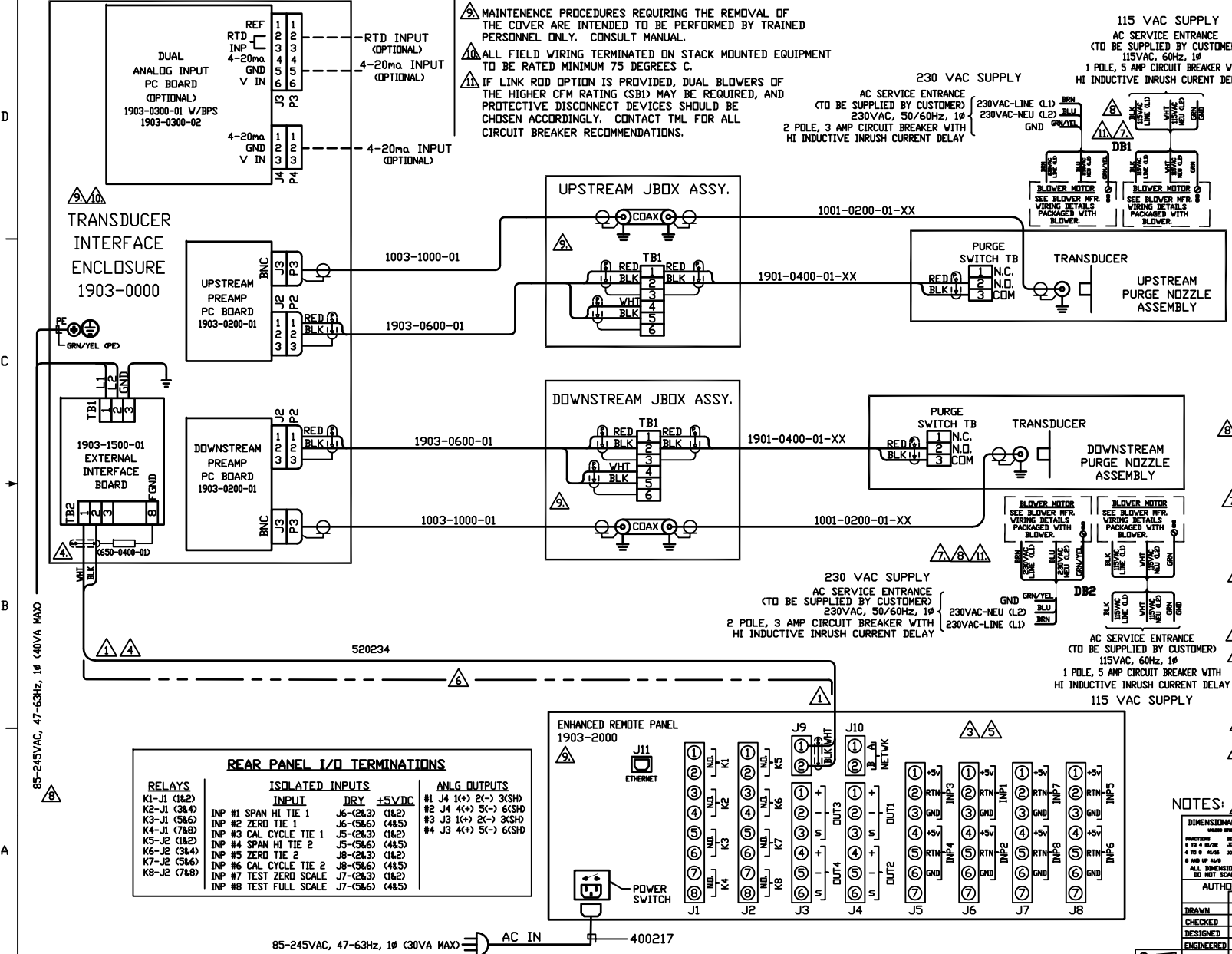
⚠ IF LINK ROD OPTION IS PROVIDED, DUAL BLOWERS OF THE HIGHER CFM RATING (SBI) MAY BE REQUIRED, AND PROTECTIVE DISCONNECT DEVICES SHOULD BE CHOSEN ACCORDINGLY. CONTACT TML FOR ALL CIRCUIT BREAKER RECOMMENDATIONS.



- ⚠ CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL DISC. DEVICES WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED BREAKERS.
- ⚠ SYSTEMS MAY BE PROVIDED WITH ONE BLOWER 'SBI' OR DUAL BLOWERS, 'DB1 & DB2'. THE SIZE AND QUANTITY OF BLOWERS ARE DETERMINED BY TML BASED ON THE SPECIFICATIONS AND CONDITIONS OF EACH INDIVIDUAL STACK. SEE NOTE 11.
- ⚠ IF FIBRELINK III OPTION IS PROVIDED, CONNECT CONTROL UNITS AND DATA CABLES PER TML SUPPLEMENTAL WIRING DIAGRAM 1808-0003, SHT. 4 AND 1808-0007.
- ⚠ SEE 'REAR PANEL I/O TABLE' FOR WIRE TERMINATIONS.
- ⚠ RECOMMENDED STACK NETWORK CABLE IS 'SHIELDED'. SHIELDS MUST BE TERMINATED AS SHOWN AND WITH TERMINATOR (0650-0400-01) AT THE TIE BOX. IN NO INSTALLATION SHALL DATA CABLE BE RUN IN TRAYS OR CONDUIT WITH OTHER CABLES EXCEEDING 230 VAC.
- ⚠ TERMINATE WIRES TO REAR PANEL USING CAGE CLAMP STYLE CONNECTORS FROM KIT PROVIDED.
- ⚠ ALL CUSTOMER CONNECTIONS TO ANALOG OUTPUTS MUST BE THRU TWISTED PAIR SHIELDED CABLES. ALL SUCH SHIELDS SHALL TERMINATE AT J4-3; J4-6; J3-3; J3-6 FOR OUTPUTS 1 THRU 4 RESPECTIVELY.

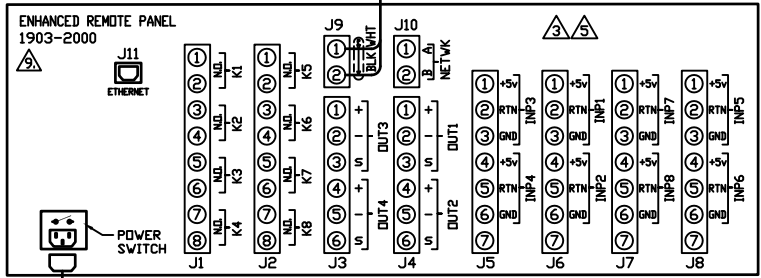
NOTES: ⚠ TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		USED IN		TELEDYNE MONITOR LABS Everywhere you look
FRACTION	DECIMAL	DRAWING	ASSEMBLY	
0 TO 4 1/2"	±0.005	1900-0000		TITLE: ULTRAFLOW 150 STD. WIRING DIAGRAM (115/230 VAC) FINISH:
4 TO 6 1/2"	±0.008			
6 TO 10 1/2"	±0.010			
OVER 10 1/2"	±0.015			
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.				
AUTHORIZATION:				
BY DATE		MATERIAL		
DRAWN DCH 8-30-01				
CHECKED DMB 5-23-02				
DESIGNED DCH 8-30-01				
ENGINEERED DMB 5-23-02				
PRODUCTION PD 5-23-02				
PROJECTION G.A. 5-23-02				
SCALE: 1:12		DRAWING NO. 1900-0004		
		LAYER: F		

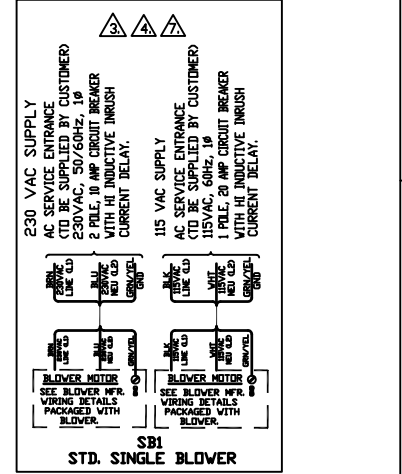


REAR PANEL I/O TERMINATIONS

RELAYS	ISOLATED INPUTS	ANLG OUTPUTS
K1-J1 (1&2)	INPUT DRY ±5VDC	#1 J4 I(+) 2(-) 3(SH)
K2-J1 (3&4)	INP #1 SPAN HI TIE 1 J6-(2&3) (1&2)	#2 J4 4(+) 5(-) 6(SH)
K3-J1 (5&6)	INP #2 ZERO TIE 1 J6-(5&6) (4&5)	#3 J3 I(+) 2(-) 3(SH)
K4-J1 (7&8)	INP #3 CAL CYCLE TIE 1 J5-(2&3) (1&2)	#4 J3 4(+) 5(-) 6(SH)
K5-J2 (1&2)	INP #4 SPAN HI TIE 2 J5-(5&6) (4&5)	
K6-J2 (3&4)	INP #5 ZERO TIE 2 J8-(2&3) (1&2)	
K7-J2 (5&6)	INP #6 CAL CYCLE TIE 2 J8-(5&6) (4&5)	
K8-J2 (7&8)	INP #7 TEST ZERO SCALE J7-(2&3) (1&2)	
	INP #8 TEST FULL SCALE J7-(5&6) (4&5)	



ZONE	SYM.	DESCRIPTION	DATE	APPD.
A		ADDED THIS SHEET PER DCN #1900-0004A	7-1-02	ELM
B		NO CHANGE THIS SHEET	9-20-02	ELM
C		NO CHANGE THIS SHEET	5-13-03	ELM
D		NO CHANGE THIS SHEET	11-20-03	ELM
E		PER DCN 1900-0004E	6-1-07	ELM
F		NO CHANGE THIS SHEET	10-10-13	I.E.



