DRG. PRACTICE TO B.S. BR882.2008. THEN ANGLE PROLECTION TOLERANCING LIMESS OTHERWISE STATED TO BS EN 22768-1:1993 m No part of this drawing may be reproduced, stored or transmitted by electronic or other means except with the prior written permission of Diamond Light Source Lid. Hor may this drawing be used for any purpose other than that it was supplied for. FIRST ISSUE ⋖

STORAGE RING CELL 15
FE15I INSTRUMENTATION & CONTROL
HOOK-UP DRAWING

	HOOK-UP DRAWING DRAWINGS			
SHEET	DESCRIPTION			
1	HOOK-UP DRAWING INDEX			
2	FE15I-CS-RACK-01 230VAC POWER DISTRIBUTION.			
3	FE15I-CS-RACK-01 24VDC POWER DISTRIBUTION.			
4	FE15I-CS-RACK-01 NETWORK / COMMS (SERIAL)			
5	FE15I-RS-ABSB-01 AND FE15I-VA-VALVE-01 CONTROL			
6	FE15I-PS-SHTR-01 CONTROL & MPS DETAIL			
7	FE15I-PS-SHTR-02 AND FE15I-VA-VALVE-02 CONTROL			
8	FE15I-VA-IMG-01/02, FE15I-VA-PIRG-01/02, FE15I-VA-RGA-01, CONTROL.			
9	FE15I-VA-FCTLR-01 FAST FLAP CONTROLLER 01			
10	FE15I-VA-IONP-01/02/03/04/05 CONTROL.			
11	FE15I-VA-IMG-03/05, FE15I-VA-PIRG-03/05, CONTROL.			
12	FE15I-VA-IMG-04/06, FE15I-VA-PIRG-04/06, CONTROL.			
13	FE15I-AL-APTR-03 MOTION CONTROL (TABLE 01)			
14	REMOTE I/O INPUTS:FAN, PSU FAILURE ALARM AND OUTPUT: RGA RESET			
15	FE15I MODULE ASSEMBLY 01 TEMPERATURE TRIPS			
16	FE15I MODULE ASSEMBLY 01 WATER FLOWS & SWITCHES			
17	FE15I MODULE ASSEMBLY 02 TEMPERATURE INDICATION			
18	FE15I MODULE ASSEMBLY 02 WATER FLOWS & SWITCHES			
19				
20				
21				
22				
23				
24				
25				

REFERENCE	TITLE
1010498	BLOCK CABLE DIAGRAM (BCD)
1166407	GENERAL ARRANGEMENT (GA)
1008741/ 1008742	6 VALVE CONTROL CRATE
1013463	SR15C VACUUM CONTROL
1019678	SR15C MPS CONTROL
1008690	SERIAL COMMS CABLES
1058899	FAST FLAP VALVE CONTROLLER
1004628	CIA 15 POWER DISTRIBUTION
1008560	POWER SUPPLY UNIT (DUPLEX)
1166409	STORAGE RING CELL 15 FRONT END 151 CONTROL SYSTEMS LABELS
1025895	STEPPER DRIVE CRATE

PROFINET REMOTE I/O TERMINALS					
MODULE	PART NUMBER	FUNCTION	SEE SHEET Nº		
PROFINET COMMUNICATIONS	NX-PNC202	PROFINET COMMUNICATIONS UNIT	14		
8	NX-EC0212	COUNTER MODULE	16 AND 18		
1 TO 4	NX-TS3201	PT100 TEMPERATURE INPUT MODULE	15 AND 17		
5	NX-ID5442	16 X DIGITAL INPUT MODULE (PNP)	16 AND 18		
6	NX-PD1000	POWER DISTRIBUTION MODULE	14		
9	NX-AD4604	ANALOGUE INPUT MODULE	08, 11 AND 12.		
7	NX-0C4633	4 X RELAY OUTPUT MODULE	14		
10	NX-END01	END UNIT			

CABLE INTERFACE UNITS					
REF.	TYPE No.	DESCRIPTION	SEE SHEET Nos.	USAGE	
CIU 01	2315188	25 WAY FEMALE	6 AND 7	13-20	
CIU 02	2315133	25 WAY MALE	6	13-16	
CIU 03	2315188	25 WAY FEMALE	9	1-4, 9,10, 13-16	
CIU 04	2315188	37 WAY FEMALE	08	07,11,13,14 AND 21 TO 23	
CIU 05	2315188	37 WAY FEMALE	11	07,11,13,14 AND 21 TO 23	
CIU 06	2315188	37 WAY FEMALE	12	07,11,13,14 AND 21 TO 23	

TERMINAL BLOCKS				
REF.	TYPE No.	DESCRIPTION	SEE SHT Nos.	NUMBER
-X-01 (FS 1 TO 10)	9802730000	2 TIER TERMINAL WDK 2.5	03	10
-X-02	(A2C 2.5) 1521850000	1 TIER TERMINAL A2C 2.5	03	6
-X-03	1521850000	1 TIER TERMINAL WDU 2.5	03	4
-X-04	1521850000	1 TIER TERMINAL WDU 2.5	03	4
-X-05	1608540000	1 TIER TERMINAL WDU 2.5	06	2
-X-06	1608540000	2 TIER TERMINAL ZDU 2.5	14, 16 AND 18.	10

BECKHOFF ETHERCAT MODULE						
MODULE	PART No.	FUNCTION	SEE SHEET No.	POWER REQ.	ACC. POWER	
BUS COUPLER	EK 1100	24VDC SUPPLY	/08.06	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	/11.F6	200mA	400mA	
03	ES 3702	2 X ANALOGUE 0-10V I/P	/12.F6	200mA	600mA	

FOR REFERENCE ONLY NOT FOR MANUFACTURE

08/09/21



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DRN NMP
DATE 13/09/21
CHK
DATE
APPD OR
DATE

STORAGE RING CELL 15 FRONT END 15I CONTROL SYSTEMS HOOK-UP DRAWING

NMP 24/02/21 DRG STATUS Being Checked

AUTOCAD No. 1166408

408 SHEET 1 OF 18

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