

A

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C

ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULE

D

E

F

STORAGE RING CELL 10

FE10B FRONT END CONTROL SYSTEM

HOOK-UP DRAWING

HOOK-UP DRAWING DRAWINGS

SHEET	DESCRIPTION
1	HOOK-UP DRAWING INDEX
2	FE10B-CS-RACK-01 230VAC / 24VDC POWER DISTRIBUTION.
3	FE10B-CS-RACK-01 24V DISTRIBUTION
4	FE10B-CS-RACK-01 NETWORK / COMM (SERIAL)
5	FE10B-VA-ABSB-01, FE10B-VA-VALVE-01 AND FE10B-VA-VALVE-02 CONTROL
6	FE10B-VA-VALVE-03, FE10B-VA-VALVE-04 AND FE10B-VA-VALVE-05 CONTROL
7	FE10B-VA-FCTRLR-01 FAST FLAP CONTROLLER 01, FE10B-VA-FVALV-01
8	GCTRL-01 FE10B-VA-IMG-01/02, FE10B-VA-PIRG-01/02 CONTROL.
9	MPC-01 FE10B-VA-IONP-01, 02, 03 AND 04 CONTROL.
10	GCTRL-02 FE10B-VA-IMG-03/04, FE10B-VA-PIRG-03/04, CONTROL.
11	MPC-02 FE10B-VA-IONP-05 AND 06 CONTROL.
12	GCTRL-03 FE10B-VA-IMG-05/06, FE10B-VA-PIRG-05/06, CONTROL.
13	FE10B MODULE ASSEMBLY 01 & 02 WATER FLOWS & TEMPERATURE SWITCHES
14	FE10B-CS-GRIO-01 RGA RESET
15	END STATION VALVES 06, 07, 12, 13, 14, 15 AND FE10B-RS-VALVE-11
16	SLITS 01 AXIS X & Y MOTION CONTROL
17	END STATION ROOT PUMP AND TURBO PUMP CONTROL.
18	END STATION TEMPERATURE MONITORING.
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REV D CREATED FOR Drawings BUG.NO.

CHANGES FROM REV C.

REV E

REV F

REV G

REV H

REV I

REV J

REV K

REV L

REV M

REV N

REV O

REV P

REV Q

REV R

REV S

REV T

REV U

REV V

REV W

REV X

REV Y

REV Z

REV AA

REV BB

REV CC

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REV EE

REV FF

REV GG

REV HH

REV II

REV JJ

REV KK

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REV PP

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REV WW

REV XX

REV YY

REV ZZ

REV AA

REV BB

REV CC

REV DD

REV EE

REV FF

REV GG

REV HH

REV II

REV JJ

REV KK

REV LL

REV MM

REV NN

REV OO

REV PP

REV QQ

REV RR

REV SS

REV TT

REV UU

REV VV

REV WW

REV XX

REV YY

REV ZZ

REV AA

REV BB

REV CC

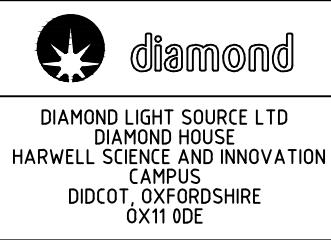
REV DD

REV EE

REV FF

REFERENCE DRAWINGS / DOCUMENTATION	
REFERENCE	TITLE
1149579	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEMS SYSTEM GUIDE
1147699	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEMS GENERAL ARRANGEMENT
1147701	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEMS LABELS
1008560	GENERIC CONTROL EQUIPMENT DUPLEX 24VDC POWER SUPPLY UNIT WIRING DIAGRAM
1008690	CONTROL RACK EQUIPMENT RS232/422 COMMUNICATION LEADS WIRING DIAGRAM
1058899	VAT FAST FLAP VALVE CONTROLLER WIRING DIAGRAM
1008741 / 1008742	6 VALVE CONTROL CRATE
1025895	STEPPER DRIVE CRATE
1013448	STORAGE RING CELL 10 VACUUM INSTRUMENTATION & CONTROL HOOK-UP DRAWING
-	-
TDI-VAC-CTRL-031	VACUUM COATING R&D FACILITY: MULTI-PURPOSE DEVELOPMENT FRONT-END SPECIFICATION

BECKHOFF ETHERCAT MODULE					
MODULE	PART No.	FUNCTION	SEE SHEET No.	POWER REQ.	ACC. POWER
BUS COUPLER	EK 1100	24VDC SUPPLY	/08.G6	70mA	
01	ES 3702	2 X ANALOGUE 0-10V I/P	/08.F6	200mA	200mA
02	ES 3702	2 X ANALOGUE 0-10V I/P	/10.F6	200mA	400mA
03	ES 3702	2 X ANALOGUE 0-10V I/P	/12.F6	200mA	600mA



THIS REVISION		TITLE		
DRN	NMP DATE	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEM HOOK-UP		
CHK	MWP DATE	HARWELL SCIENCE AND INNOVATION CAMPUS DIDCOT, OXFORDSHIRE OX11 0DE		
APPD	MWP DATE	ORIGINATOR DATE 05/04/19		
AUTOCAD	DRG No.	1147700	SHEET 1 OF 18	REV. F

A	FIRST ISSUE
B	

ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULE

C

SHEET 01: ADDED SH17.
SHEET 02: ADDED POWER TO ROOT PLMP.
SHEET 3 ADDED POWER TO JBOX-04 AND TURBO PUMP.
SHEET 04: ADDED COMMS TO RIO 02.
SHEET 05: ADDED MODULE TO RIO 01.
SHEET 10 AND 1: ADDED MODULE TO RIO 01.
SHEET 15: ADDED JBOX-04 AND MODULES TO SECOND RIO.
ADDED VALVES TO END STATION.
SHEET 17: ADDED ROOT AND TURBO PLMP LOGIC.

D

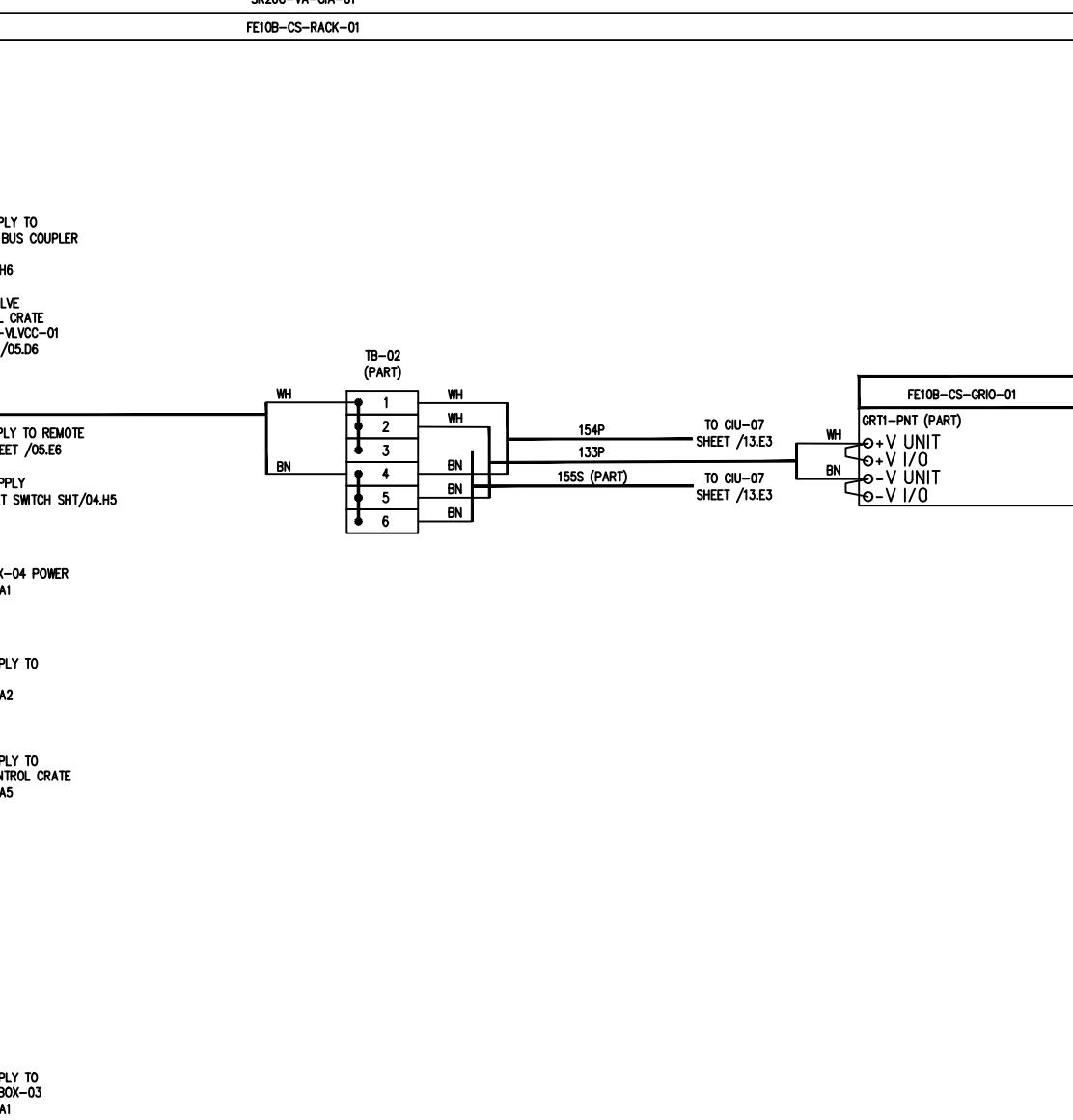
REV D CREATED FOR Drawings BUG.NO
CHANGES FROM REV C.