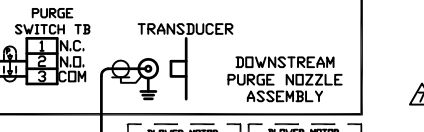
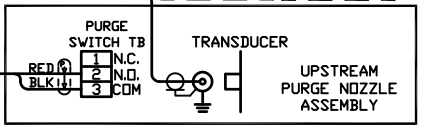
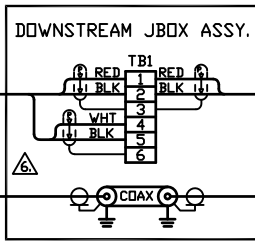
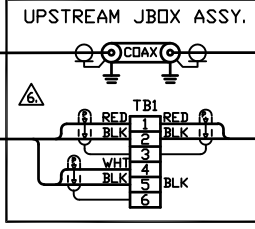
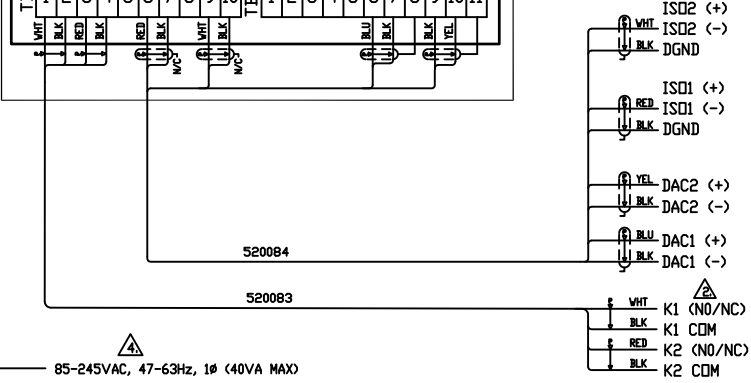
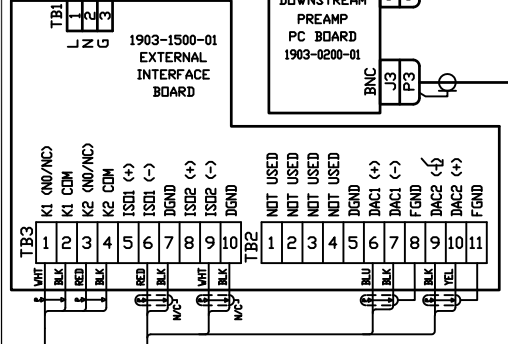
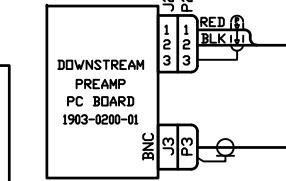
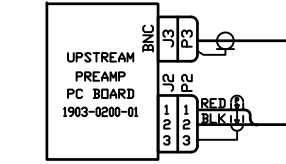
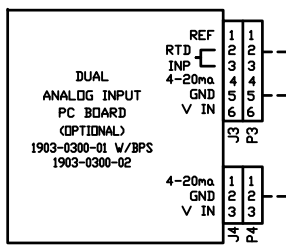
- IF LINK ROD OPTION IS PROVIDED, DUAL BLOWERS OF THE HIGHER CFM RATING (SBI) MAY BE REQUIRED, AND PROTECTIVE DISCONNECT DEVICES SHOULD BE CHOSEN ACCORDINGLY. CONTACT TML FOR ALL CIRCUIT BREAKER RECOMMENDATIONS.
- MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.
- ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- CUSTOMER TO PROVIDE CIRCUIT BREAKER OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL EACH DISC. DEVICE WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. SEE NOTE 7.
- SYSTEMS MAY BE PROVIDED WITH ONE BLOWER "SBI" OR DUAL BLOWERS, "DB1 & DB2". THE SIZE AND QUANTITY OF BLOWERS ARE DETERMINED BY TML BASED ON THE SPECIFICATIONS AND CONDITIONS OF EACH INDIVIDUAL STACK. SEE NOTE 7.
- RELAY CONTACTS ARE JUMPER SELECTABLE ON 6 POINT I/O PC BOARD (N.O. OR N.C.). SEE USER'S MANUAL.

NOTES: TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED			USED IN		TELEDYNE MONITOR LABS Everywhere you look
FRACTION	DECIMAL	ANGLE	DRAWING	ASSEMBLY	
0 TO 4 1/2"	0.005	0.005	1900-0000		TITLE ULTRAFLOW 150 DIRECT INTERFACE WIRING DIAGRAM (115/230 VAC)
4 TO 8 1/2"	0.010	0.010			
8 TO 16 1/2"	0.015	0.015			
16 TO 30 1/2"	0.020	0.020			
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE THIS DRAWING					
AUTHORIZATION					
BY		DATE		MATERIAL	
DRAWN DCH		9-6-01			
CHECKED ELM		7-18-02			
DESIGNED DCH		9-6-01			
ENGINEERED ELM		7-18-02			
PRODUCTION PD		7-19-02			
PROJECTION G.A.		7-18-02			

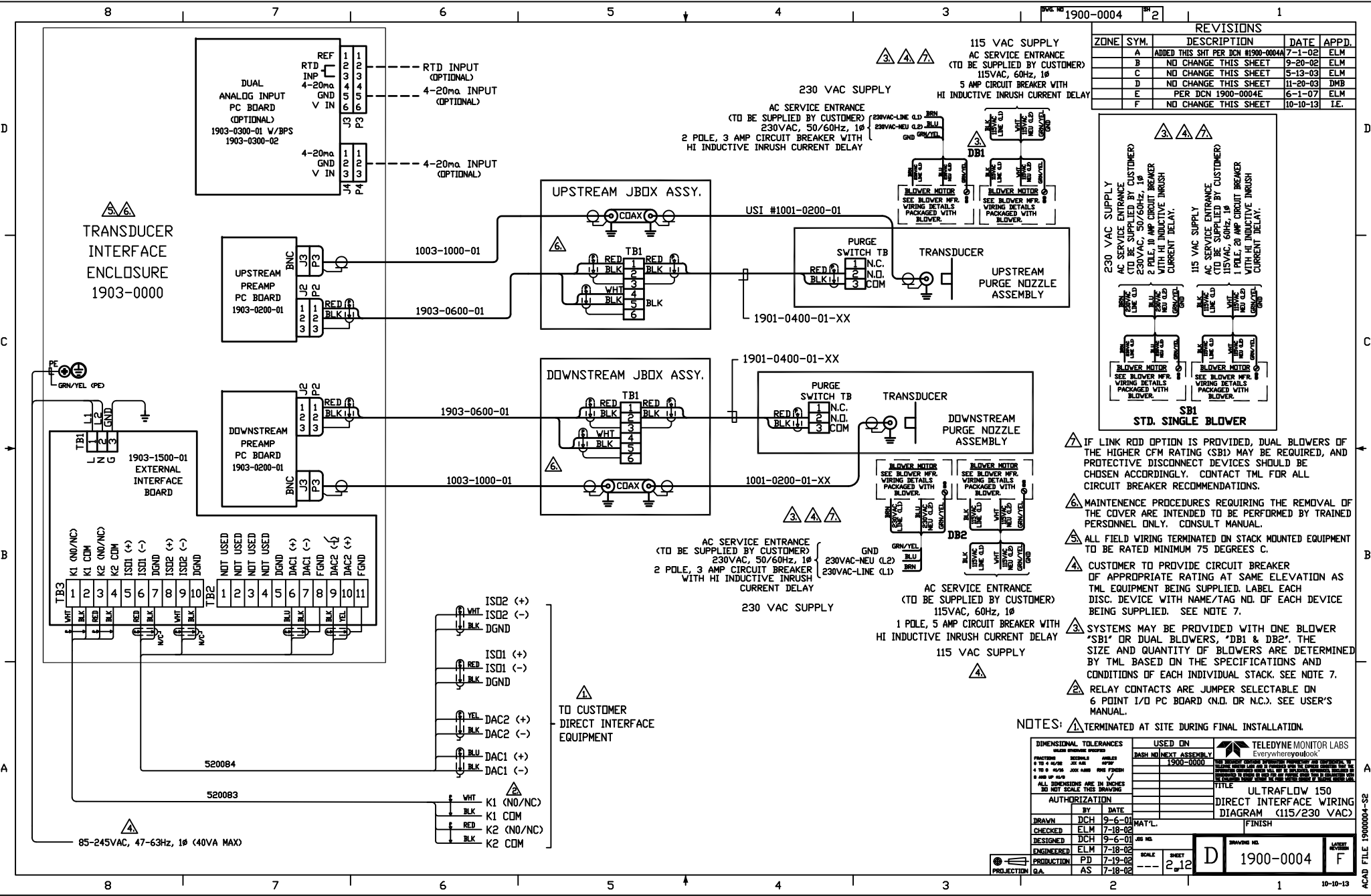
SCALE	SHEET	FINISH	DRIVING NO.	LAST REVISION
2.12	12		D 1900-0004	F

