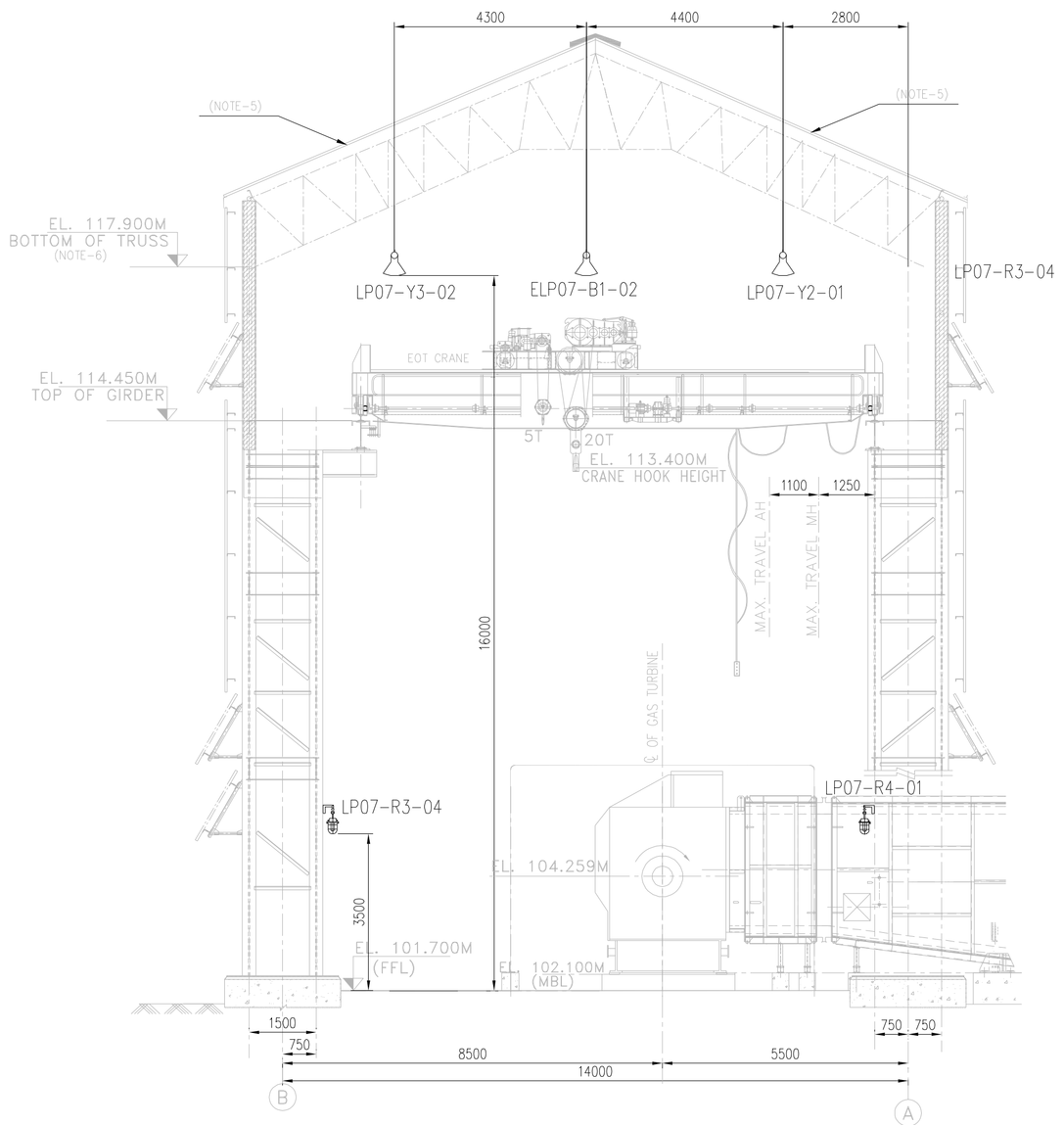
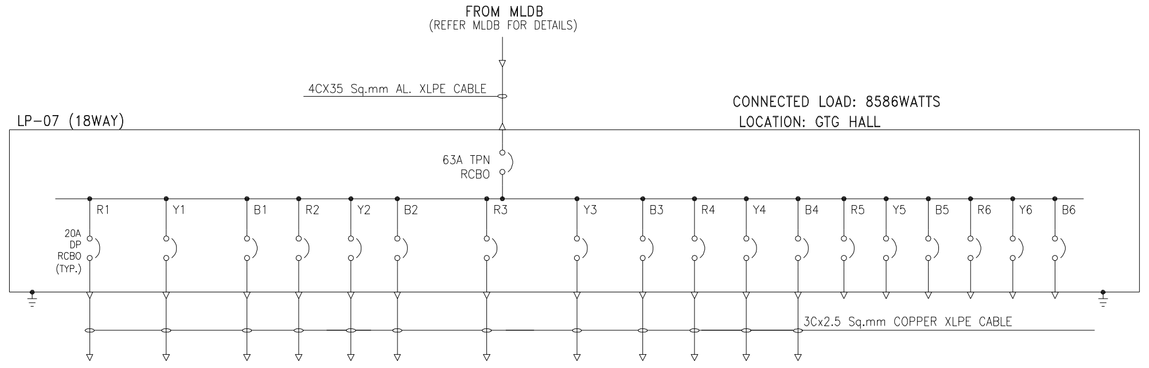
FICHTNER-AI