E

SHT. 02: DUBLEY POWER SUPPLY
REV ADED, TWO SEPARATELY FED PSU
AND PSU ADDED.
SHT. 03: ADDED REUNDANCY MODULE ADDED
TO 24V X-0 TERMINAL BLOCK.
SHT. 14: PSU HEALTHY INPUT ADDED TO
O-01.

F

SHT. 04: ADDED PAGE 8 TO INDEX.
SHT. 05: ADDED TURBO CONTROLLER
POWER.
SHT. 06: ADDED PROFNET SMC MANIFOLD.
SHT. 07: ADDED TURBO CONTROLLER SERIAL COMM.
SHT. 08: ADDED PROFNET X-TRIP TO PLC.
SHT. 09: ADDED PROFNET ANALOGUE
INPUTS TO RIO-01.
SHT. 10: ADDED PERMITS TO PLC.
SHT. 11: ADDED ABSR-01 (P1-100).
SHT. 12: ADDED PT-100 MOVED TO JBOX-02.
SHT. 13: DELETED ABSR-01.
SHT. 14: TURBO PUMP TTP-01 REMOVED.
SHT. 15: END STATION VALVES NOW
CONTROLLED BY SMC PROFNET NODE.
ADDED VALUES 16 TO 19.
SHT. 16: ENCODERS WIRING CHANGED.
SHT. 17: TURBO PUMP REPLACED.
ADDED SHT. 18: END STATION
TEMPERATURE MONITORING.



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DIAMOND HOUSE
HARWELL SCIENCE AND INNOVATION
CAMPUS
DIDCOT, OXFORDSHIRE
OX11 0DE

THIS REVISION		TITLE	
DRN DATE	NMP 29/10/20	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEM HOOK-UP	
CHK DATE	MWP 29/10/20		
APPD DATE	MWP 29/10/20	ORIGINATOR DATE	NMP 05/04/19
DRG STATUS	Approved	DRG STATUS	Approved
AUTOCAD No.	1147700	SHEET 3 OF 18	REV. F

C

SHEET 01: ADDED SH.17
SHEET 02: ADDED POWER TO ROOT
SHEET 03: ADDED POWER TO JBX-04
SHEET 04: ADDED TURBO PUMP.
SHEET 05: ADDED PROFIBUS
SHEET 06: ADDED COMM'S TO RIO 02.
SHEET 07: ADDED MODULE TO
SHEET 08: ADDED JBX-04 AND
MODULES TO SECOND RIO, ADDED
VALVES TO END STATION.
SHEET 09: ADDED TURBO AND
MFP LOGIC.

REV D CREATED FOR Idrawings BUG.NO
CHANGES FROM REV C.

**CHT. 02: DUPLEX POWER SUPPLY
OPERATOR TWO SEPARATELY FOR PSW**

RH1.03: REDUNDANCY MODULE ADDED
TO 24V -X-01 TERMINAL BLOCK.
RH1.14: PSU HEALTHY INPUT ADDED TO
RIO-01.

HHT.01: ADDED PAGE 18 TO INDEX.
HHT.02: ADDED TURBO CONTROLLER.
HHT.03: ADDED TURBO CONTROLLER.

H7T. 04: ADDED PROFINET SMC MANIFOLD
H7T. 07: ADDED TURBO CONTROLLER SERIAL COMM.
H7T. 07: ADDED RGA X-TRIP TO PLC.
H7T. 08: 10 & 12 UPDATED ANALOGUE
INPUTS TO PIO-0

HIT 13: DELETED ABSR-01 (PT-100).
HIT 14: PT-100 MOVED TO JBOX-02.
HIT 15: END STATION VALVES NOW
CONTROLLED BY SMG PROFINET NODE
LOW SW TRIP-01 REMOVED.

UPATED R02.
SHT.16: ENCODERS WIRING CHANGED.
SHT.17: TURBO PUMP REPLACED.
ADDED SHT. 18 END STATION
TEMPERATURE MONITORING.

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The logo of Harvard University, featuring a circular seal with a crest containing a bird.

The logo consists of a stylized lowercase 'd' inside a circle.

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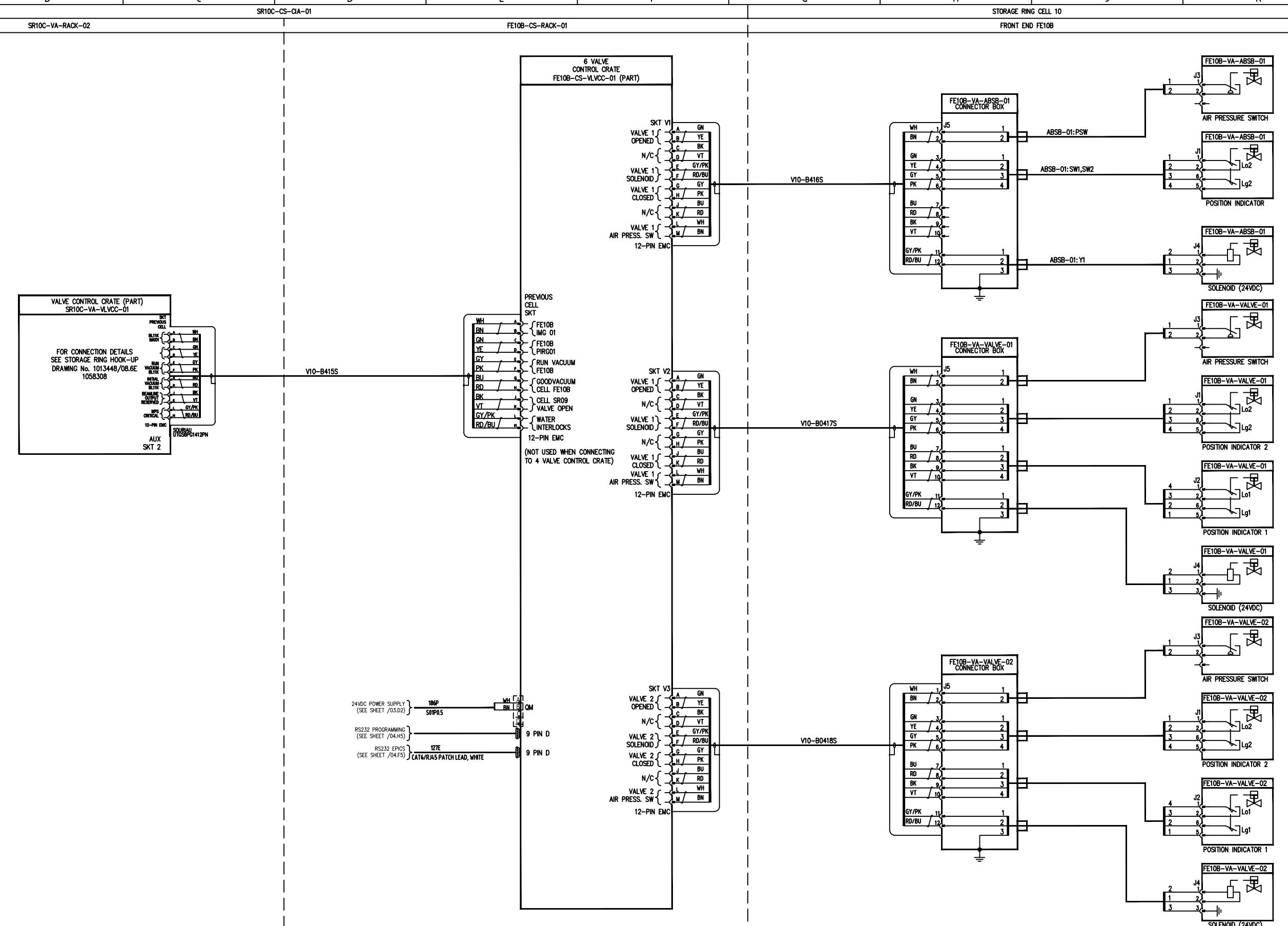
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8