TRANSUCER INTERFACE ENCLOSURE 1903-0000

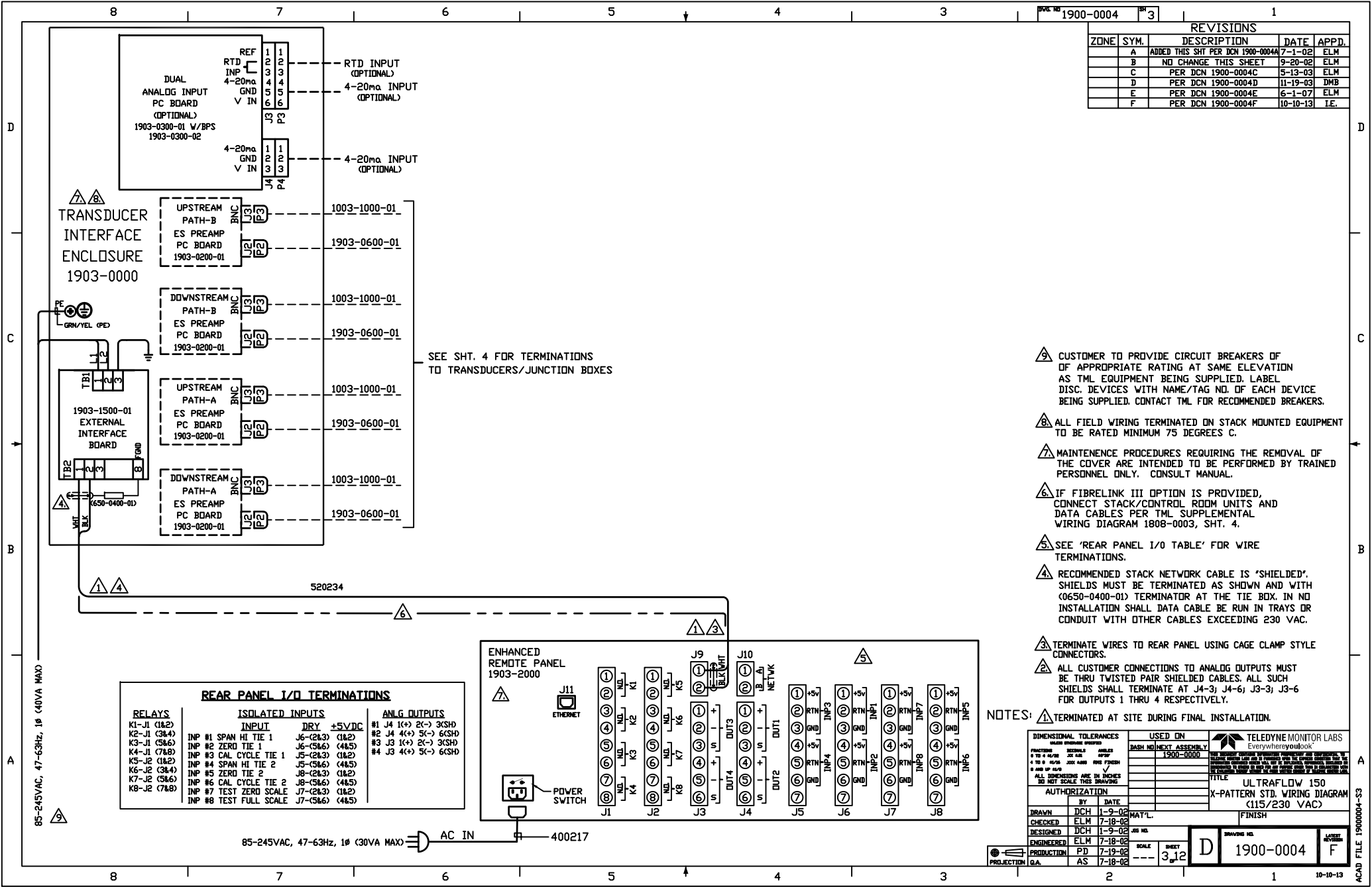


AC SERVICE ENTRANCE (TO BE SUPPLIED BY CUSTOMER)
230VAC, 50/60Hz, 1Ø
2 POLE, 3 AMP CIRCUIT BREAKER WITH HI INDUCTIVE INRUSH CURRENT DELAY

AC SERVICE ENTRANCE (TO BE SUPPLIED BY CUSTOMER)
115VAC, 60Hz, 1Ø
1 POLE, 5 AMP CIRCUIT BREAKER WITH HI INDUCTIVE INRUSH CURRENT DELAY



REVOLUTIONS		DATE	APPD.
ZONE	SYM.	DESCRIPTION	
A		ADDED THIS SHT PER DCN 1900-0004A	7-1-02 ELM
B		NO CHANGE THIS SHEET	9-20-02 ELM
C		PER DCN 1900-0004C	5-13-03 ELM
D		PER DCN 1900-0004D	11-19-03 DMB
E		PER DCN 1900-0004E	6-1-07 ELM
F		PER DCN 1900-0004F	10-10-13 I.E.



SEE SHT. 4 FOR TERMINATIONS TO TRANSDUCERS/JUNCTION BOXES

- ⚠ CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL DISC. DEVICES WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED BREAKERS.
- ⚠ ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- ⚠ MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.
- ⚠ IF FIBRELINK III OPTION IS PROVIDED, CONNECT STACK/CONTROL ROOM UNITS AND DATA CABLES PER TML SUPPLEMENTAL WIRING DIAGRAM 1808-0003, SHT. 4.
- ⚠ SEE 'REAR PANEL I/O TABLE' FOR WIRE TERMINATIONS.
- ⚠ RECOMMENDED STACK NETWORK CABLE IS 'SHIELDED'. SHIELDS MUST BE TERMINATED AS SHOWN AND WITH (0650-0400-01) TERMINATOR AT THE TIE BOX. IN NO INSTALLATION SHALL DATA CABLE BE RUN IN TRAYS OR CONDUIT WITH OTHER CABLES EXCEEDING 230 VAC.
- ⚠ TERMINATE WIRES TO REAR PANEL USING CAGE CLAMP STYLE CONNECTORS.
- ⚠ ALL CUSTOMER CONNECTIONS TO ANALOG OUTPUTS MUST BE THRU TWISTED PAIR SHIELDED CABLES. ALL SUCH SHIELDS SHALL TERMINATE AT J4-3; J4-6; J3-3; J3-6 FOR OUTPUTS 1 THRU 4 RESPECTIVELY.

NOTES: ⚠ TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED			USED IN		TELEDYNE MONITOR LABS Everywhere you look
FRACTION	DECIMAL	ANGLES	DASH	NEXT ASSEMBLY	
0 TO 4 1/32"	0.005	±0.005		1900-0000	TITLE: ULTRAFLUW 150 X-PATTERN STD. WIRING DIAGRAM (115/230 VAC) FINISH:
4 TO 8 1/16"	0.010	±0.010			
8 TO 16 1/8"	0.020	±0.020			
16 TO 32 1/4"	0.040	±0.040			
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED					
DO NOT SCALE THESE DRAWINGS					
AUTHORIZATION					
BY	DATE				
DRAWN	DCH	1-9-02	MAT'L.		
CHECKED	ELM	7-18-02	JIG NO.		
DESIGNED	DCH	1-9-02	SCALE		
ENGINEERED	ELM	7-18-02	SHEET		
PRODUCTION	PD	7-19-02	3.12		
PROJECTION	AS	7-18-02			