SECTION A–A



CONNECTED LOAD	LOAD IN (WATTS)
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/R1/01&02).	860
1 No. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/Y1/01). 1 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (LP07/Y1/02).	430 + 142 =572
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/B1/01&02).	860
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/R2/01&02).	860
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/Y2/01&02).	860
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/B2/01&02).	860
1 No. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/Y3/02.03&04). 1 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (LP07/Y3/02.03&04).	430 + 426 =856
2 NoS. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/R3/02.03&04). 1 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (LP07/R3/01).	860 + 142 =1002
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400 W HPMV LAMP. (LP07/B3/01&02).	860
2 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (LP07/B3/02&03).	284
4 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (LP07/Y4/01.02.03&04).	426
2 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (LP07/B4/01&02).	284
SPARE	
SPARE	
SPARE	
SPARE	
SPARE	
SPARE	

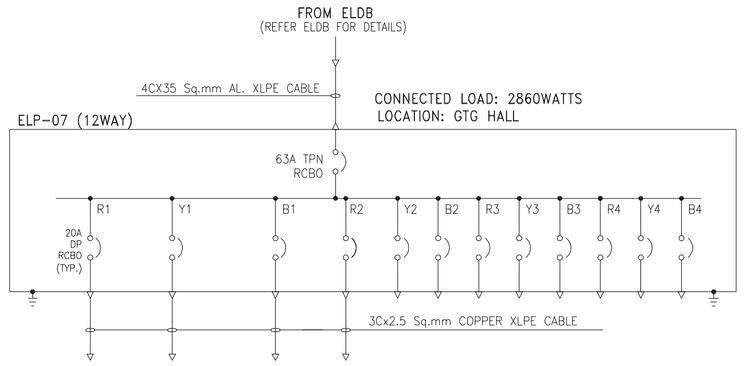
DESCRIPTION	CONNECTED IN WATTS
R – PHASE	2860W
Y – PHASE	2862W
B – PHASE	2864W
TOTAL LOAD	8586W