SR10C-CS-CIA-0

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STORAGE RING CELL 10

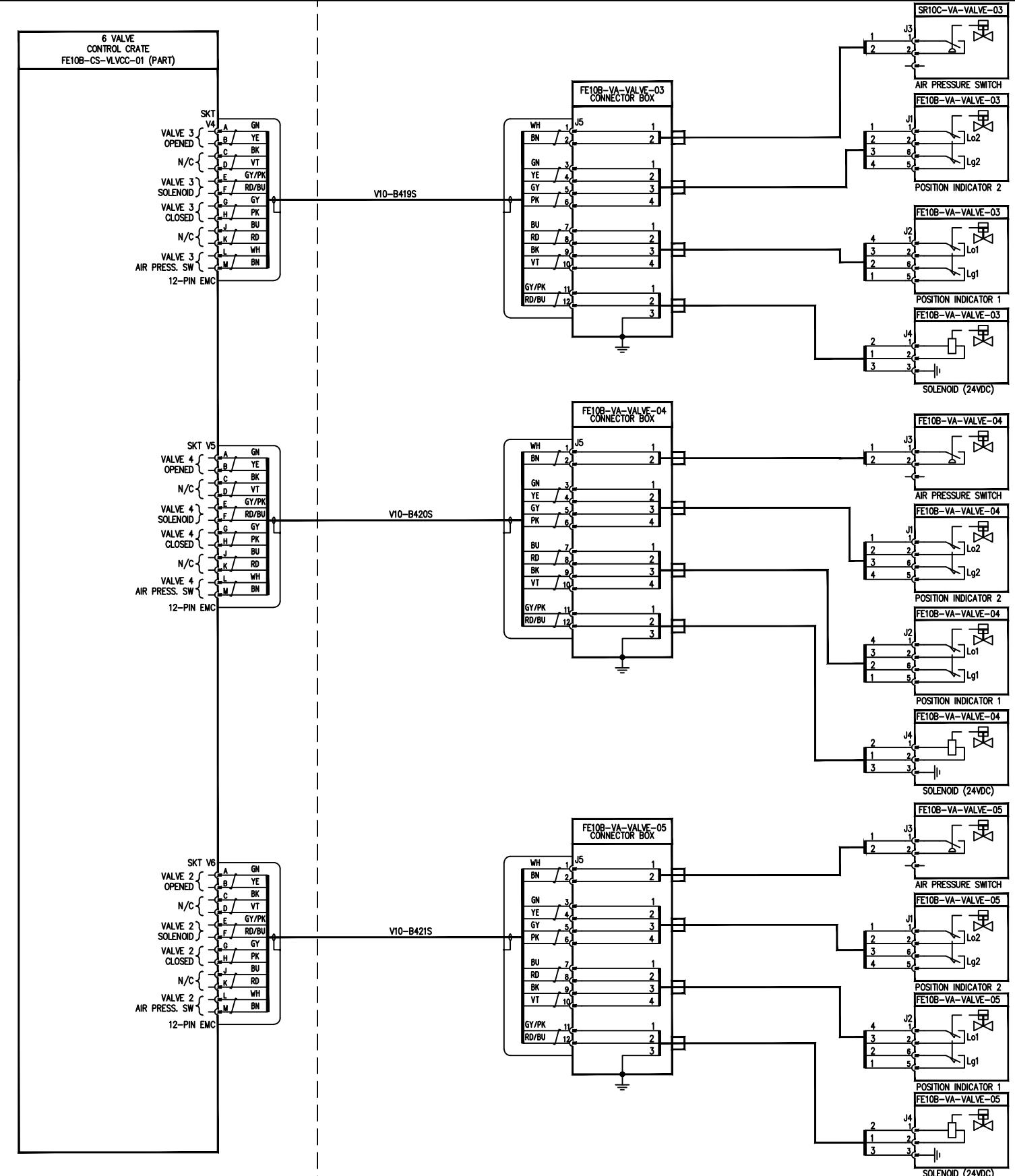
FRONT END FE10

ALL INFORMATION IS UNLESS OTHERWISE STATED

DRG. PRACTICE 10 B.S. 88888; 2008. THIRD ANGLE PROJECTION

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SHEET 01: ADDED SH1-17.
SHEET 02: ADDED POWER TO ROOT
SHEET 3 ADDED POWER TO JBOX-04
AND TURBO PUMP.
SHEET 04: UPDATED PROFIBUS
NETWORK.
SHEET 05: ADDED COMMS TO RIO 02.
SHEET 10 AND 11: ADDED MODULE TO
RIO 01.
SHEET 15: ADDED JBOX-04 AND
MODULES TO SECOND RIO. ADDED
VALUES TO END STATION.
SHEET 17: ADDED ROOT AND TURBO
PUMP.
SHEET 18: ADDED TURBO PUMP INCR.

REV D CREATED FOR Drawings BUG.NO
CHANGES FROM REV C.

F	<p>SHT-01: ADDED PAGE 18 TO INDEX. SHT-02: ADDED TURBO CONTROLLER. SHT-03: REMOVED TURBO CONTROLLER POWERER. SHT-04: ADDED PROFINET SMAC MANIFOLD. SHT-05: ADDED TURBO CONTROLLER SERIAL COMM. SHT-07: ADDED RGA X-TRIP TO PLC. SHT-08: ADDED 12 UPATED ANALOGUE INPUTS TO PLC-01. SHT-09: ADDED MFS PERMIT TO PLC. SHT-11: DELETED ABSR-01 (P1-100). SHT-13: MOVED TO JBOX-02. FLOW SW TRP-01 REMOVED. SHT-15: END STATION VALUES NOW CONTROLLED BY SMAC PROFINET NODE. ADDED VALUES 16 TO 19. UPDATED RI02.</p>
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 diamond DIAMOND LIGHT SOURCE LTD DIAMOND HOUSE HARWELL SCIENCE AND INNOVATION CAMPUS DIDCOT, OXFORDSHIRE OX11 0DE	THIS REVISION		TITLE	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEM HOOK-UP			
	DRN DATE	NMP 29/10/20		CHK DATE	MWP 29/10/20	ORIGINATOR DATE	NMP 05/04/19
	APPD DATE	MWP 29/10/20	DRG STATUS	Approved	AUTOCAD	DRG No.	SHEET 6 OF 18
					1147700		REV. F

A ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULE

B FIRST ISSUE

C

SHEET 01: ADDED SH17.
SHEET 02: ADDED POWER TO ROOT PLATE.
SHEET 3 ADDED POWER TO JBOX-04 AND TURBO PUMP.
SHEET 05: ADDED COMMS TO RIO 02.
SHEET 10 AND 1: ADDED MODULE TO RIO 01.
SHEET 15: ADDED JBOX-04 AND MODULES TO SECOND RIO.
ADDED VALVES TO END STATION.
SHEET 17: ADDED ROOT AND TURBO AMP LOGIC.

D

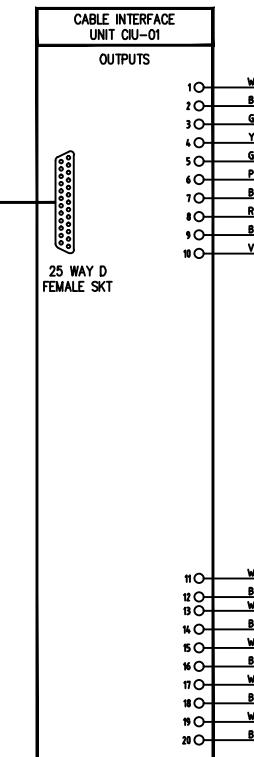
REV D CREATED FOR Drawings BUG.NO
CHANGES FROM REV C.

E

SHT. 02: DUBLEY POWER SUPPLY
REPLACED, TWO SEPARATELY FEED PSU
AND SOLENOID ADDED.
SHT. 03: REARREDUNDANCY MODULE ADDED
TO THE 24V X-01 TERMINAL BLOCK.
SHT. 14: PSU HEALTHY INPUT ADDED TO O-01.

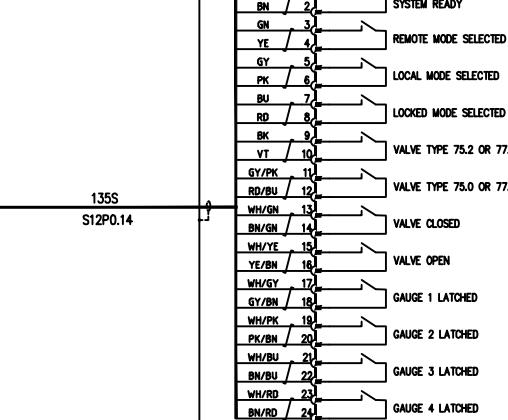
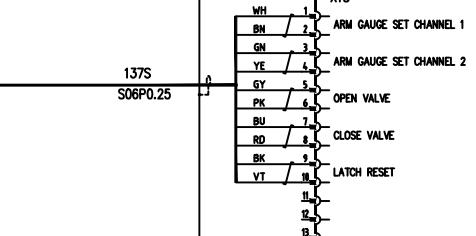
F

SHT. 04: ADDED PAGE 8 TO INDEX.
SHT. 05: ADDED TURBO CONTROLLER
AND SOLENOID.
SHT. 06: REMOVED TURBO CONTROLLER
AND TURBO CONTROLLER SERIAL COMM.
SHT. 07: ADDED PROFINET SMC MANIFOLD.
SHT. 08: ADDED TURBO X-TRIP TO PLC.
SHT. 09: ADDED TURBO CONTROLLER SERIAL COMM.
SHT. 10 & 12: UPDATED ANALOGUE
INPUTS TO RIO-01.
SHT. 11: ADDED ASMR-01 (P1-100).
SHT. 12: MOVED TO RIO-02.
SHT. 13: DELETED ASMR-01 (P1-100).
SHT. 14: SW TRIP-01 REMOVED.
SHT. 15: END STATION VALVES NOW
CONTROLLED BY SMC PROFINET NODE.
ADDED VALVES 16 TO 19.
SHT. 16: ENCODERS WIRING CHANGED.
ADDED RIO-02.
SHT. 17: TURBO PUMP REPLACED.
ADDED SHT. 18: END STATION
TEMPERATURE MONITORING.