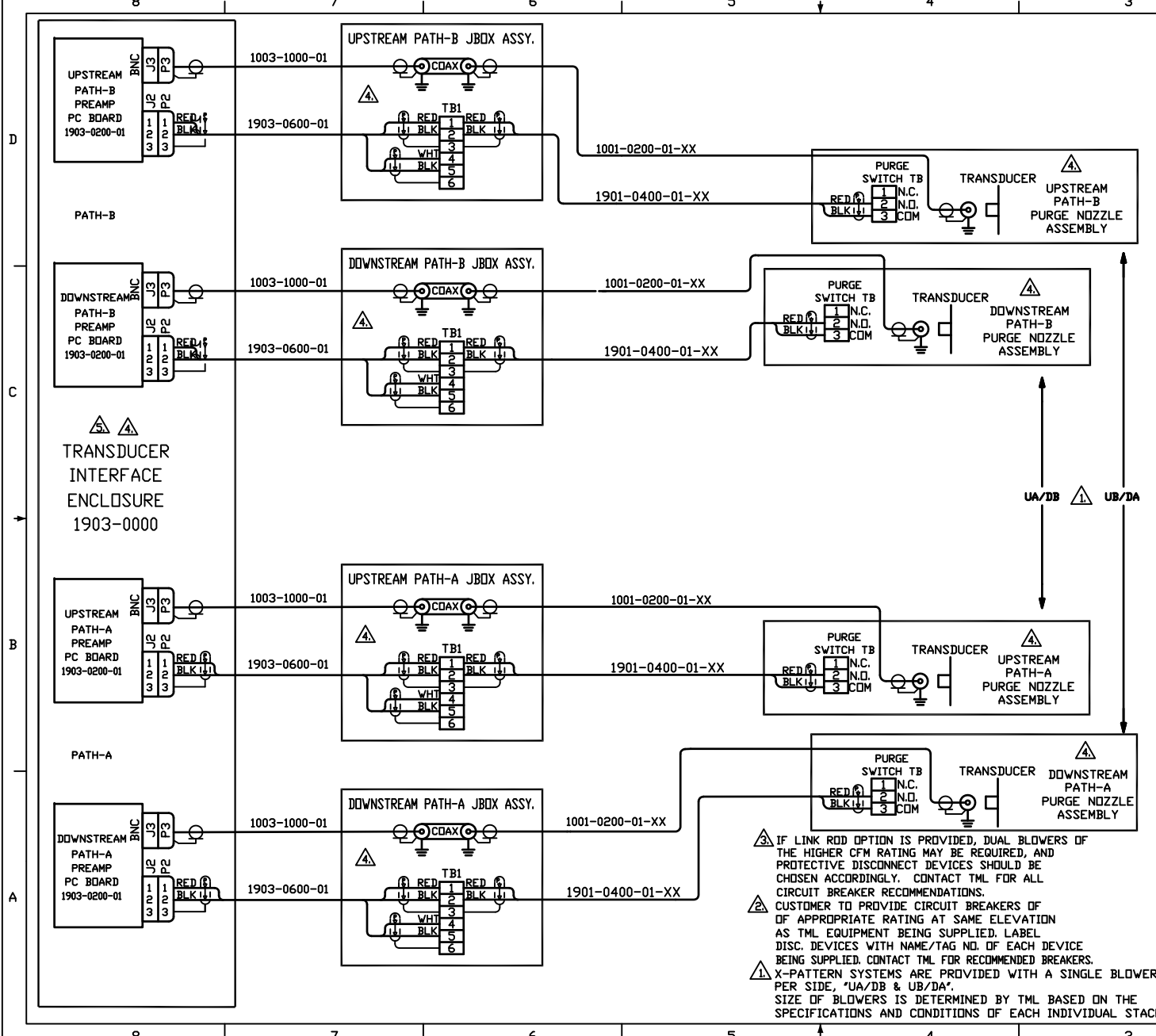
DRWG NO.	1900-0004	REVISED	F
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85-245VAC, 47-63Hz, 1Ø (40VA MAX)

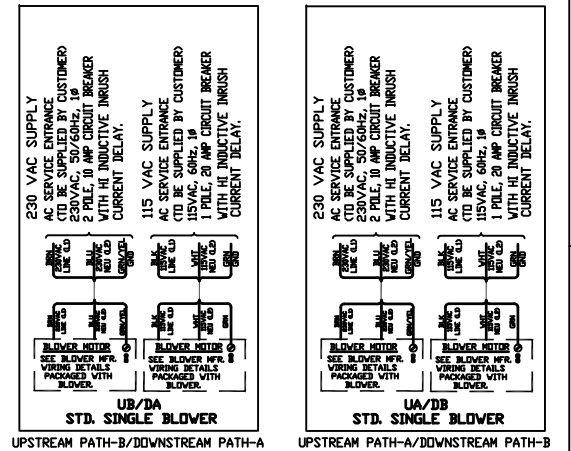
85-245VAC, 47-63Hz, 1Ø (30VA MAX) AC IN 400217

REVISIONS

ZONE	SYM.	DESCRIPTION	DATE	APPD.
A		ADDED THIS SHEET PER DCN 1900-0004A	7-1-02	ELM
B		PER DCN 1900-0004B	9-25-02	ELM
C		NO CHANGE THIS SHEET	5-13-03	ELM
D		NO CHANGE THIS SHEET	11-20-03	DMB
E		PER DCN 1900-0004E	6-1-07	ELM
F		NO CHANGE THIS SHEET	10-10-13	I.E.



- ⚠ ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- ⚠ MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.



BLOWERS

NOTE:
FOR STANDARD (LOWWORKS) NETWORK,
USE WITH SHEET 3.
FOR DIRECT INTERFACE SYSTEMS,
USE WITH SHEET 5.

- ⚠ IF LINK ROD OPTION IS PROVIDED, DUAL BLOWERS OF THE HIGHER CFM RATING MAY BE REQUIRED, AND PROTECTIVE DISCONNECT DEVICES SHOULD BE CHOSEN ACCORDINGLY. CONTACT TML FOR ALL CIRCUIT BREAKER RECOMMENDATIONS. CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL DISC. DEVICES WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED BREAKERS.
- ⚠ X-PATTERN SYSTEMS ARE PROVIDED WITH A SINGLE BLOWER PER SIDE, 'UA/DB & UB/DA'. SIZE OF BLOWERS IS DETERMINED BY TML BASED ON THE SPECIFICATIONS AND CONDITIONS OF EACH INDIVIDUAL STACK.

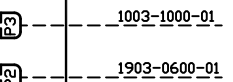
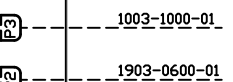
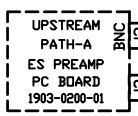
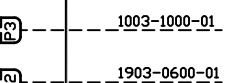
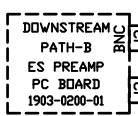
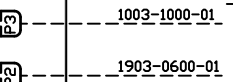
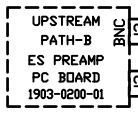
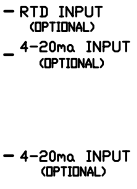
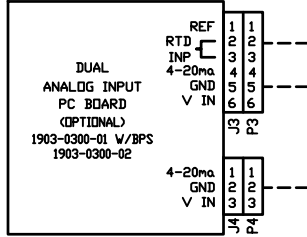
DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		USED ON		TELEDYNE MONITOR LABS Everywhere you look	
FRACTION	DECIMAL	DRAWING	ASSEMBLY	THIS DESIGN CONTAINS TRADEMARKS AND PROPRIETARY INFORMATION. ALL RIGHTS ARE RESERVED. THE COMPANY ASSUMES NO LIABILITY FOR REPRODUCTION OR TRANSMISSION OF THIS INFORMATION WITHOUT THE WRITTEN PERMISSION OF THE COMPANY.	
0 TO 1/16	0.0005	1900-0000	1900-0000		
1/16 TO 1/8	0.0010			TITLE ULTRAFLOW 150 X-PATTERN WIRING DIAGRAM (115/230 VAC)	
1/8 TO 1/2	0.0020			FINISH	
1/2 TO 1	0.0030			AUTHORIZATION	
1 TO 2	0.0040			BY DATE	
2 TO 3	0.0050			DRAWN DCH 8-30-01	
3 TO 4	0.0060			CHECKED ELM 7-18-02	
4 TO 5	0.0070			DESIGNED DCH 1-10-02	
5 TO 6	0.0080			ENGINEERED ELM 7-18-02	
6 TO 7	0.0090			PRODUCTION PD 7-19-02	
7 TO 8	0.0100			PROJECTION G.A. 7-18-02	

DRWING NO.	1900-0004	LAST REVISION	F
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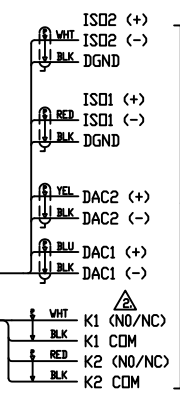
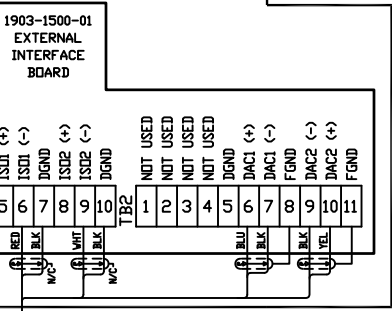
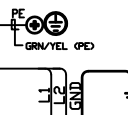
REVISIONS

ZONE	SYM.	DESCRIPTION	DATE	APPD.
A		ADDED THIS SHT PER DCN 1900-0004A	7-1-02	ELM
B		NO CHANGE THIS SHEET	9-20-02	ELM
C		NO CHANGE THIS SHEET	5-13-03	ELM
D		NO CHANGE THIS SHEET	11-20-03	DMB
E		PER DCN 1900-0004E	6-1-07	ELM
F		PER DCN 1900-0004F	10-10-13	I.E.

