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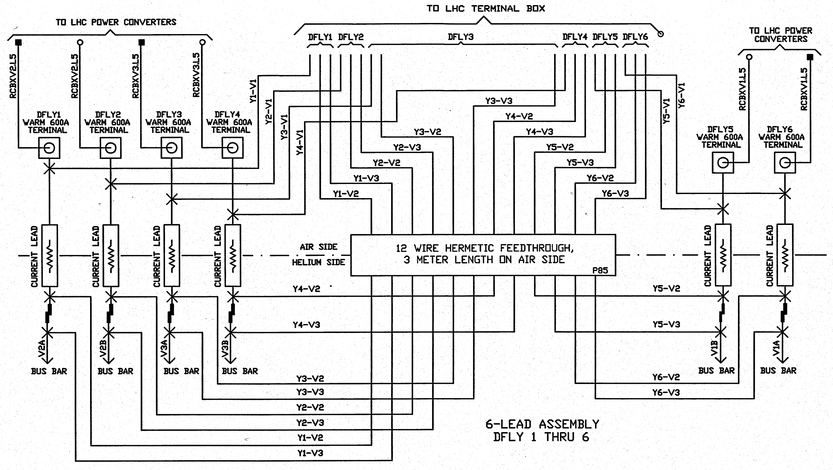
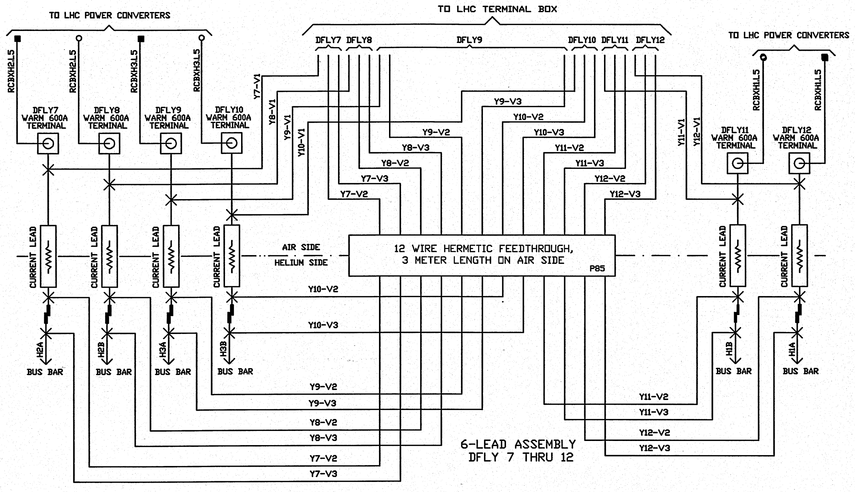
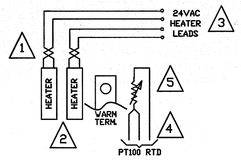
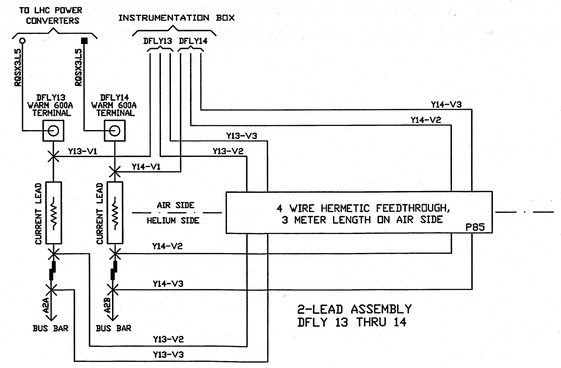