SR10-CS-CIA-01

FE10B-CS-RACK-01

230VAC FROM
CB8 (C2A)
(SEE SHEET 2/F5)108M BN 1 L
BU 2 N
G/Y 3 PE
IEC

V10-B538S
V10-B539S
V10-B540S
V10-B541S
V10-B542S

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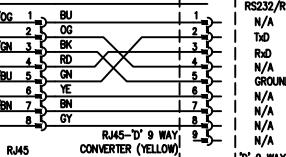
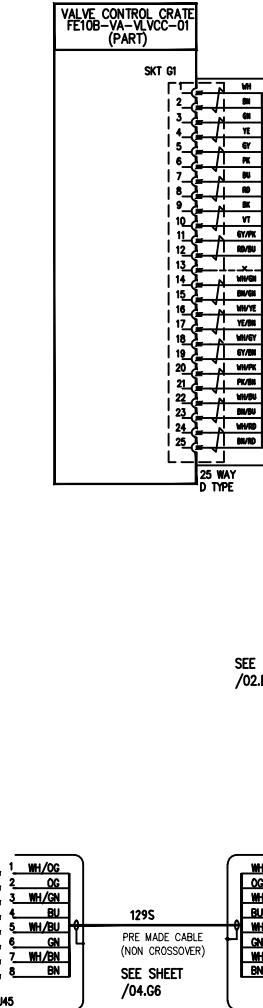
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REV D CREATED FOR Drawings BUG.NO
CHANGES FROM REV C

SHEET 01: ADDED SHT.17.
SHEET 02: ADDED POWER TO ROOT PLMP.
SHEET 3 ADDED POWER TO JBXK-04 AND TURBO PUMP.
SHEET 04: ADDED PROFIBUS NETWORK.
SHEET 05: ADDED COMMS TO RIO 02.
PRO 01 AND 1: ADDED MODULE TO MODULES TO SECOND RIO.
ADDED VALVES TO END STATION.
SHEET 17: ADDED ROOT AND TURBO AMP LOGIC.

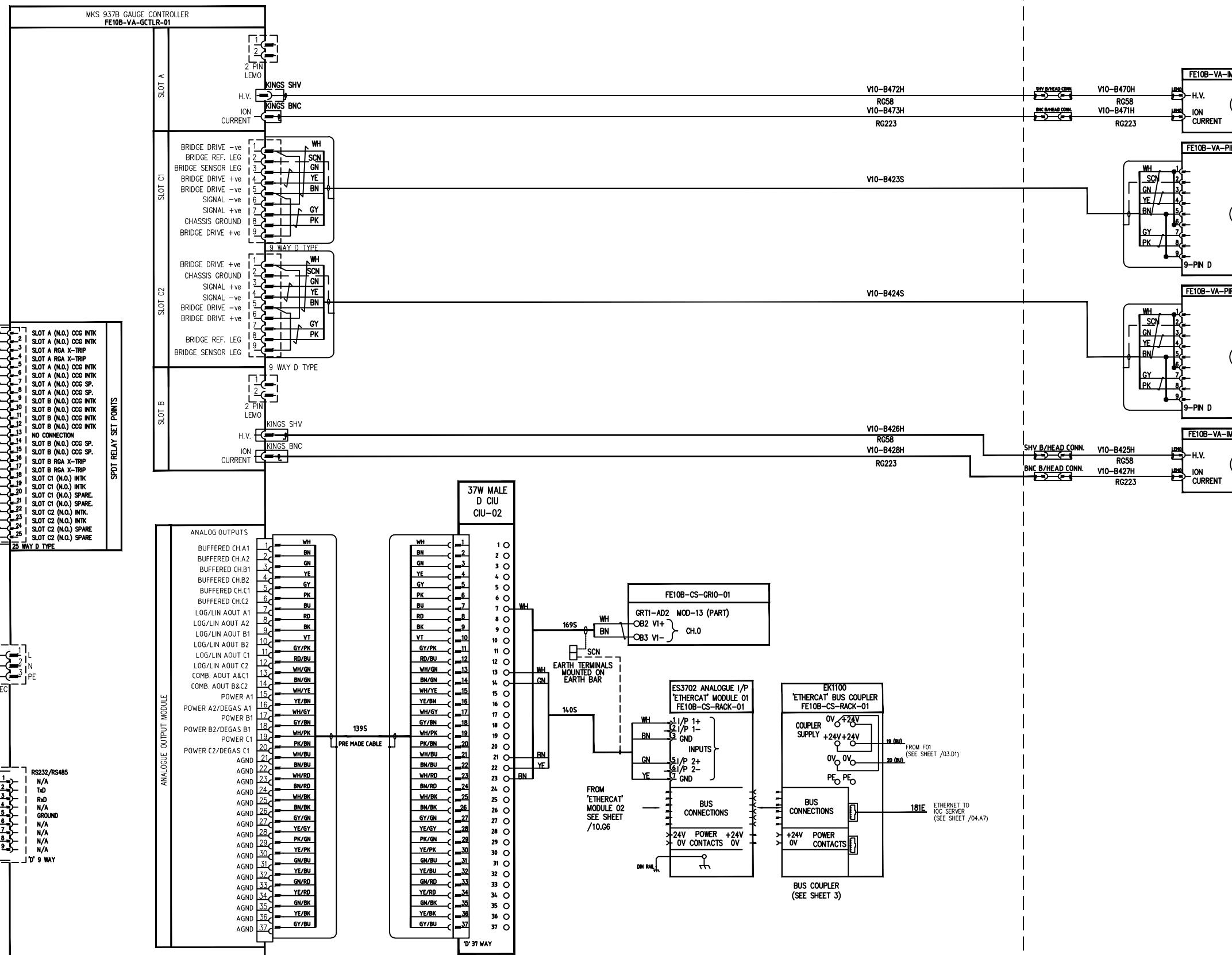
SHT. 02: DUBLEY POWER SUPPLY
REPLACED, TWO SEPARATELY FED PSU1
AND PSU2 ADDED.
SHEET 10: ADDED REduNDANCY MODULE ADDED
SHEET 14: X-OF TERMINAL BLOCK
0-10.

SHT. 15: ADDED JBXK-04 AND TURBO PUMP.

SHEET 16: ENCODERS WIRING CHANGED.

SHT.17: TURBO PUMP REPLACED.

ADDED SHT. 18: END STATION TEMPERATURE MONITORING.



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THIS
REVISION
DRN NMP
DATE 29/10/20

CHK MWP
DATE 29/10/20

APPD MWP
DATE 29/10/20

ORIGINATOR
DATE 05/04/19

DRG STATUS Approved
No. 1147700

SHEET
8 OF 18

REV. F

STORAGE RING CELL 10
FRONT END FE10B

A FIRST ISSUE

B

ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULE

C

SHEET 01: ADDED SHT.17.
SHEET 02: DUBLEY POWER SUPPLY
REPLACED, TWO SEPARATELY FED PSU1
AND PSU2 ADDED.
SHEET 3 ADDED POWER TO JBXK-04 AND TURBO PUMP.
SHEET 04: ADDED PROFIBUS NETWORK.
SHEET 05: ADDED COMMS TO RIO 02.
PRO 01 AND 1: ADDED MODULE TO MODULES TO SECOND RIO.
ADDED VALVES TO END STATION.
SHEET 17: TURBO PUMP REPLACED.

D

REV D CREATED FOR Drawings BUG.NO
CHANGES FROM REV C

E

SHT. 02: DUBLEY POWER SUPPLY
REPLACED, TWO SEPARATELY FED PSU1
AND PSU2 ADDED.
SHEET 10: ADDED REduNDANCY MODULE ADDED
SHEET 14: X-OF TERMINAL BLOCK
0-10.

F

SHT. 01: ADDED PAGE8 TO INDEX.
SHT. 02: ADDED TURBO CONTROLLER
SHT. 03: REMOVED TURBO CONTROLLER
SHT. 04: ADDED PROFIBUS MANIFOLD
SHT. 05: ADDED TURBO CONTROLLER SERIAL COMM.
SHT. 06: ADDED TURBO X-TRIP TO PLC.
SHT. 07: ADDED TURBO X-TRIP TO PLC.
SHT. 08: ADDED PROFIBUS MANIFOLD.
SHT. 09: ADDED PROFIBUS MANIFOLD.
SHT. 10: ADDED PROFIBUS MANIFOLD.
SHT. 11: ADDED PROFIBUS MANIFOLD.
SHT. 12: ADDED PROFIBUS MANIFOLD.
SHT. 13: DELETED ABSR-01 (P1-100).
SHT. 14: ADDED RIO 01 MOVED TO JBXK-02.
SHT. 15: END STATION VALVES NOW
CONTROLLED BY PROFIBUS NODE.
ADDED VALUES 16 TO 19.
SHT. 16: ENCODERS WIRING CHANGED.
SHT. 17: TURBO PUMP REPLACED.
ADDED SHT. 18: END STATION
TEMPERATURE MONITORING.