TRANSUCER
INTERFACE
ENCLOSURE
1903-0000



SEE SHT. 4 FOR TERMINATIONS
TO TRANSDUCERS/JUNCTION BOXES



TO CUSTOMER
DIRECT INTERFACE
EQUIPMENT

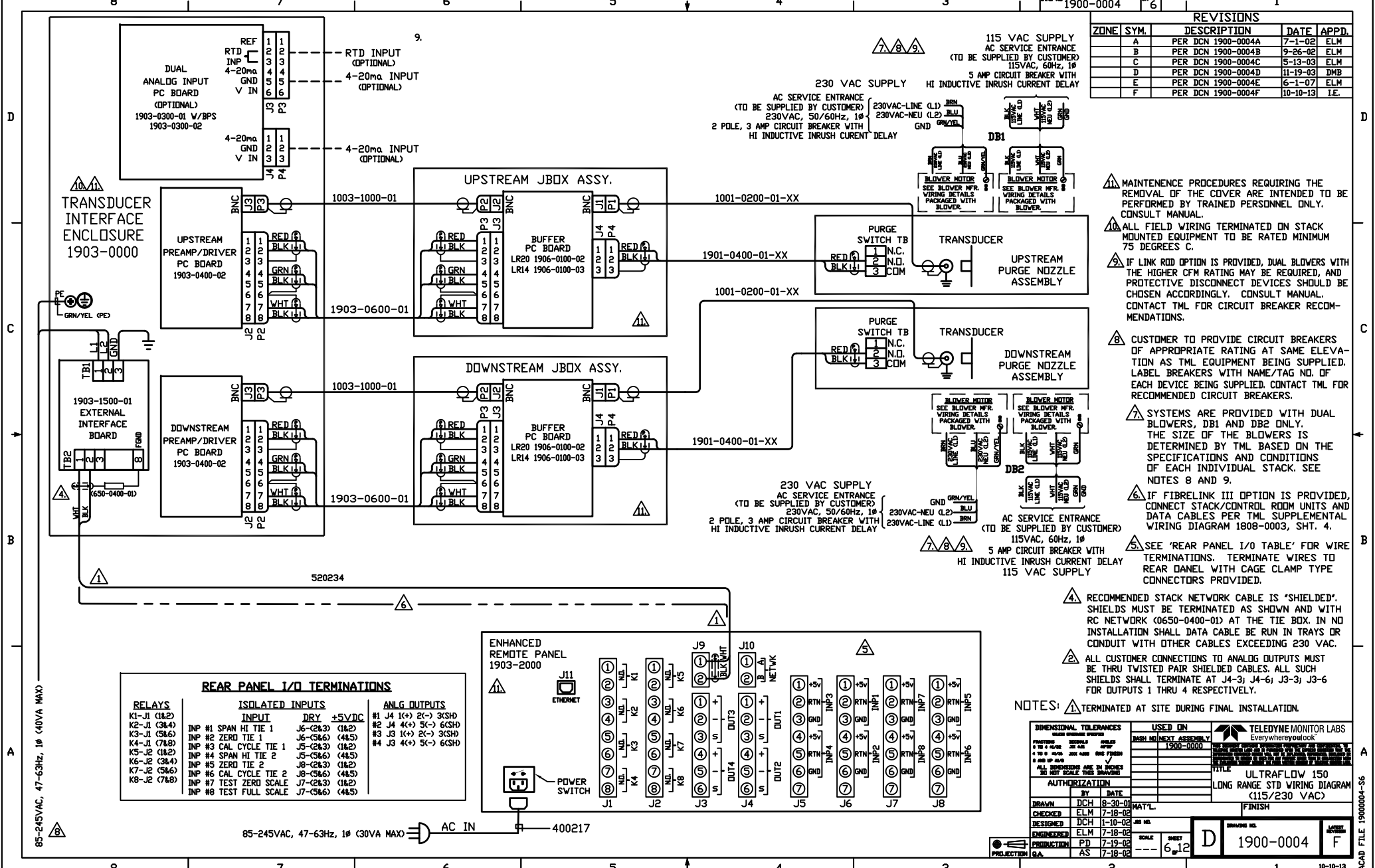
- ⚠ MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.
- ⚠ CUSTOMER TO PROVIDE CIRCUIT BREAKER OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL EACH DISC. DEVICE WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. SEE NOTE 7.
- ⚠ ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- ⚠ RELAY CONTACTS ARE JUMPER SELECTABLE ON 6 POINT 1/0 PC BOARD (N.O. OR N.C.). SEE USER'S MANUAL.

NOTES: ⚠ TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DECIMALS ANGLES 0 TO 4 1/16 0.015 0.030 0.062 0.125 4 TO 8 1/32 0.030 0.060 0.125 0.250 8 TO 16 1/64 0.015 0.030 0.060 0.125 16 TO 48 1/32 0.030 0.060 0.125 0.250 48 TO 96 1/16 0.060 0.125 0.250 0.500 ALL DIMENSIONS ARE IN INCHES DO NOT SCALE THESE DRAWINGS	USED ON DASH NO/NEXT ASSEMBLY 1900-0000	TELEDYNE MONITOR LABS EverywhereYouLook TITLE ULTRAFLOW 150 X-PATTERN D.I. WIRING DIAGRAM (115/230 VAC)
	AUTHORIZATION BY DATE DRAWN DCH 1-9-02 CHECKED ELM 7-18-02 DESIGNED DCH 1-10-02 ENGINEERED ELM 7-18-02 PRODUCTION PD 7-19-02 G.A. AS 7-18-02	

85-245VAC, 47-63Hz, 1Ø (40VA MAX)

ZONE	SYM.	DESCRIPTION	DATE	APPD.
A		PER DCN 1900-0004A	7-1-02	ELM
B		PER DCN 1900-0004B	9-26-02	ELM
C		PER DCN 1900-0004C	5-13-03	ELM
D		PER DCN 1900-0004D	11-19-03	DMB
E		PER DCN 1900-0004E	6-1-07	ELM
F		PER DCN 1900-0004F	10-10-13	I.E.

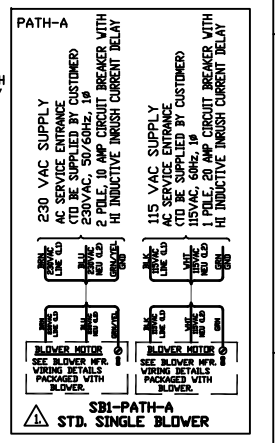
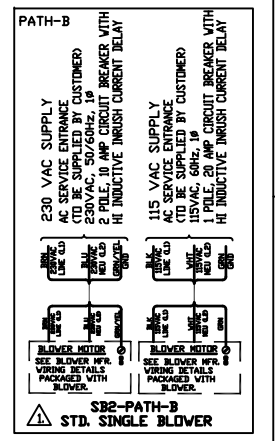
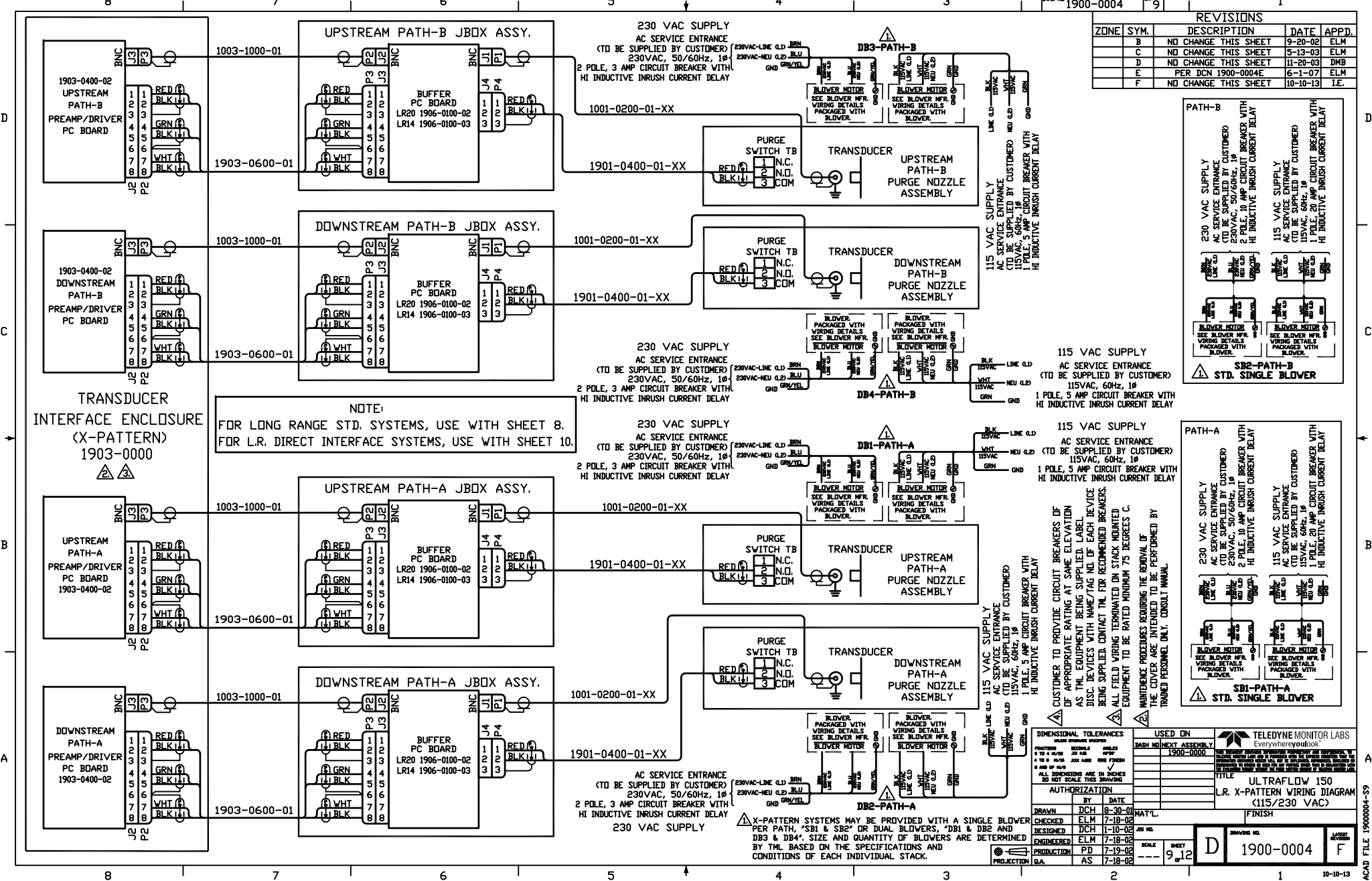