BILL OF QUANTITY

SL. NO.	LEGEND	DESCRIPTION	QTY.
01.		INDUSTRIAL INTEGRAL TOTALLY ENCLOUSED HIGH BAY FIXTURE SUITABLE FOR 400W HPMV LAMP(NORMAL) ROOF TRUSS / CELING MOUNTED (TYPE–HB2–SM).	16 Nos.
02.		INDUSTRIAL INTEGRAL TOTALLY ENCLOUSED HIGH BAY FIXTURE SUITABLE FOR 400W HPMV LAMP(EMERGENCY) ROOF TRUSS / CELING MOUNTED (TYPE–HB2–SM).	05 Nos.
03.		INTEGRAL WELL GLASS LUMINAIRE WITH CAST AL. ALLOY MOUNTING PIECE, SHEEL AL. CONOPY WITH STOVE ENAMELLED WHITE INSIDE AND GREY OUT SIDE, HEAT RESISTANT GLASS AND WIRE GUARD SUITABLE FOR 125W HPMV LAMP. (NORMAL)(COLUMN/ WALL MOUNTING) (TYPE BK2/BK4/FLP4–BM/WM).	13 Nos.
04.		INTEGRAL WELL GLASS LUMINAIRE WITH CAST AL. ALLOY MOUNTING PIECE, SHEEL AL. CONOPY WITH STOVE ENAMELLED WHITE INSIDE AND GREY OUT SIDE, HEAT RESISTANT GLASS AND WIRE GUARD SUITABLE FOR 125W HPMV LAMP. (EMERGENCY)(COLUMN/ WALL MOUNTING) (TYPE BK2/BK4/FLP4–BM/WM).	05 Nos.
05.		INDUSTRIAL BULKHEAD LUMINAIRE SUITABLE FOR 1x10W CFL LAMP & 110V DC SUPPLY WITH DC TO AC CONVERTOR. WALL MOUNTED (TYPE–BK1–WM)	05 Nos.
06.		20A, 240V, INDUSTRIAL METAL CLAD TYPE SOCKET WITH MCB.	04 Nos.
07.		NORMAL AC INDOOR LIGHTING PANEL (18WAY)	01 No.
08.		EMERGENCY AC INDOOR LIGHTING PANEL (12WAY)	01 No.
09.		AC INDOOR POWER PANEL (6WAY)	01 No.
10.		DC INDOOR LIGHTING PANEL (6WAY)	01 No.
11.		63A TPN WELDING RECEPTACLE	02 Nos.
12.		DC TO AC CONVERTOR	05 Nos.
13.		3Cx2.5 Sq.mm COPPER XLPC CABLE	AS REQD.
14.		200X150X80MM 4 WAY RECTANGULAR JB WITH 4Nos. 3/4" CABLE ENTRY SUITABLE FOR TERMINATING 3CX2.5SQMM CU. CABLE.	44 Nos.
15.		RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBO)	AS PER LP/ PP SLDs

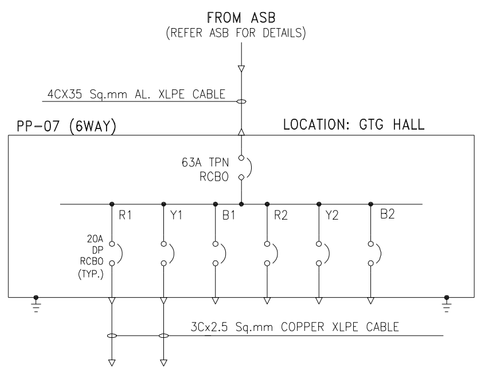
NOTES:

1. ALL DIMENSIONS ARE IN MM AND ELEVATION LEVELS ARE IN METRES.
2. LOCATION OF LIGHTING FIXTURES, SWITCHBOARDS, PANELS AND SOCKETS ARE INDICATIVE ONLY, EXACT LOCATION SHALL BE DECIDED AS PER SITE CONDITIONS TO CLEAR OTHER INTERFERENCES. SITE TO ENSURE THAT FIXTURES ARE NOT PLACED EXACTLY TOP OF ANY PANEL/EQUIPMENT AND SHALL NOT FOUL WITH CRANE.
3. EACH LIGHTING FIXTURES/RECEPTACLES SHALL BE PROVIDED WITH AN EARTHING TERMINAL.
4. MOUNTING HEIGHT OF LIGHTING FIXTURES AS DETAILED BELOW:
   a) 125W HPMV WG FIXTURE (COLUMN MOUNTED). – 3500mm FROM FFL.
   b) 400W HPMV HIGH BAY FIXTURE – 16000mm FROM FFL.
   c) 10W CFL BULKHEAD FIXTURE – 3000mm FROM FFL.
   d) TOP OF LIGHTING/POWER PANELS – 1800mm FROM FFL.
   e) 20A SOCKET/63A RECEPTACLES – 1200mm FROM FFL.
5. FOR MOUNTING DETAILS REFER NOTES & DETAILS FOR PLANT ILLUMINATION SYSTEM, DOC. NO. 4–381–21–03694.
6. 63A TPN WELDING RECEPTACLES SHALL BE FED FROM "ASB". MAXIMUM 2NOS. RECEPTACLES SHALL BE FED FROM ONE FEEDER. HOWEVER ONE RECEPTACLE SHALL BE USED AT A TIME.
7. MOUNTING ARRANGEMENT SHOWN IN THE LAYOUT IS INDICATIVE ONLY. EXACT ARRANGEMENT TO BE DECIDED AS PER SITE REQUIREMENTS.
8. SIZE AND TYPE OF CABLES/WIRES TO BE USED AS INDICATED IN THE SLDS. ALL CABLES TO BE ROUTED ALONG THE COLUMNS/BEAM/LADDER CHANNEL AND CLEATED BY SUITABLE CABLE CLAMPS. HOWEVER SUITABLE CABLE TRAY SHALL BE USED IF MORE THAN TWO NOS. CABLES ARE TO BE ROUTED IN SAME PATH.
9. DC TO AC CONVERTOR TO BE USED FOR EACH BULKHEAD DC LIGHTING. CONVERTOR TO BE LOCATED AS NEARER AS POSSIBLE TO THE FIXTURE.
10. FOR EACH FIXTURE, JB (200X150X80MM) TO BE USED FOR LOOP IN/OUT OF CIRCUIT CABLES.
11. JB SHALL BE INSTALLED AT EASILY ACCESIBLE LOCATION. (I.E. ON POLE FOR POLE/HANDRIAL MOUNTED FIXTURE & ON HAND RAIL/COLUMN, FOR CEILING/BRACKET MOUNTED FIXTURE).
12. DISTANCE BETWEEN SUCCESSIVE FIXTURE INDICATED IN THE DRAWING IS THE MAXIMUM PERMISSIBLE SPACING TO ACHIEVE DESIRE LUX LEVEL. SPACING BETWEEN TWO FIXTURES SHALL NOT BE INCREASED BEYOND THIS VALUE.
13. FIXTURE MOUNTING TYPE IS INDICATED IN THE BOM, FOR MOUNTING DETAILS OF THE SAME REFER ANNEXURE–1 OF NOTES & DETAILS (DOC. NO. 4–381–21–03694).