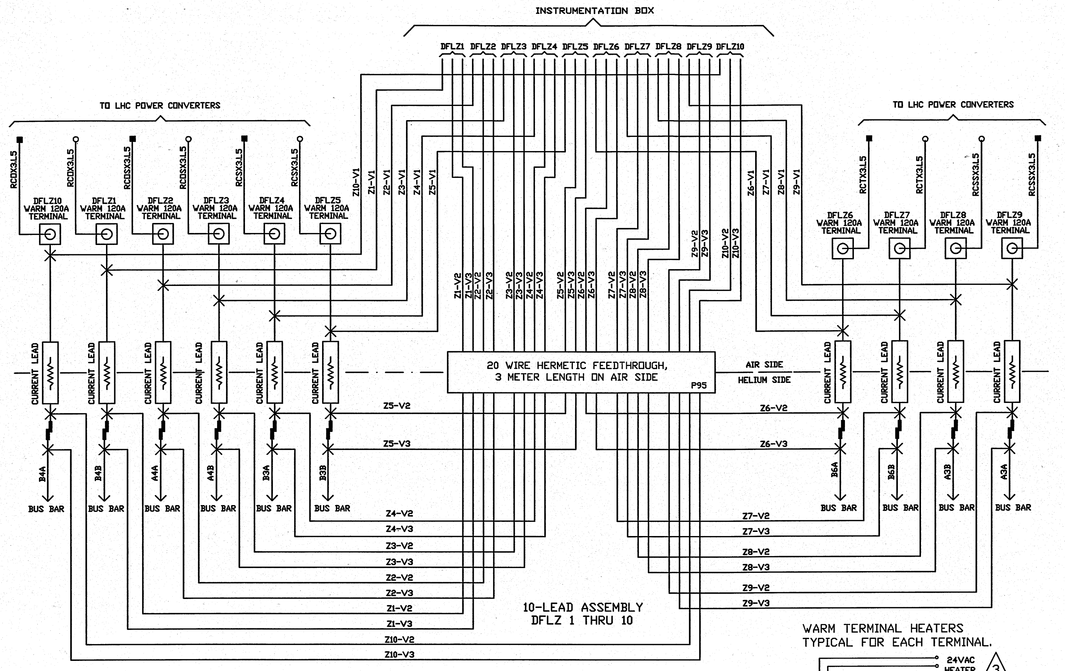


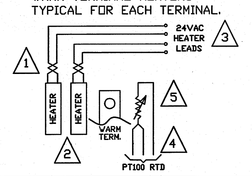


1

600A LEADS (DFLY)