- ⚠ MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.
- ⚠ ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- ⚠ IF LINK ROD OPTION IS PROVIDED, DUAL BLOWERS WITH THE HIGHER CFM RATING MAY BE REQUIRED, AND PROTECTIVE DISCONNECT DEVICES SHOULD BE CHOSEN ACCORDINGLY. CONSULT MANUAL. CONTACT TML FOR CIRCUIT BREAKER RECOMMENDATIONS.
- ⚠ CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL BREAKERS WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED CIRCUIT BREAKERS.
- ⚠ SYSTEMS ARE PROVIDED WITH DUAL BLOWERS, DB1 AND DB2 ONLY. THE SIZE OF THE BLOWERS IS DETERMINED BY TML BASED ON THE SPECIFICATIONS AND CONDITIONS OF EACH INDIVIDUAL STACK. SEE NOTES 8 AND 9.
- ⚠ IF FIBRELINK III OPTION IS PROVIDED, CONNECT STACK/CONTROL ROOM UNITS AND DATA CABLES PER TML SUPPLEMENTAL WIRING DIAGRAM 1808-0003, SHT. 4.
- ⚠ SEE "REAR PANEL I/O TABLE" FOR WIRE TERMINATIONS. TERMINATE WIRES TO REAR PANEL WITH CAGE CLAMP TYPE CONNECTORS PROVIDED.
- ⚠ RECOMMENDED STACK NETWORK CABLE IS "SHIELDED". SHIELDS MUST BE TERMINATED AS SHOWN AND WITH RC NETWORK (0650-0400-01) AT THE TIE BOX. IN NO INSTALLATION SHALL DATA CABLE BE RUN IN TRAYS OR CONDUIT WITH OTHER CABLES EXCEEDING 230 VAC.
- ⚠ ALL CUSTOMER CONNECTIONS TO ANALOG OUTPUTS MUST BE THRU TWISTED PAIR SHIELDED CABLES. ALL SUCH SHIELDS SHALL TERMINATE AT J4-3) J4-6) J3-3) J3-6 FOR OUTPUTS 1 THRU 4 RESPECTIVELY.

NOTES: ⚠ TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED			USED IN		TELEDYNE MONITOR LABS Everywhereyoulook	
FRONT	0 TO 4	±0.005	ASSEMBLY	1900-0000		
BACK	4 TO 8	±0.005				
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED						
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED						
AUTHORIZATION			DATE		TITLE	
BY			DATE		TITLE	
DRAWN DCH			8-30-01		MATERIAL	
CHECKED ELM			7-18-02		FINISH	
DESIGNED DCH			1-10-02		JOB NO.	
ENGINEERED ELM			7-18-02		SCALE	
PRODUCTION PD			7-19-02		SHEET	
PROJECT M.A.			7-18-02		DRAWING NO.	
					1900-0004	
					REVISED	
					F	

ZONE	SYM.	DESCRIPTION	DATE	APPD.
	0	NO CHANGE THIS SHEET	9-20-02	ELM
	1	NO CHANGE THIS SHEET	5-13-03	ELM
	2	NO CHANGE THIS SHEET	11-20-03	DMB
	3	PER DCN 1900-0004E	6-1-07	ELM
	4	NO CHANGE THIS SHEET	10-10-13	I.E.



CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL DISC. DEVICES WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED BREAKERS. ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C. MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.

DIMENSIONAL TOLERANCES

FRACTIONS	DECIMALS	ANGLES
± 0.125	± 0.005	± 0.005
± 0.250	± 0.010	± 0.010
± 0.375	± 0.015	± 0.015
± 0.500	± 0.020	± 0.020
± 0.625	± 0.025	± 0.025
± 0.750	± 0.030	± 0.030
± 0.875	± 0.035	± 0.035
± 1.000	± 0.040	± 0.040
± 1.125	± 0.045	± 0.045
± 1.250	± 0.050	± 0.050
± 1.375	± 0.055	± 0.055
± 1.500	± 0.060	± 0.060
± 1.625	± 0.065	± 0.065
± 1.750	± 0.070	± 0.070
± 1.875	± 0.075	± 0.075
± 2.000	± 0.080	± 0.080
± 2.125	± 0.085	± 0.085
± 2.250	± 0.090	± 0.090
± 2.375	± 0.095	± 0.095
± 2.500	± 0.100	± 0.100
± 2.625	± 0.105	± 0.105
± 2.750	± 0.110	± 0.110
± 2.875	± 0.115	± 0.115
± 3.000	± 0.120	± 0.120
± 3.125	± 0.125	± 0.125
± 3.250	± 0.130	± 0.130
± 3.375	± 0.135	± 0.135
± 3.500	± 0.140	± 0.140
± 3.625	± 0.145	± 0.145
± 3.750	± 0.150	± 0.150
± 3.875	± 0.155	± 0.155
± 4.000	± 0.160	± 0.160
± 4.125	± 0.165	± 0.165
± 4.250	± 0.170	± 0.170
± 4.375	± 0.175	± 0.175
± 4.500	± 0.180	± 0.180
± 4.625	± 0.185	± 0.185
± 4.750	± 0.190	± 0.190
± 4.875	± 0.195	± 0.195
± 5.000	± 0.200	± 0.200
± 5.125	± 0.205	± 0.205
± 5.250	± 0.210	± 0.210
± 5.375	± 0.215	± 0.215
± 5.500	± 0.220	± 0.220
± 5.625	± 0.225	± 0.225
± 5.750	± 0.230	± 0.230
± 5.875	± 0.235	± 0.235
± 6.000	± 0.240	± 0.240
± 6.125	± 0.245	± 0.245
± 6.250	± 0.250	± 0.250
± 6.375	± 0.255	± 0.255
± 6.500	± 0.260	± 0.260
± 6.625	± 0.265	± 0.265
± 6.750	± 0.270	± 0.270
± 6.875	± 0.275	± 0.275
± 7.000	± 0.280	± 0.280
± 7.125	± 0.285	± 0.285
± 7.250	± 0.290	± 0.290
± 7.375	± 0.295	± 0.295
± 7.500	± 0.300	± 0.300
± 7.625	± 0.305	± 0.305
± 7.750	± 0.310	± 0.310
± 7.875	± 0.315	± 0.315
± 8.000	± 0.320	± 0.320
± 8.125	± 0.325	± 0.325
± 8.250	± 0.330	± 0.330
± 8.375	± 0.335	± 0.335
± 8.500	± 0.340	± 0.340
± 8.625	± 0.345	± 0.345
± 8.750	± 0.350	± 0.350
± 8.875	± 0.355	± 0.355
± 9.000	± 0.360	± 0.360
± 9.125	± 0.365	± 0.365
± 9.250	± 0.370	± 0.370
± 9.375	± 0.375	± 0.375
± 9.500	± 0.380	± 0.380
± 9.625	± 0.385	± 0.385
± 9.750	± 0.390	± 0.390
± 9.875	± 0.395	± 0.395
± 10.000	± 0.400	± 0.400

USED ON

DRAWN	DCH	8-30-01	MAT'L.
CHECKED	ELM	7-18-02	
DESIGNED	DCH	1-10-02	
ENGINEERED	ELM	7-18-02	
PRODUCTION	PD	7-19-02	
PRODUCTION	AS	7-18-02	

