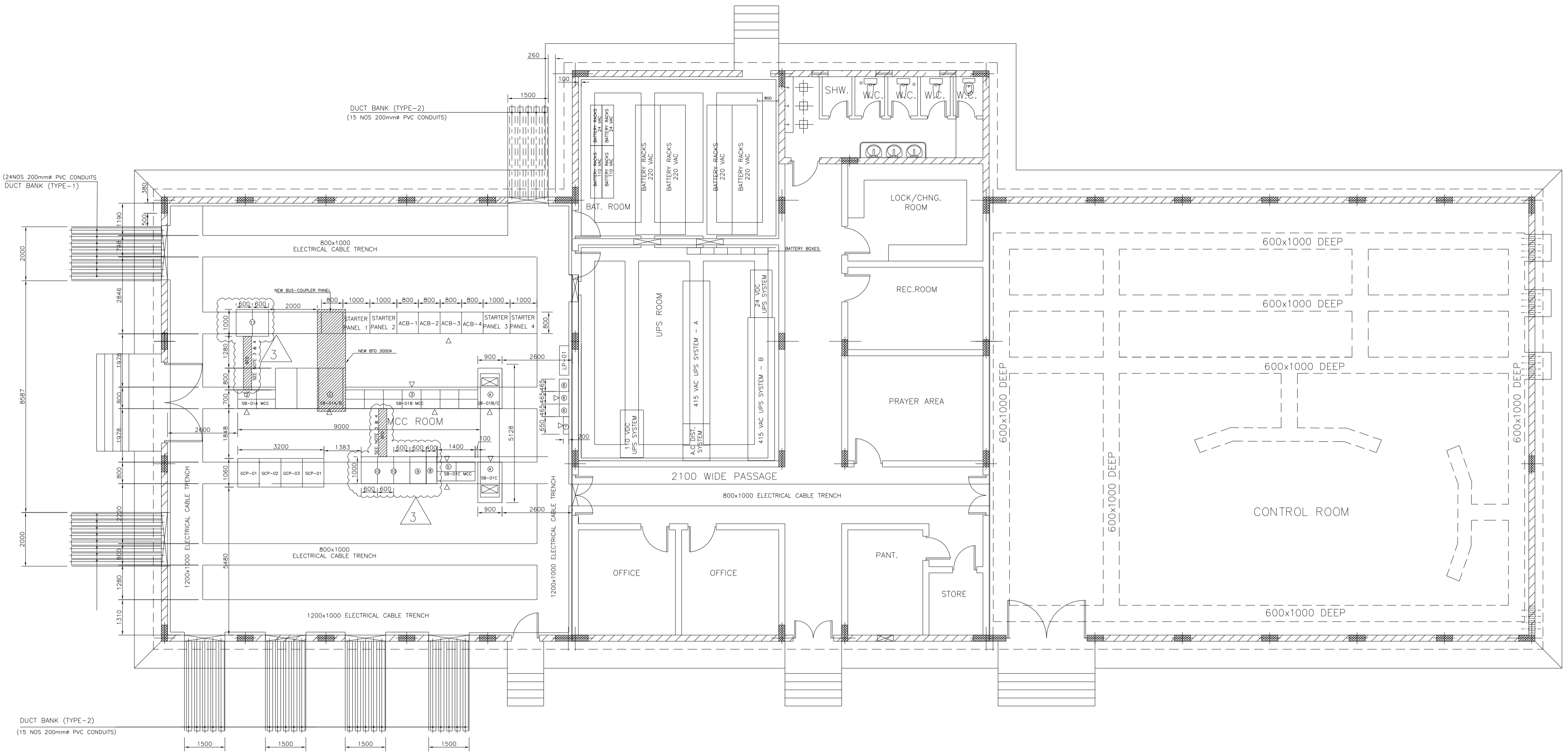


**PROCUREMENT (SUPPLY), CONSTRUCTION, INSTALLATION/ERECTION, PRE-COMMISSIONING, & COMMISSIONING ASSISTANCE FOR NEW CENTRIFUGAL COMPRESSORS AND MODIFICATION WORKS OF EXISTING TURBO COMPRESSOR TRAINS FOR QADIRPUR COMPRESSION PROJECT**

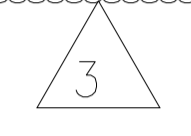
**TENDER ENQUIRY NO. PROC-FC/CB/PROJ/QP-4369/2019  
POST-BID CLARIFICATION No. OGDCL-QP-4369-009**