STORAGE RING CELL 10
FRONT END 10B CONTROL SYSTEM
HOOK-UP

8

 diamond DIAMOND LIGHT SOURCE LTD DIAMOND HOUSE ARWELL SCIENCE AND INNOVATION CAMPUS DIDCOT, OXFORDSHIRE OX11 0DE	THIS REVISION		TITLE	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEM HOOK-UP			
	DRN DATE	NMP 29/10/20		APPD DATE	MWP 29/10/20	ORIGINATOR DATE	NMP 05/04/19
	CHK DATE		DRG STATUS	Approved	DRG No.	SHEET 9 OF 18	REV. F

A
FIRST ISSUE

B

C
ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULE

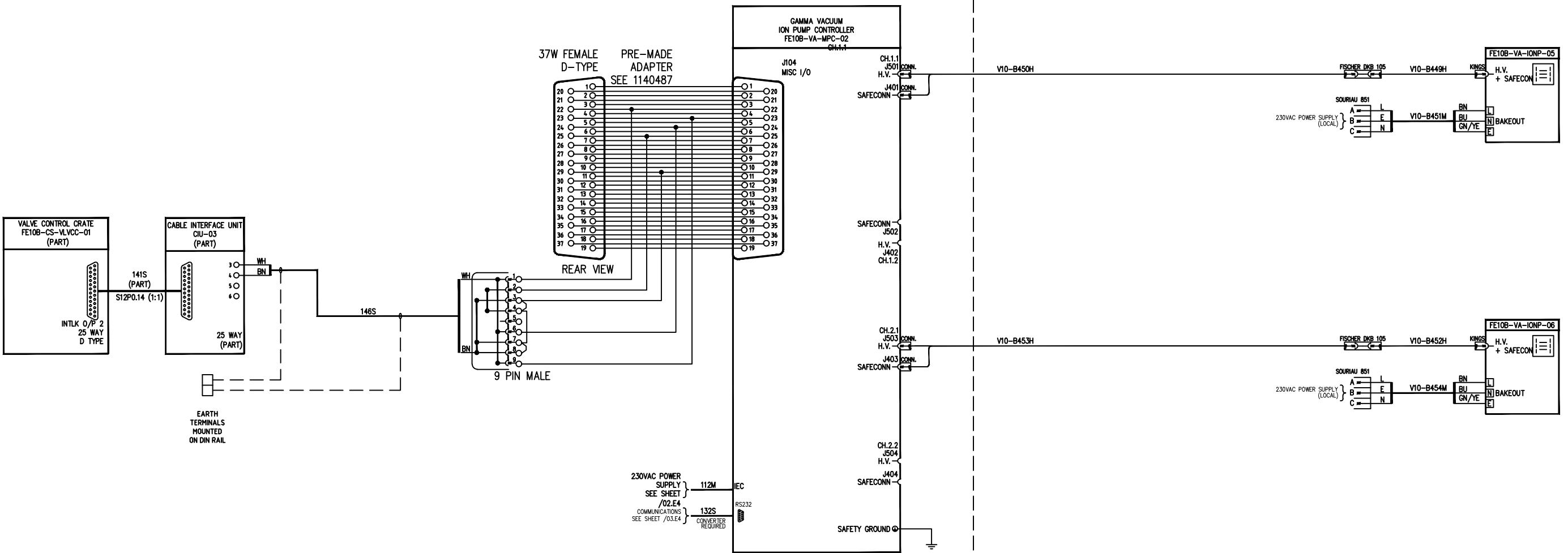
D
REV D CREATED FOR Drawings BUG.NO
CHANGES FROM REV C.

E
SHT. 02: DUBLEY POWER SUPPLY
REPLACED, TWO SEPARATELY FED PSU1
AND PSU2 ADDED. ADDED
REDUNDANCY MODULE ADDED
TO RIO. 01. 24V X-OF TERMINAL BLOCK
PSU1.14 PSU HEALTHY INPUT ADDED
TO RIO.

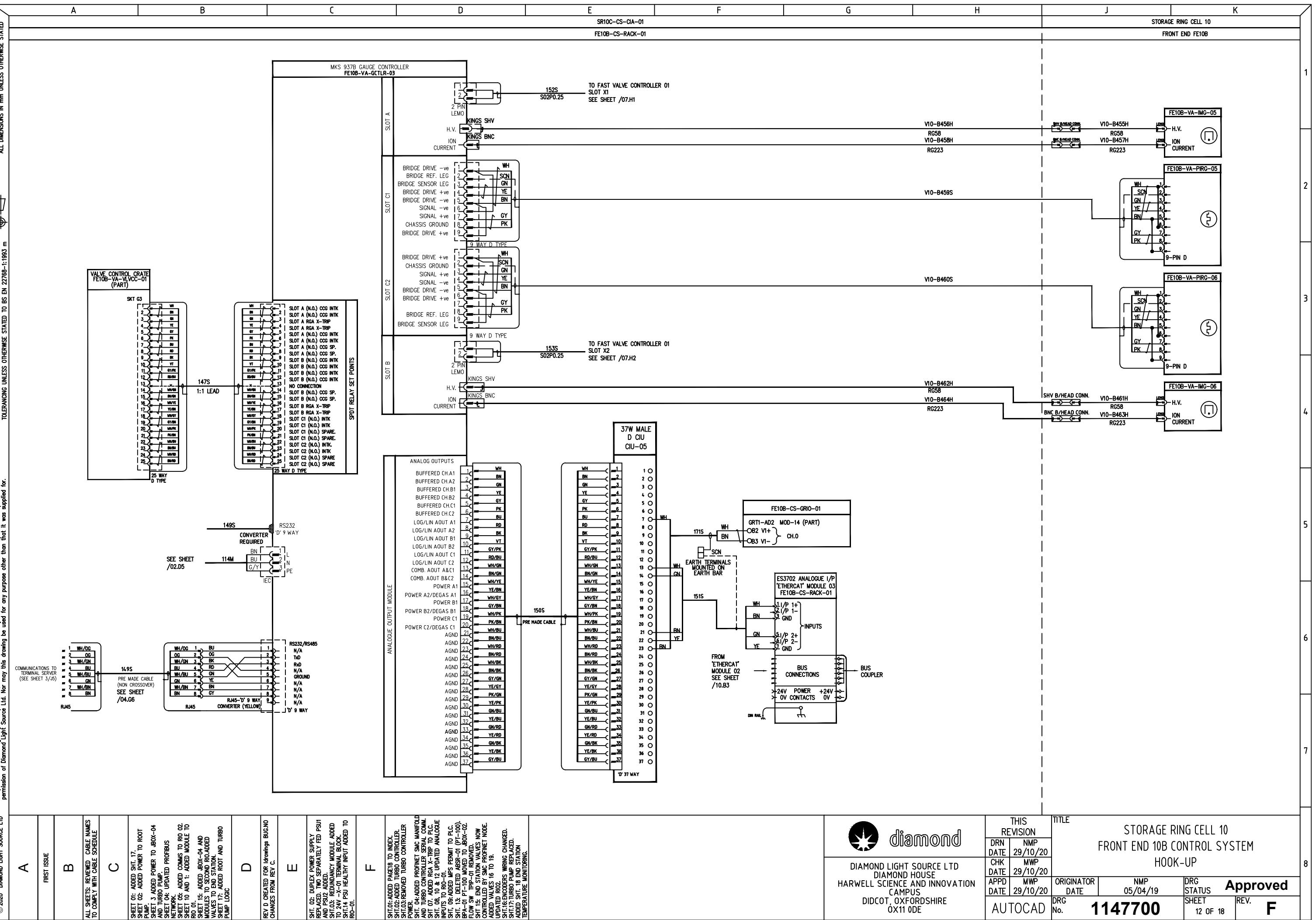
F

SHT. 03: ADDED SH1-17.
SHEET 3 ADDED POWER TO RIO.
PUMP AND TURBO PUMP.
SHEET 05: ADDED COMMS TO RIO 02.
RIO 01.
SHEET 15: ADDED RIO-X-01 AND
MODULES TO SECOND RIO.
ADDED VALVES TO END STATION.
SHEET 17: ADDED RIO-X-01 AND TURBO
PUMP LOGIC.

SH1-17: ADDED PAGE 8 TO INDEX.
SH1-18: ADDED TURBO CONTROLLER
CONTROLLER.
SH1-19: REMOVED TURBO CONTROLLER
CONTROLLER.
SH1-20: ADDED PROFIBUS MANIFOLD
COMM.
SH1-21: ADDED TURBO CONTROLLER SERIAL COMM.
SH1-22: ADDED RIO-X-01 TO PLC.
SH1-23: ADDED RIO-X-01.
SH1-24: ADDED PSU1.14 TO RIO-02.
SH1-25: DELETED ABSR-01 (P1-100).
SH1-26: RIO-X-01 MOVED TO RIO-02.
SH1-27: END STATION VALVES NOW
CONTROLLED BY SMC PROFINET NODE.
ADDED VALVES 16 TO 19.
SH1-28: ENCODERS WIRING CHANGED.
SH1-29: TURBO PUMP REPLACED.
ADDED SH1-18 END STATION
TEMPERATURE MONITORING.