TELEDYNE MONITOR LABS
 Everywhere you look

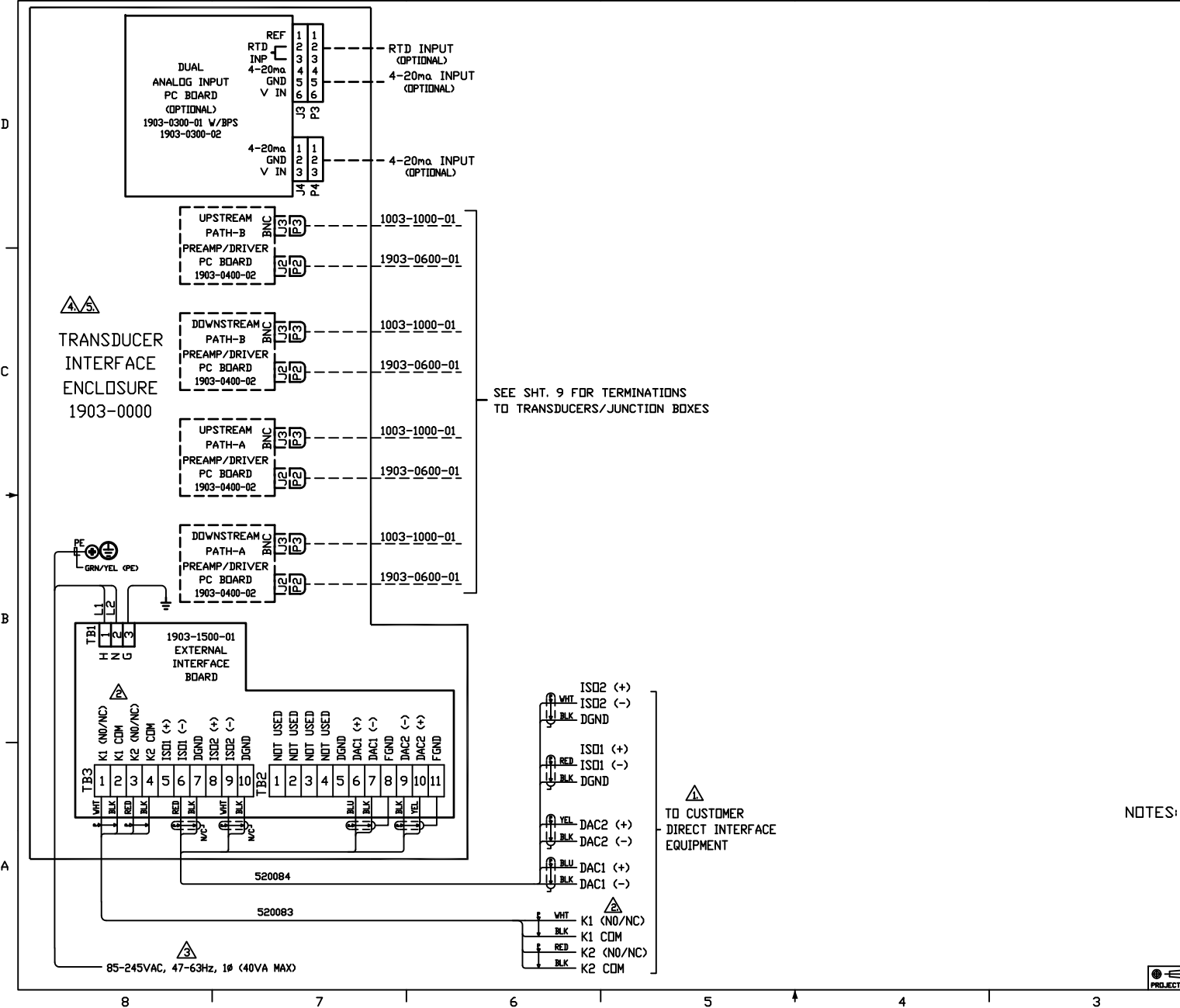
ULTRAFLOW 150
 L.R. X-PATTERN WIRING DIAGRAM
 (115/230 VAC)

FINISH

DATE	BY
1900-0004	D

SCALE 1:1 **SHEET** 9/12 **DATE** 9-12

REVISIONS				
ZONE	SYM.	DESCRIPTION	DATE	APPD.
	A	ADDED THIS SHT PER DCN 1900-0004A	7-1-02	ELM
	B	NO CHANGE THIS SHEET	9-20-02	ELM
	C	NO CHANGE THIS SHEET	5-13-03	ELM
	D	NO CHANGE THIS SHEET	11-20-03	DMB
	E	PER DCN 1900-0004E	6-1-07	ELM
	F	PER DCN 1900-0004F	10-10-13	I.E.



SEE SHT. 9 FOR TERMINATIONS TO TRANSDUCERS/JUNCTION BOXES

TO CUSTOMER DIRECT INTERFACE EQUIPMENT

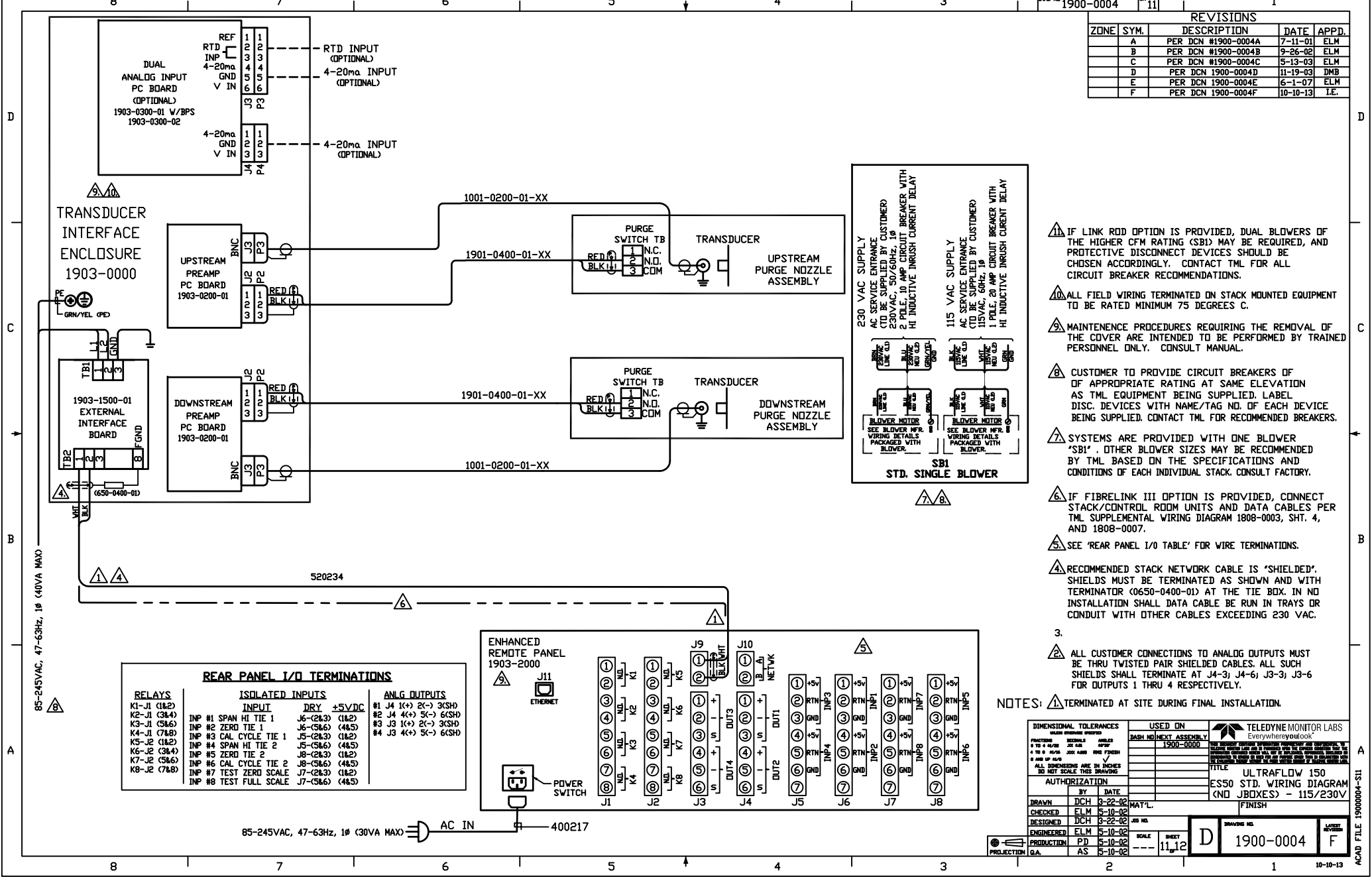
- ⚠ MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.
- ⚠ ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- ⚠ CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL DISC. DEVICES WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED BREAKERS.
- ⚠ RELAY CONTACTS ARE JUMPER SELECTABLE ON 6 POINT I/O PC BOARD (N.O. OR N.C.). SEE USER'S MANUAL.

NOTES: ⚠ TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DECIMALS MILLIMETERS 3/16 TO 1/8 1/32 3/64 1/16 1/8 TO 1/2 1/16 1/8 3/16 1/4 1/2 AND UP 1/8 1/4 3/8 1/2 ALL DIMENSIONS ARE IN INCHES DO NOT SCALE THESE DRAWINGS	USED ON DASH NEXT ASSEMBLY 1900-0000	TELEDYNE MONITOR LABS Everywhere you look TITLE ULTRAFLOW 150 L.R. X-PATT. DI. WIRING DIAGRAM (115/230 VAC)
	AUTHORIZATION BY DATE DRAWN DCH 1-9-02 CHECKED ELM 7-18-02 DESIGNED DCH 1-10-02 ENGINEERED ELM 7-18-02 PRODUCTION PD 7-19-02 PROJECTION G.A. 7-18-02	

REVISIONS

ZONE	SYM.	DESCRIPTION	DATE	APPD.
A		PER DCN #1900-0004A	7-11-01	ELM
B		PER DCN #1900-0004B	9-26-02	ELM
C		PER DCN #1900-0004C	5-13-03	ELM
D		PER DCN 1900-0004D	11-19-03	DMB
E		PER DCN 1900-0004E	6-1-07	ELM
F		PER DCN 1900-0004F	10-10-13	I.E.