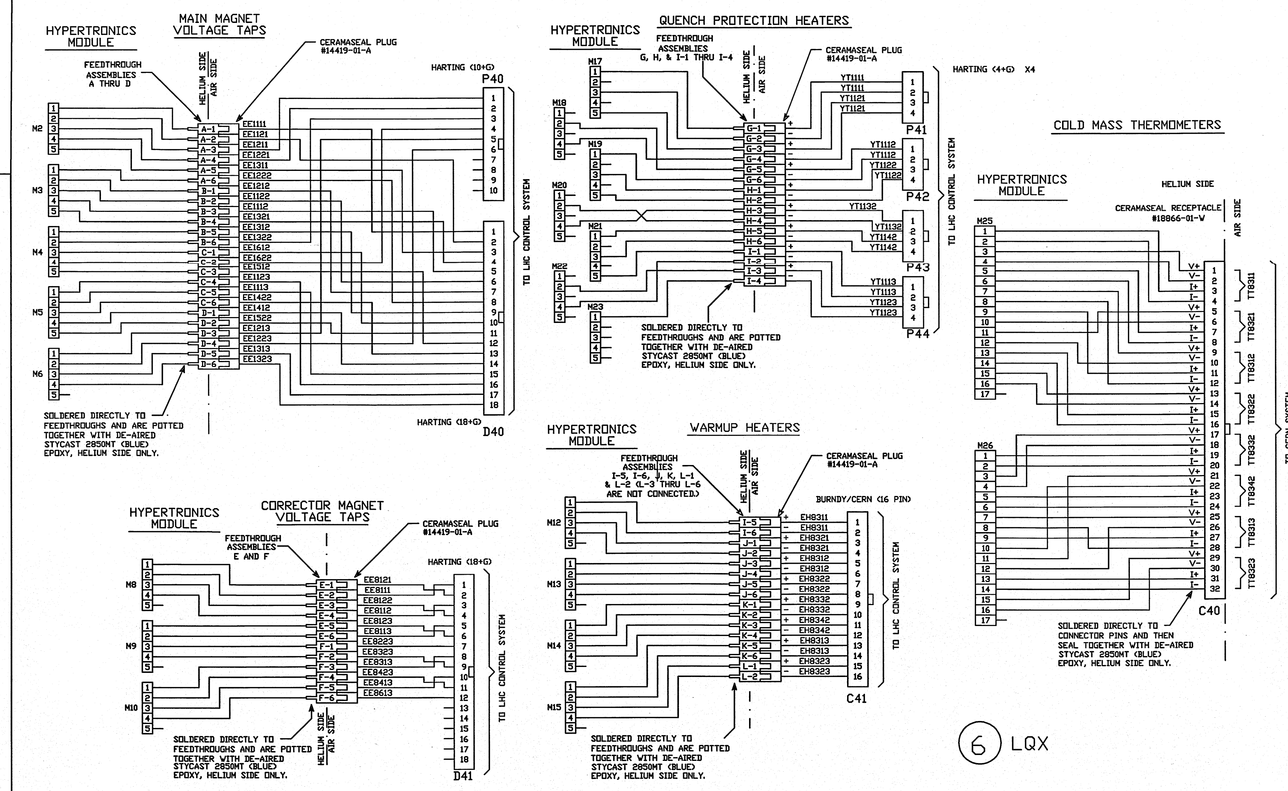




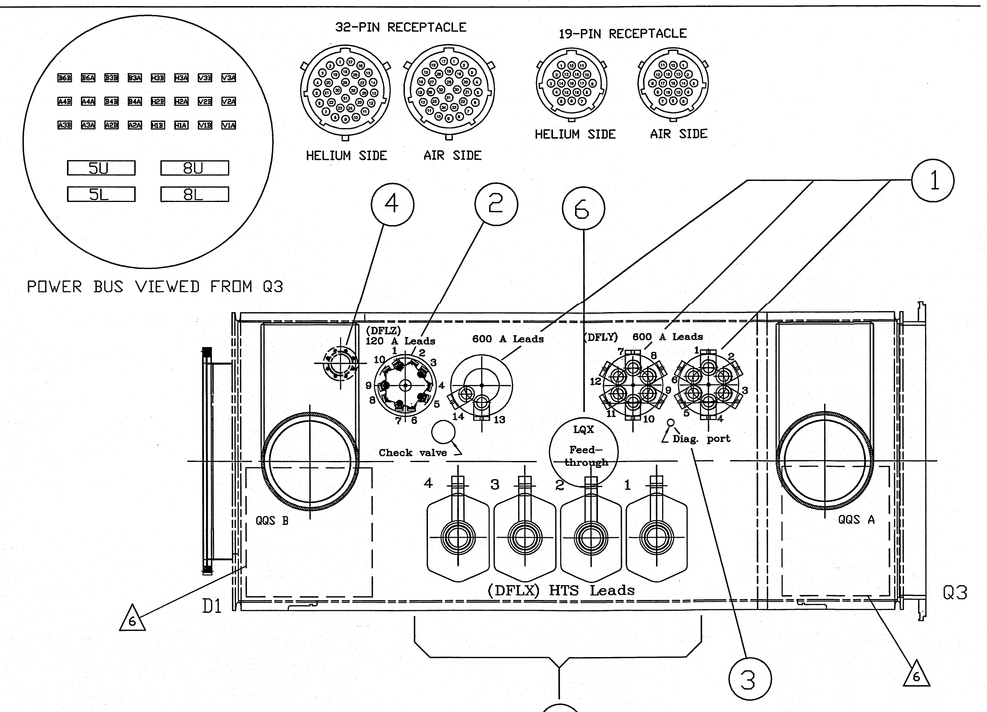


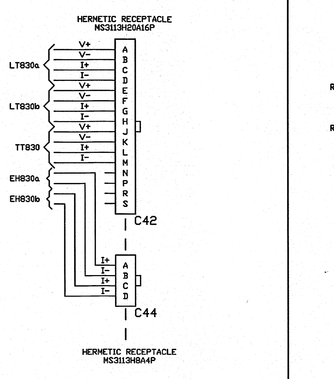
2

120A LEADS (DFLZ)