Sr. No.	Bidder Query	OGDCL/ENAR Response (23-Oct-2019)
<b>General</b>		
1	Please confirm that construction water will be supply by client.	Please refer to Sec-3.1 (Pg-15 of 51) of scope of work.
2	Based on above and most of vendors / suppliers require more time to provide their items quotation; based on this request you to extend the bid submission date by 3 week.	Extension can not be given. As already sufficient time has been given.
<b>Electrical</b>		
3	Please provide the drawing # 0106-ELD-6705 & 0106-ELB-66013.	Drawing no. 0106-ELD-6705 is already submitted with tender package. However, again attached here for your ready reference. Further, drawing no. 0106-ELB-66013 is not referenced/used in the tender, therefore, please clarify the need of this drawings and where is mentioned in the tender.
4	Please provide As built drawings/schematics of existing switchgears.	All the available Vendor drawings are attached here for your reference. Any further details if required, can be acquired during site visit.
5	Please provide Switchgear room layout with placement of existing switchgears, new switchgears and BTDS.	Drawing no. 0106-ELD-6705 (MCC Room Equipment Layout) is already submitted with tender package. However, again attached here for your ready reference.
6	System study has not been mentioned in RFQ whereas it has been mentioned as vendor's scope in drawings notes. Please clarify.	Refer to Single Line Diagram Doc# 0106-ELB-6601 note#8, which states that Contractor is responsible for the selection of MCC Vendor who shall carryout following min. studies to further ascertain the values of initial and peak short circuit currents at all section of switchgear/MCC during different operation scenarios; - Load flow - Short circuit - Relay co ordination  However, short circuit rating mentioned on SLDs are minimum to consider by the bidder/vendor.
7	PCL E&I team would like to have additional site visit to further investigate the existing LV Panel modification scope, please advise the visit date so to coordinate with your site team.	Please visit web site for visit schedule.

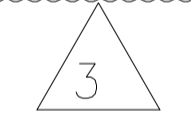


- NOTES: -**
- 1- THE CONTRACTOR SHALL INSTALL A DUMMY PANEL BESIDE THE INTERIM SWITCHBOARD. THE DUMMY PANEL SHALL BE CONNECTED TO THE PIRKOH SWITCHBOARD VIA 3000A BTD / (BUS-COUPLER). THE CONTRACTOR/ SUPPLIER SHALL MEASURE THE ACTUAL BTD LENGTH BEFORE EXECUTING INSTALLATION WORKS.
  - 2- PANEL DIMENSIONS ARE TENTATIVE AND SHALL BE FINALIZED AFTER VENDOR DATA. HOWEVER, DUE TO LIMITED SPACE AVAILABLE, VENDOR TO SELECT PANEL DIMENSIONS (CONSTITUTES OF DUMMY PANEL, MOTOR STARTERS AS MENTIONED IN SLD) IN SUCH A MANNER THAT ALL ARE TO BE ADJUSTED IN ALLOCATED SPACE WITHOUT ENCRUCHING MAINTENANCE AND OPERATIONAL ALLOWANCE.
  - 3- AS THE TAP-OFF CONNECTION FROM SUITABLE LOCATION OF RESPECTIVE EXISTING MCC (SB-01B & SB-01C) SHALL BE DECIDED/DETERMINED BY SWITCHGEAR/MCC VENDOR AT SITE, THEREFORE, FINAL LOCATION OF EXTENDED PORTION OF AFORESAID PANELS SHALL BE FINALIZED THEREAFTER. HOWEVER, DUE CONSIDERATION SHALL BE GIVEN TO LOCATION OF TEE-OFF CONNECTION THAT REQUIRES MINIMUM BTD LENGTH AND BE ADJUSTED WITHIN ALLOCATED/AVAILABLE SPACE WITHOUT JEOPARDIZING EXISTING SYSTEM INTEGRITY.
  - 4- IF ADDITIONAL DUMMY PANEL REQUIRED TO ACCOMPLISH THE AFORESAID CONNECTION SHALL ALSO BE PROVIDED BY SWITCHGEAR/MCC VENDOR WITHOUT ADDITIONAL COST.
  - 5- ALL PANELS SHALL BE SUITABLE FOR CABLE CONNECTION FROM REAR SIDE.



**ELECTRICAL EQUIPMENT DIMENSIONS**

NO.	EQUIP. NO.	ITEM	QTY.	UNIT	UNIT DIMENSION (W x D x H mm)
①	SB-01A/B	SB-01A/B SWGR	02	SET	800 x 1500 x 2350
			01	SET	900 x 1500 x 2350
②	SB-01A MCC	SB-01A MCC	02	SET	700 x 700 x 2400
③	SB-01B MCC	SB-01B MCC	07	SET	700 x 700 x 2400
④	SB-01B/C	SB-01B/C SWG	02	SET	900 x 1500 x 2350
⑤	SB-01C MCC	SB-01C MCC	02	SET	700 x 700 x 2400
⑥	VWF	VWF PANEL	03	SET	465 x 355 x 1457
⑦	SHP-01	SPACE HEATER PANEL	01	SET	650 x 200 x 1500
⑧	-	DUMMY PANEL	01	SET	
⑨	SB-01C	EXTENDED PANEL	01	SET	SEE NOTE-2
⑩	SB-01B	EXTENDED PANEL	03	SET	SEE NOTE-2
⑪	SB-01A	EXTENDED PANEL	02	SET	SEE NOTE-2