THIS REVISION		TITLE	
DRN	NMP	STORAGE RING CELL 10	
CHK	MWP	FRONT END 10B CONTROL SYSTEM	
DATE	DATE	HOOK-UP	
29/10/20	29/10/20	ORIGINATOR DATE 05/04/19 DRG STATUS Approved	
AUTOCAD	DRG No. 1147700	SHEET 11 OF 18	REV. F



A FIRST ISSUE

B

C ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULE

D REV D CREATED FOR Drawings BUG.NO

E CHANGES FROM REV C

F

G

H

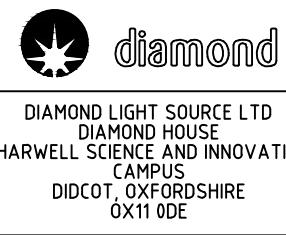
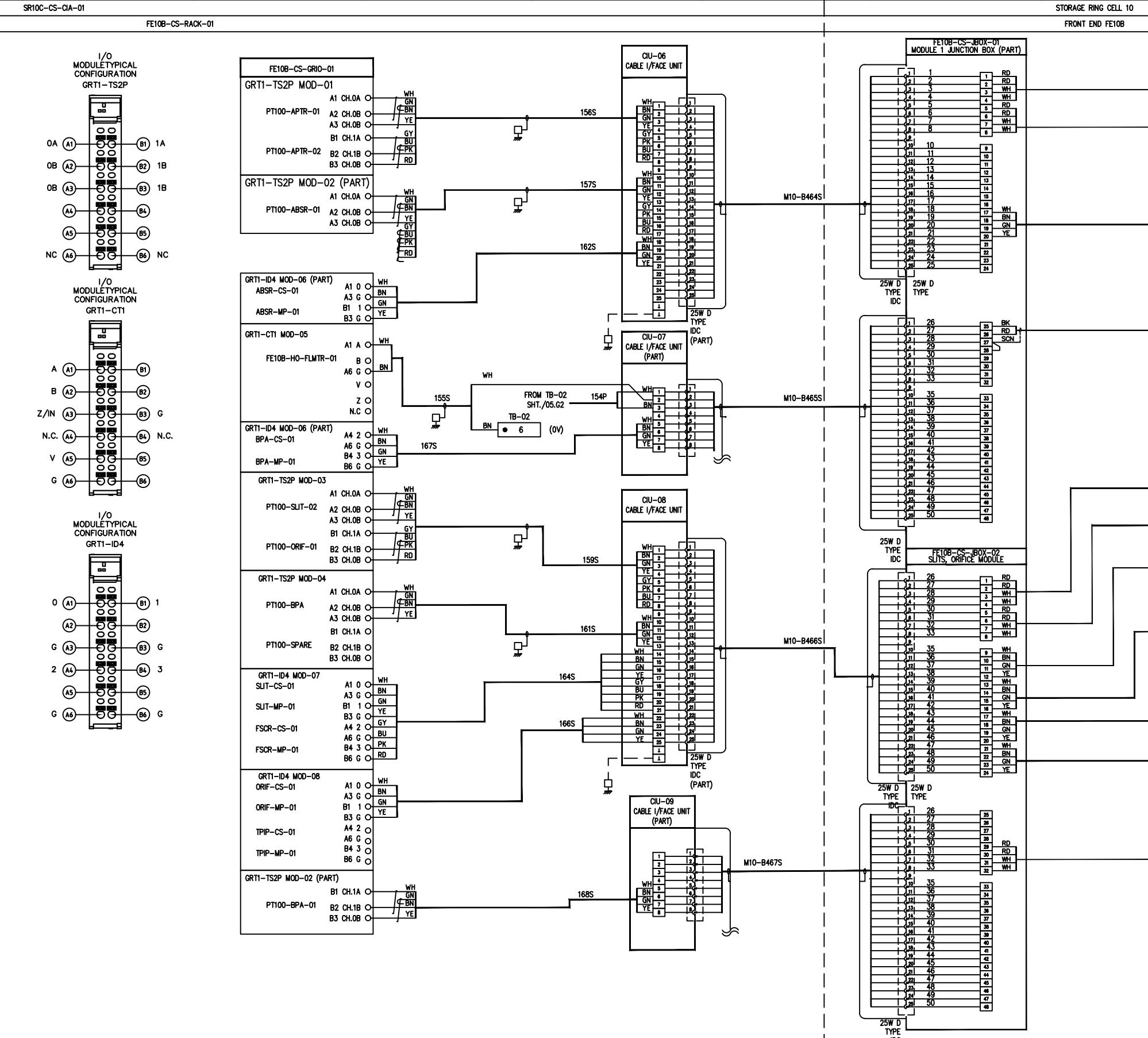
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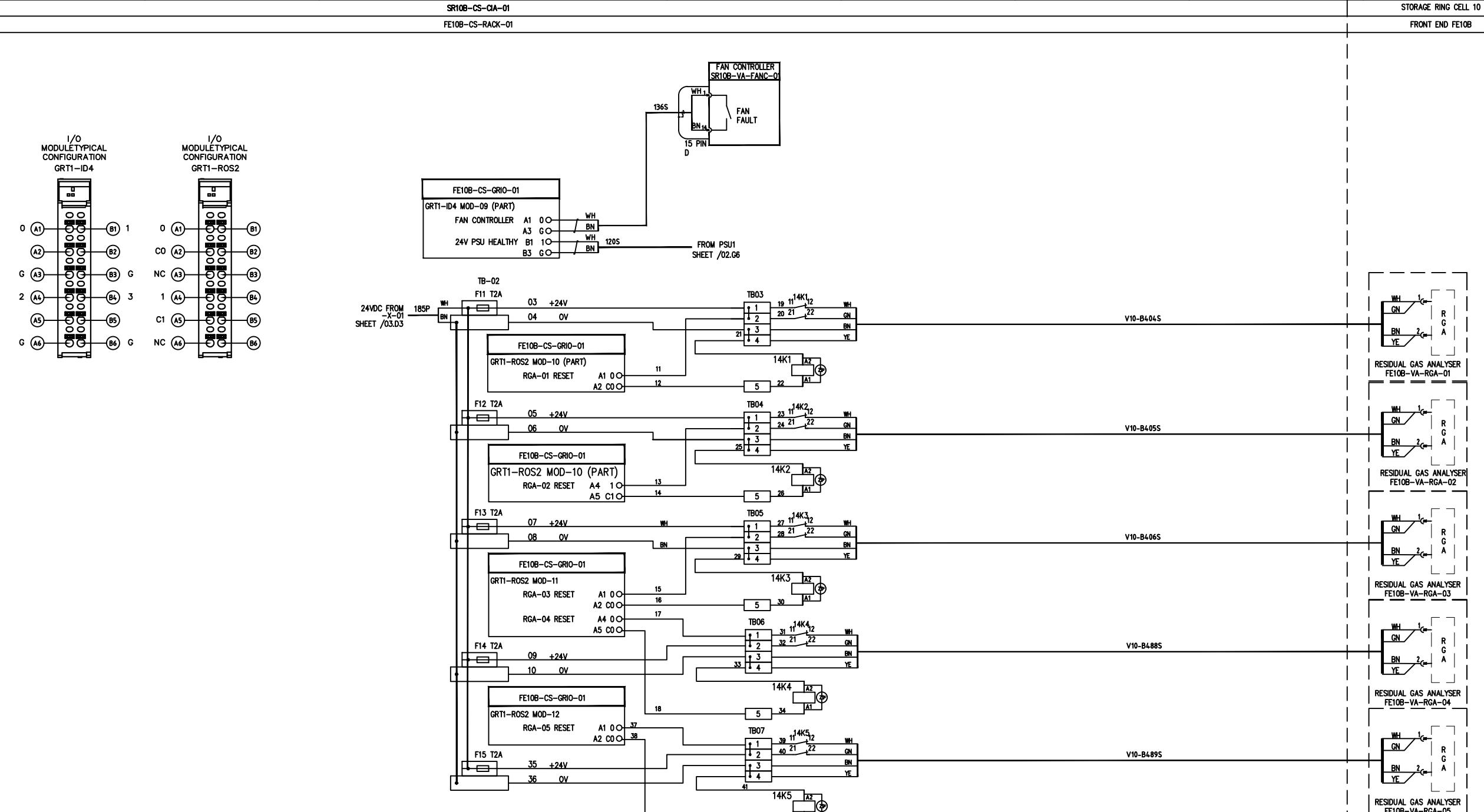
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SR10C-CS-CIA-01

FE10B-CS-RACK-01



THIS REVISION		TITLE	
DRN	NMP	STORAGE RING CELL 10	
DATE	29/10/20	FRONT END 10B CONTROL SYSTEM	
CHK	MWP	HOOK-UP	
DATE	29/10/20		
APPD	MWP	ORIGINATOR	NMP
DATE	29/10/20	DATE	05/04/19
DRG	Approved	DRG STATUS	Approved
CAD		No.	
AUTOCAD		1147700	
		SHEET	
		13 OF 18	REV.
			F

ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULE

REV D CREATED FOR Drawings BUG.NO

CHANGES FROM REV C.