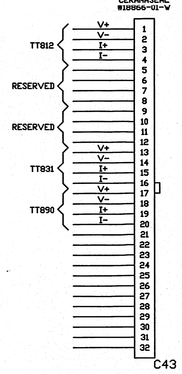
6 LQX





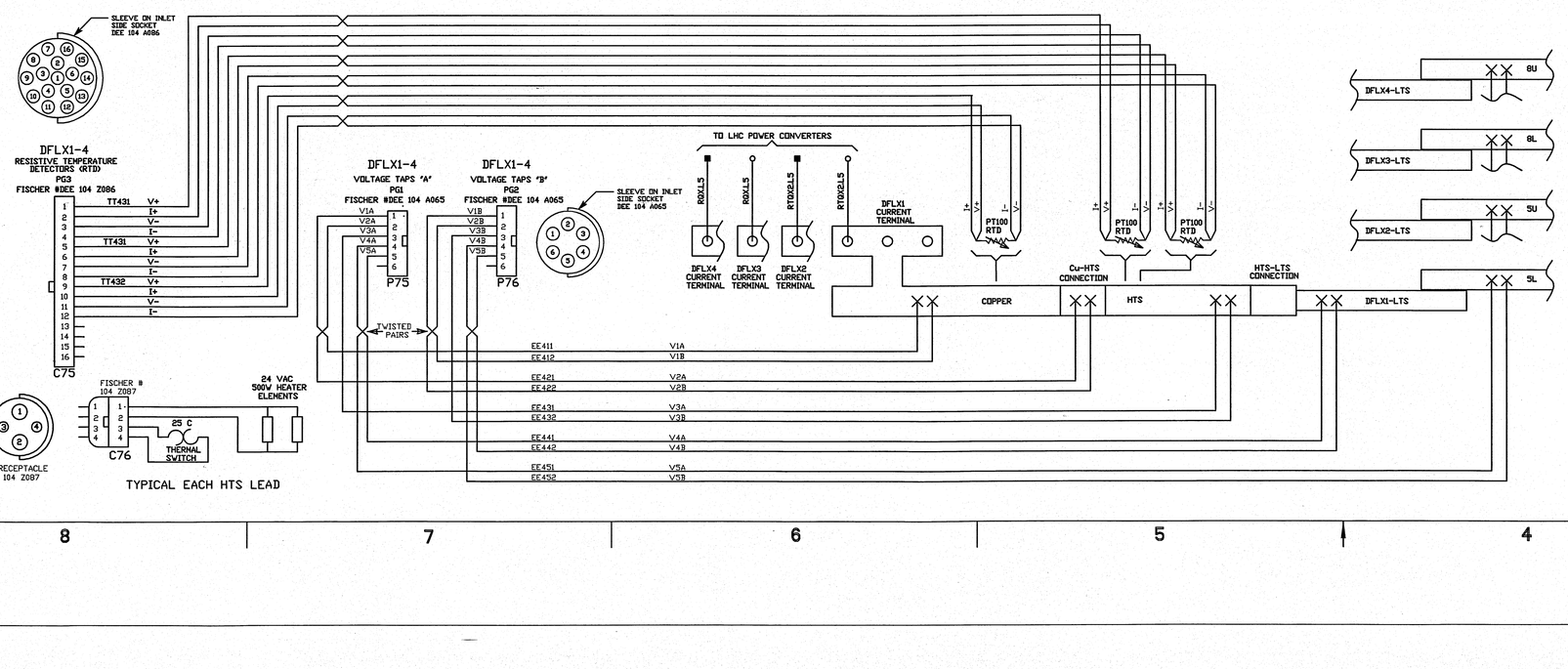
3

LEAD CHAMBER SERVICE PORT



4

CRYOGENIC PIPING SIGNALS



7

HTS LEADS (DFLX)

SYMBOL LEGEND
■ = A SIDE
○ = B SIDE
× = SOLDER JOINT
= CORRECTOR BUS SPLICE
600A LAP JOINTS PER LBNL PROCEDURE M982 AND 120A LAP JOINTS PER LBNL PROCEDURE M983.
= MAIN BUS SPLICE PER LBNL PROCEDURE M985

NOTES:

1. BUNDLE AND LABEL EACH 4-WIRE HEATER CABLE WITH "EH411", FOLLOWED BY THE CURRENT LEAD DESIGNATION, FOR EXAMPLE "Y13". WIRE LENGTH TO BE 3 METERS.
2. DFLY HEATER TOTAL POWER 32V @ 24V, DFLZ HEATER TOTAL POWER 20V @ 24V.
3. HEATERS TO BE POWERED IN PARALLEL WITH 24V SUPPLY. CONNECTIONS MADE AT CERN.
4. BUNDLE AND LABEL EACH 3-WIRE RTD CABLE WITH "TT491", FOLLOWED BY THE CURRENT LEAD DESIGNATION, FOR EXAMPLE "Z09". WIRE LENGTH TO BE 3 METERS.
5. SENSOR RESISTANCE PER IEC 751, CLASS B.
6. LOCATIONS OF CERN INSTRUMENT BOX

REV	DWG	CHK	ZONE	DATE	CHANGES
D			B6		REDRAW TO REFLECT ACTUAL BUILD EE1612 MOVED FROM D40-14 TO D40-10, EE1412 MOVED FROM D40-10 TO D40-14, EE1622 MOVED FROM D40-13 TO P40-4, EE1422 MOVED FROM P40-4 TO D40-13.
C			C8		ADA TO DFLY13 (WAS DFLY 14); A2B TO DFLY 14 (WAS DFLY 13).
B			C7, A2		1) a) ADDED 19 AND 32 PIN CERN PINOUTS, b) CORRECTED C75 WIRING, c) CHANGED C40, C43, C44.
			A1-B3		2) a) ADDED NOTES TO ADDED VIEW OF POWER BUSS.
			A4-A8		3) IN BOX 7: a) ADDED CERN-SPECIFIED CONNECTOR DESIGNATIONS, b) CHANGED HTS LEAD THERMOMETER PINOUTS IN C75, c) CHANGED HTS LEAD VOLTAGE TAP PINOUTS IN P75 AND P76.
			B4-C6		4) IN BOX 6: a) CHANGED CONNECTORS FROM FISCHER TO HARTING AND BURNDY b) CHANGED VOLTAGE TAP, HEATER AND TT DESIGNATIONS, c) CHANGED C40 PINOUTS AND ADDED CE DESIGNATIONS.
			B8		5) IN BOX 3 CHANGED CONNECTOR CONFIGURATION.
			B6-C3		6) IN BOX 2: a) SEPARATE POWER FOR HEATERS, b) WIRE LABELS SIMPLIFIED, c) CHANGED FEEDTHROUGH DESIGNATION
A			B4-C8		7) IN BOX 1: a) SEPARATE POWER FOR HEATERS, b) WIRE LABELS SIMPLIFIED, c) CHANGED FEED THROUGH DESIGNATION.

DESCRIPTION	MATERIAL	MAT. LOCATION

UNLESS OTHERWISE SPECIFIED
DECIMALS: X.X ± 0.1, X.XX ± 0.05, X.XXX ± 0.010, ANGLES ± 1.00°
FINISH 63 µin
DO NOT SCALE PRINT
THREADS ARE CLASS 2
CHAMFER ENDS OF ALL SCREW THREADS 45°
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS
BREAK EDGES .015 MAX. ON MACHINED WORK
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE
IN ACCORDANCE WITH ASME Y14.5M & B46.1

SHOP ORDERS: SER NO. | ACCT NO. | DATE | DEL TO | DATE | SURFACE TREATMT | IDENT METHOD | PROJECT NUMBER | PROJECT NAME

DWN	J. STIRKKINEN	DATE 04-23-02
CHK	B. BINGHAM	DATE 12/14/05
APP	J. ZBASNIK	DATE 12/16/05

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY
UNIVERSITY OF CALIFORNIA - BERKELEY

LHC IR FEEDBOX
ELECTRICAL
DFBXE (IR5 L) WIRING DIAGRAMS

MICROFILMED: | DWG. TYPE ASSEMBLY | SHOWN ON | SCALE: 1/1 | DO NOT SCALE PRINTS | SHEET 1 OF 1
PATENT CLEAR: | DESIGN ACCT. NO. Z5LCE2 | CATEGORY CODE LH2004 | DWG. NO. 25I6176 | REV. D

SIZE D | REV. LTR. | DWG. NO. | SHEET 1