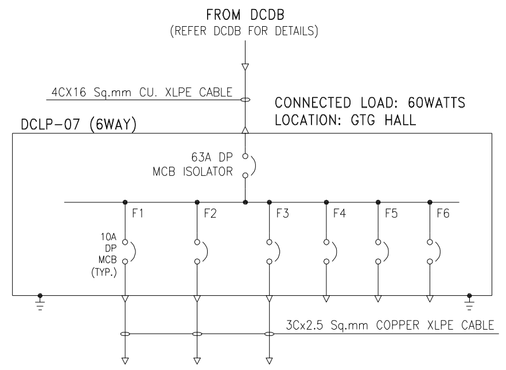


CONNECTED LOAD	LOAD IN (WATTS)
1 No. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400W LAMP. (ELP07/R1/01).	430
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400W LAMP. (ELP07/Y1/01&02). 1 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (ELP07/Y1/01&02).	860 + 142 =1002
2 Nos. INDUSTRIAL INTEGRAL HIGH BAY FIXTURE SUITABLE FOR 400W LAMP. (ELP07/B1/02&03).	860
1 No. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP (ELP07/B1/01).	142
3 Nos. INDUSTRIAL INTEGRAL WELL GLASS FIXTURE SUITABLE FOR 125W LAMP. (ELP07/R2/01.02&03).	426
SPARE	
SPARE	
SPARE	
SPARE	
SPARE	
SPARE	
SPARE	

DESCRIPTION	CONNECTED IN WATTS
R – PHASE	856W
Y – PHASE	1002W
B – PHASE	1002W
TOTAL LOAD	2860W



CONNECTED LOAD
2 Nos. 20A, 240V INDUSTRIAL METAL CLAD TYPE SOCKET WITH MCB. (PP07/Y1/01&02)
2 Nos. 20A, 240V INDUSTRIAL METAL CLAD TYPE SOCKET WITH MCB. (PP07/B1/01&02)
SPARE
SPARE
SPARE
SPARE



CONNECTED LOAD	LOAD IN (WATTS)
3 Nos. BULKHEAD LUMINAIRE SUITABLE FOR 1x10W CFL LAMP & 110V DC SUPPLY WITH DC TO AC CONVERTOR. (DCLP07/F1/01.02&03).	36
2 Nos. BULKHEAD LUMINAIRE SUITABLE FOR 1x10W CFL LAMP & 110V DC SUPPLY WITH DC TO AC CONVERTOR. (DCLP07/F2/01&02).	24
SPARE	
SPARE	
SPARE	
SPARE	

REV.	DATE	DESCRIPTION	DRN	STR	MECH	ELEC	INST
				APPROVED BY			
R00	13.10.15	FIRST ISSUE	.	XXX	XXX	.	XXX