SHEET 01: ADDED SH1-17.
 SHEET 02: ADDED POWER TO ROOT PLATE.
 SHEET 3 ADDED POWER TO JBOX-04 AND TURBO PUMP.
 SHEET 04: ADDED COMMS TO RIO 02.
 SHEET 10: ADDED MODULE TO RIO 01.
 SHEET 15: ADDED JBOX-04 AND MODULES TO SECOND RIO.
 SHEET 17: ADDED ROOT AND TURBO VALVES TO END STATION.
 SHEET 18: ADDED 24V TO TERMINAL BLOCK.
 SHEET 19: ADDED PSU HEALTHY INPUT ADDED TO RAMP LOGIC.

REV D CREATED FOR Drawings BUG.NO

CHANGES FROM REV C.

SHT. 02: DUBLEY POWER SUPPLY

REPLACED TWO SEPARATELY FED PSU1 AND PSU2 ADDED REduNDANCY MODULE ADDED TO RIO 01.

SHT. 17: ADDED 24V TO TERMINAL BLOCK.

SHT. 19: PSU HEALTHY INPUT ADDED TO RAMP LOGIC.

SHT. 02: ADDED 24V TO INDEX.

SHT. 02: ADDED TURBO CONTROLLER.

SHT. 04: ADDED PROFINET SMC MANIFOLD.

SHT. 04: ADDED TURBO CONTROLLER SERIAL COMM.

SHT. 04: ADDED TURBO CONTROLLER TRIP TO PLC.

SHT. 05: ADDED PROFIBUS INPUTS TO PLC.

SHT. 05: ADDED ASR-01 (P1-100).

SHT. 05: P1-100 MOVED TO JBOX-02.

SHT. 15: END STATION VALVES NOW

CONTROLLED BY SMC PROFINET NODE.

ADDED VALUES 16 TO 19.

SHT. 16: ENCODERS WIRING CHANGED.

ADDED RIO 18.

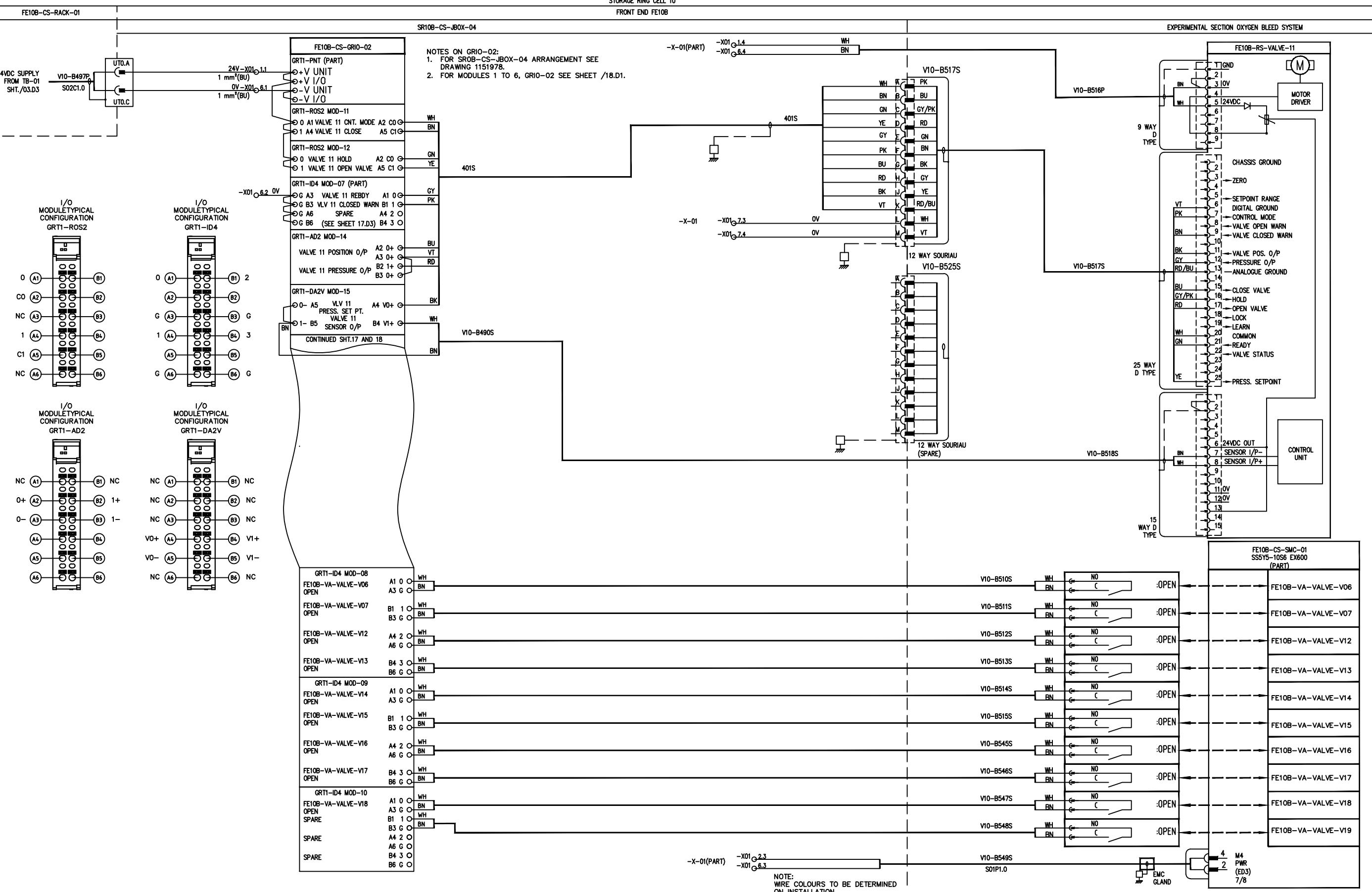
TURBO PUMP REPLACED.

ADDED SHT. 18 END STATION.

TEMPERATURE MONITORING.

 diamond
 DIAMOND LIGHT SOURCE LTD
 DIAMOND HOUSE
 HARWELL SCIENCE AND INNOVATION
 CAMPUS
 DIDCOT, OXFORDSHIRE
 OX11 0DE

THIS REVISION		TITLE	
DRN	NMP	STORAGE RING CELL 10	
DATE	DATE	FRONT END 10B CONTROL SYSTEM	
CHK	MWP	HOOK-UP	
APPD	MWP	ORIGINATOR	NMP
DATE	DATE	DATE	DATE
AUTOCAD	DRG No.	Approved	DRG STATUS
	1147700	14 OF 18	REV. F



diamond
 DIAMOND LIGHT SOURCE LTD
 DIAMOND HOUSE
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 OX11 0DE

THIS REVISION
 DRN NMP
 DATE 29/10/20
 CHK MWP
 DATE 29/10/20
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 ORIGINATOR NMP
 DATE 05/04/19
 DRG STATUS Approved
 No. 1147700
 SHEET 15 OF 18
 REV. F