- ⚠ IF LINK ROD OPTION IS PROVIDED, DUAL BLOWERS OF THE HIGHER CFM RATING (SBI) MAY BE REQUIRED, AND PROTECTIVE DISCONNECT DEVICES SHOULD BE CHOSEN ACCORDINGLY. CONTACT TML FOR ALL CIRCUIT BREAKER RECOMMENDATIONS.
- ⚠ ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- ⚠ MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.
- ⚠ CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL DISC. DEVICES WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED BREAKERS.
- ⚠ SYSTEMS ARE PROVIDED WITH ONE BLOWER 'SBI'. OTHER BLOWER SIZES MAY BE RECOMMENDED BY TML BASED ON THE SPECIFICATIONS AND CONDITIONS OF EACH INDIVIDUAL STACK. CONSULT FACTORY.
- ⚠ IF FIBRELINK III OPTION IS PROVIDED, CONNECT STACK/CONTROL ROOM UNITS AND DATA CABLES PER TML SUPPLEMENTAL WIRING DIAGRAM 1808-0003, SHT. 4, AND 1808-0007.
- ⚠ SEE 'REAR PANEL I/O TABLE' FOR WIRE TERMINATIONS.
- ⚠ RECOMMENDED STACK NETWORK CABLE IS 'SHIELDED'. SHIELDS MUST BE TERMINATED AS SHOWN AND WITH TERMINATOR (0650-0400-01) AT THE TIE BOX. IN NO INSTALLATION SHALL DATA CABLE BE RUN IN TRAYS OR CONDUIT WITH OTHER CABLES EXCEEDING 230 VAC.
- 3.
- ⚠ ALL CUSTOMER CONNECTIONS TO ANALOG OUTPUTS MUST BE THRU TWISTED PAIR SHIELDED CABLES. ALL SUCH SHIELDS SHALL TERMINATE AT J4-3J J4-6J J3-3J J3-6 FOR OUTPUTS 1 THRU 4 RESPECTIVELY.

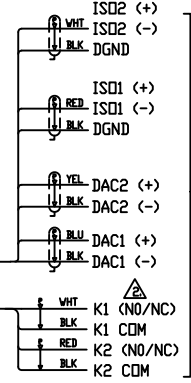
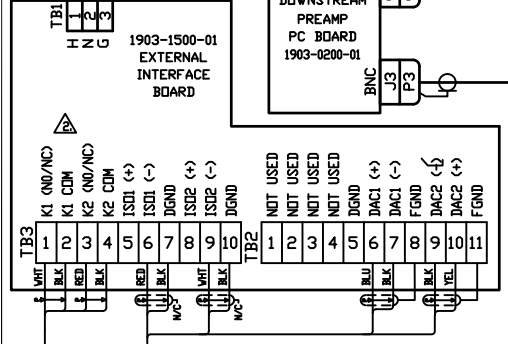
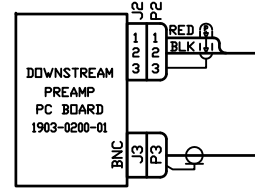
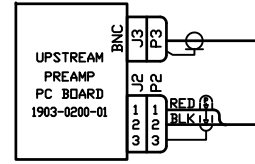
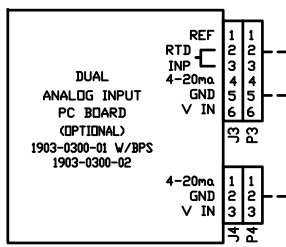
NOTES: ⚠ TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED			USED ON		TELEDYNE MONITOR LABS Everywhere you look
FRACTION	DECIMAL	ANGLES	DASH	NEXT ASSEMBLY	
0 TO 4	0.125	0.005		1900-0000	<small>THESE DIMENSIONAL TOLERANCES APPLY TO THE DIMENSIONS OF THE PARTS LISTED IN THIS DRAWING AND TO THE DIMENSIONS OF THE PARTS LISTED IN THE BOM. THE DIMENSIONS OF THE PARTS LISTED IN THE BOM ARE THE DIMENSIONS OF THE PARTS LISTED IN THE BOM. THE DIMENSIONS OF THE PARTS LISTED IN THE BOM ARE THE DIMENSIONS OF THE PARTS LISTED IN THE BOM.</small>
4 TO 8	0.150	0.005			
8 TO 16	0.188	0.005			
16 TO 32	0.250	0.005			
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED					
DO NOT SCALE THIS DRAWING					
AUTHORIZATION					
BY	DATE				
DRAWN	DCH	3-22-02	MAT'L.		
CHECKED	ELM	5-10-02			FINISH
DESIGNED	DCH	3-22-02	JOB NO.		
ENGINEERED	ELM	5-10-02			
PRODUCTION	PD	5-10-02	SCALE		
PROJECTION	AS	5-10-02	SHEET	11.12	

D	1900-0004	F
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ZONE	SYM.	DESCRIPTION	DATE	APPD.
A		ADDED THIS SHEET PER DCN 1900-0004A	7-01-02	ELM
B		PER DCN 1900-0004B	9-26-02	ELM
C		PER DCN 1900-0004C	5-13-03	ELM
D		NO CHANGE THIS SHEET	11-20-03	DMB
E		PER DCN 1900-0004E	6-1-07	ELM
F		PER DCN 1900-0004F	10-10-13	I.E.

TRANSUCER INTERFACE ENCLOSURE 1903-0000



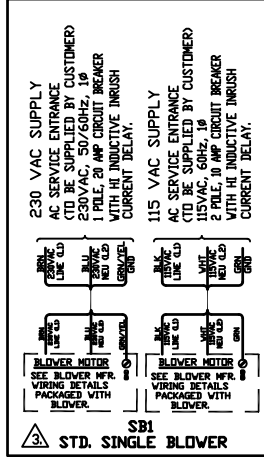
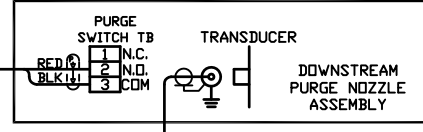
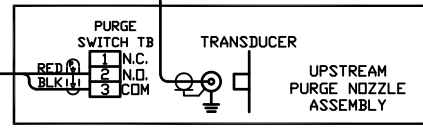
85-245VAC, 47-63Hz, 1Ø (40VA MAX)

#1001-0200-01

1901-0400-01-XX

1901-0400-01-XX

1001-0200-01-XX



- ALL FIELD WIRING TERMINATED ON STACK MOUNTED EQUIPMENT TO BE RATED MINIMUM 75 DEGREES C.
- MAINTENANCE PROCEDURES REQUIRING THE REMOVAL OF THE COVER ARE INTENDED TO BE PERFORMED BY TRAINED PERSONNEL ONLY. CONSULT MANUAL.
- IF LINK ROD OPTION IS PROVIDED, DUAL BLOWERS OF THE HIGHER CFM RATING (SBI) MAY BE REQUIRED, AND PROTECTIVE DISCONNECT DEVICES SHOULD BE CHOSEN ACCORDINGLY. CONTACT TML FOR ALL CIRCUIT BREAKER RECOMMENDATIONS.
- CUSTOMER TO PROVIDE CIRCUIT BREAKERS OF APPROPRIATE RATING AT SAME ELEVATION AS TML EQUIPMENT BEING SUPPLIED. LABEL DISC. DEVICES WITH NAME/TAG NO. OF EACH DEVICE BEING SUPPLIED. CONTACT TML FOR RECOMMENDED BREAKERS.
- SYSTEMS ARE PROVIDED WITH ONE BLOWER 'SBI'. OTHER BLOWER SIZES MAY BE RECOMMENDED BY TML BASED ON THE SPECIFICATIONS AND CONDITIONS OF EACH INDIVIDUAL STACK. CONSULT FACTORY.
- RELAY CONTACTS ARE JUMPER SELECTABLE ON 6 POINT I/O PC BOARD (N.D. OR N.C.). SEE USER'S MANUAL.

NOTES: TERMINATED AT SITE DURING FINAL INSTALLATION.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		USED ON		TELEDYNE MONITOR LABS Everywhere you look	
FRACTION	DECIMAL	DASH	NEXT ASSEMBLY		
0 TO $1/16$	0.005	1900-0000			
$1/16$ TO $1/4$	0.010				
$1/4$ TO $3/4$	0.015				
> $3/4$	0.020				
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED					
DO NOT SCALE THIS DRAWING					
AUTHORIZATION					
BY	DATE	MAT'L			
DRAWN	DCH	3-22-02			
CHECKED	ELM	7-18-02			
DESIGNED	DCH	3-22-02			
ENGINEERED	ELM	7-18-02			
PRODUCTION	PD	7-19-02			
PROJECTION	AS	7-18-02			
SCALE		SHEET		FINISH	
---		12.12		D	
DRAWING NO.		1900-0004		LATEST REVISION	
		F			