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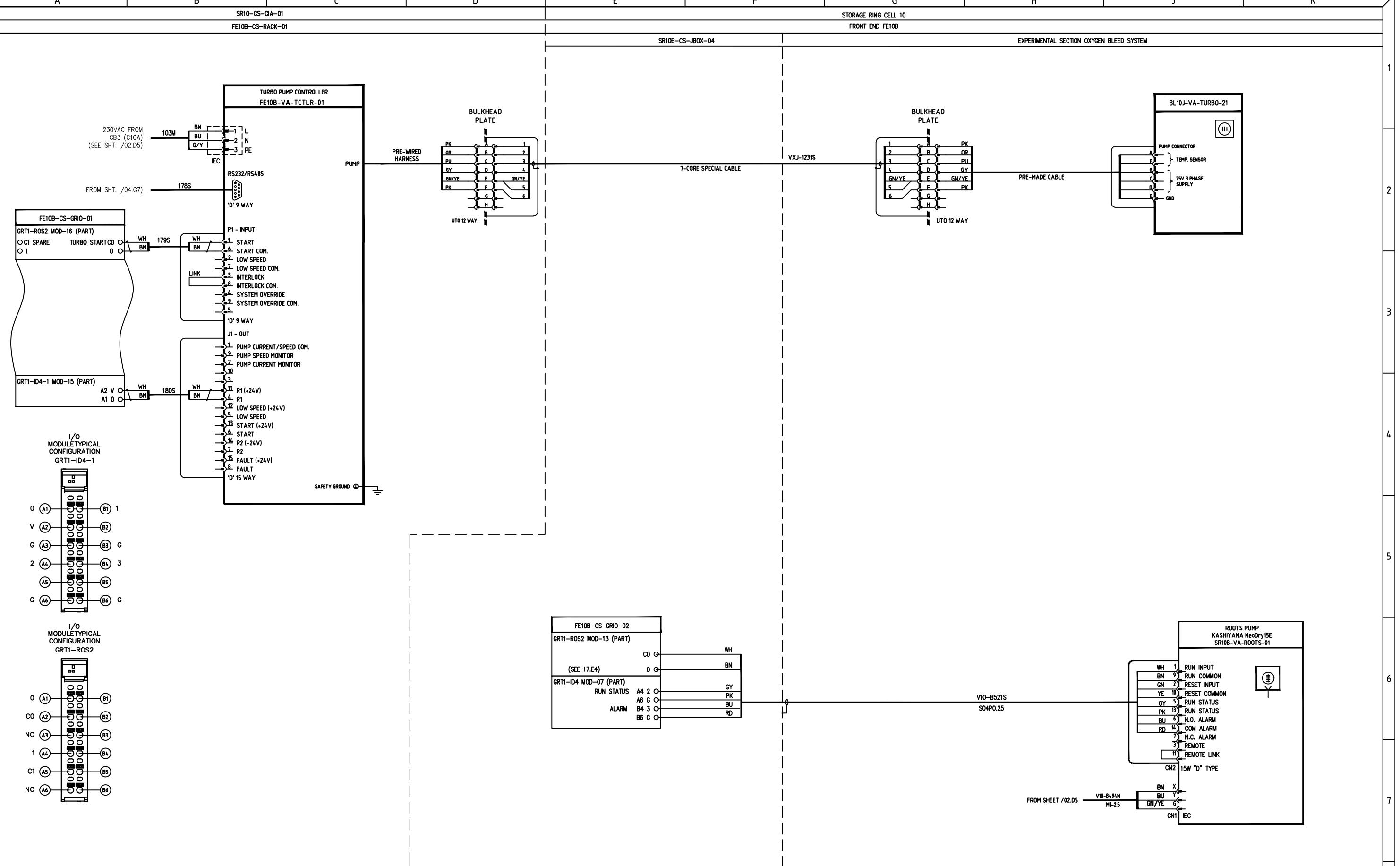
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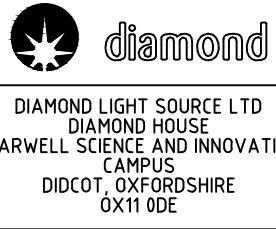
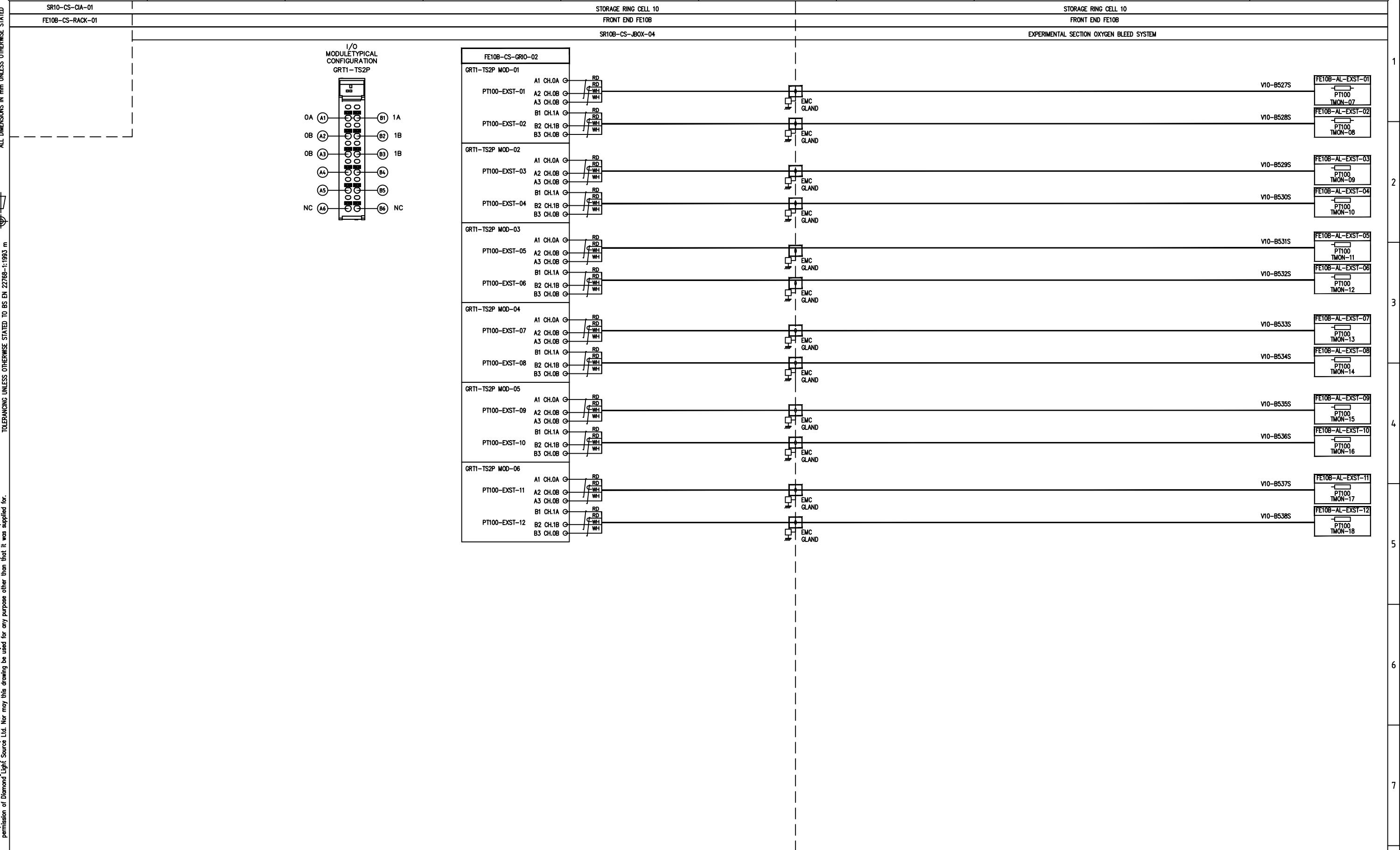
K

FIRST ISSUE

ALL SHEETS REVISED CABLE NAMES
TO COMPLY WITH CABLE SCHEDULEREV D CREATED FOR Drawings BUG.NO
CHANGES FROM REV CSHEET 01: ADDED SHT.17.
SHEET 02: ADDED POWER TO ROOT
PLUMP.
SHEET 3 ADDED POWER TO JBOX-14
AND TURBO PUMP.
SHEET 04: ADDED COMMS TO RIO 02.
RIO 01.
SHEET 05: ADDED RIO 04 AND
TURBO PUMP.
SHEET 10 AND 11: ADDED MODULE TO
RIO 01.
SHEET 15: ADDED JBOX-04 AND
MODULES TO SECOND RIO.
ADDED
VALVES TO END STATION.
SHEET 17: ADDED ROOT AND TURBO
PUMP LOGIC.SHT. 02: DUBLEY POWER SUPPLY
REPLACED, TWO SEPARATELY FED PSU1
AND PSU2.
SHT. 03: ADDED REDUNDANCY MODULE ADDED
TO JBOX-04.
SHT. 04: X-01 TERMINAL BLOCK
ADDED.
SHT. 14: PSU HEALTHY INPUT ADDED
TO JBOX-01.SHT. 05: INDEX
ADDED PAGE 8 TO INDEX.
SHT. 06: ADDED TURBO CONTROLLER
TURBO CONTROLLER.
SHT. 07: ADDED PROFINET SMC MANIFOLD.
SHT. 08: ADDED PROFINET SMC MANIFOLD.
SHT. 09: ADDED TURBO CONTROLLER SERIAL COMM.
SHT. 10: ADDED TURBO CONTROLLER SERIAL COMM.
SHT. 11: ADDED PROFINET NODE.
SHT. 12: ADDED PROFINET NODE.
SHT. 13: DELETED ABSR-01 (P1-100).
SHT. 14: MOVED TO JBOX-02.
SHT. 15: END STATION VALVES NOW
CONTROLLED BY SMC PROFINET NODE.
ADDED VALVES 16 TO 19.
SHT. 16: ENCODERS WIRING CHANGED.
ADDED RIO2.
SHT. 17: TURBO PUMP REPLACED.
ADDED SHT. 18: END STATION
TEMPERATURE MONITORING.SHT. 06: INDEX
ADDED PAGE 8 TO INDEX.
SHT. 07: ADDED TURBO CONTROLLER
TURBO CONTROLLER.
SHT. 08: ADDED PROFINET SMC MANIFOLD.
SHT. 09: ADDED PROFINET SMC MANIFOLD.
SHT. 10: ADDED TURBO CONTROLLER SERIAL COMM.
SHT. 11: ADDED PROFINET NODE.
SHT. 12: ADDED PROFINET NODE.
SHT. 13: DELETED ABSR-01 (P1-100).
SHT. 14: MOVED TO JBOX-02.
SHT. 15: END STATION VALVES NOW
CONTROLLED BY SMC PROFINET NODE.
ADDED VALVES 16 TO 19.
SHT. 16: ENCODERS WIRING CHANGED.
ADDED RIO2.
SHT. 17: TURBO PUMP REPLACED.
ADDED SHT. 18: END STATION
TEMPERATURE MONITORING.

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THIS REVISION		TITLE		
DRN DATE	NMP DATE	STORAGE RING CELL 10 FRONT END 10B CONTROL SYSTEM HOOK-UP		
CHK DATE	MWP DATE	DIAMOND LIGHT SOURCE LTD DIAMOND HOUSE HARWELL SCIENCE AND INNOVATION CAMPUS DIDCOT, OXFORDSHIRE OX11 0DE		
APPD DATE	MWP DATE	ORIGINATOR DATE	NMP DATE	DRG STATUS
AUTOCAD	DRG No.	1147700	05/04/19	Approved
		SHEET 18 OF 18	REV. F	