**NEW SCOPE OF PROJECT**  
**ISSUED FOR BID**

REV.	DATE	DESCRIPTION OF REVISION	DRAWN	DESIGNED	CHECKED	APPR.
3	08-07-2019	ISSUED FOR BID (MODIFIED UNDER PROJECT 14-0220)	MAA	JAB	AIB	TH
3b	14-06-2019	RE-ISSUED FOR REVIEW & APPROVAL (MODIFIED UNDER PROJECT 14-0220)	MAA	JAB	AIB	TH
3a	10-05-2019	ISSUED FOR REVIEW & APPROVAL (MODIFIED UNDER PROJECT 14-0220)	MAA	JAB	AIB	TH
3	07-07-2012	RE-ISSUED FOR CONSTRUCTION	MS	JBK	WAK	TH
2	20-05-2011	ISSUED FOR CONSTRUCTION	MS	JBK	WAK	TH
1	22-12-2010	ISSUED FOR BID	MAZ	ARG	WAK	TH
0	05-12-2009	ISSUED FOR BID	MAZ	ARG	WAK	TH

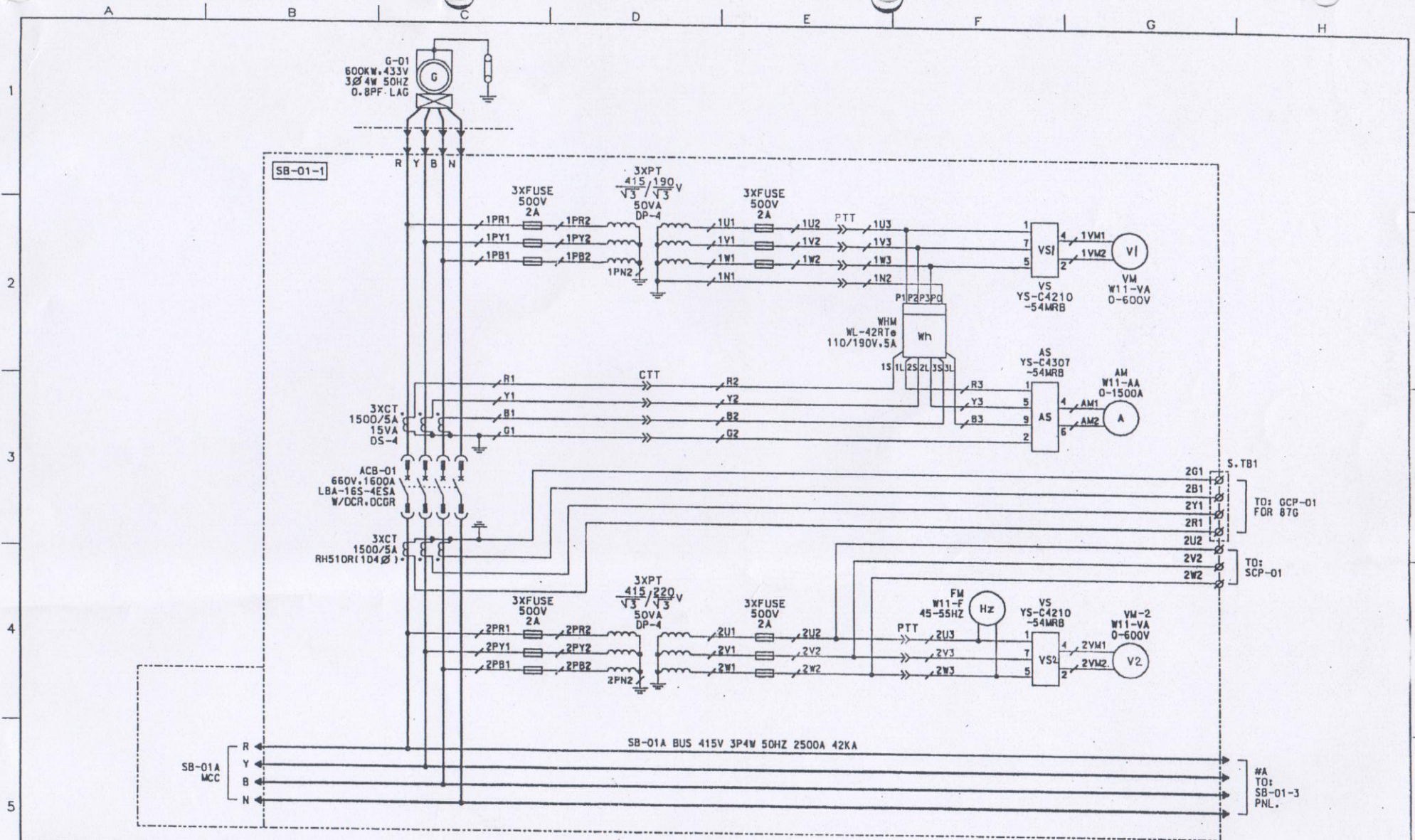
Job No. 14-0106  
 Dwg. No. 0106-ELD-6705

**ENAR PETROTECH SERVICES (PRIVATE) LIMITED**  
 7-B, Sector 7-A, Korangi Industrial Area, Karachi Pakistan  
 TEL: (9221) 5062791 E-mail: info@enar.com.pk  
 URL: www.enar.com.pk

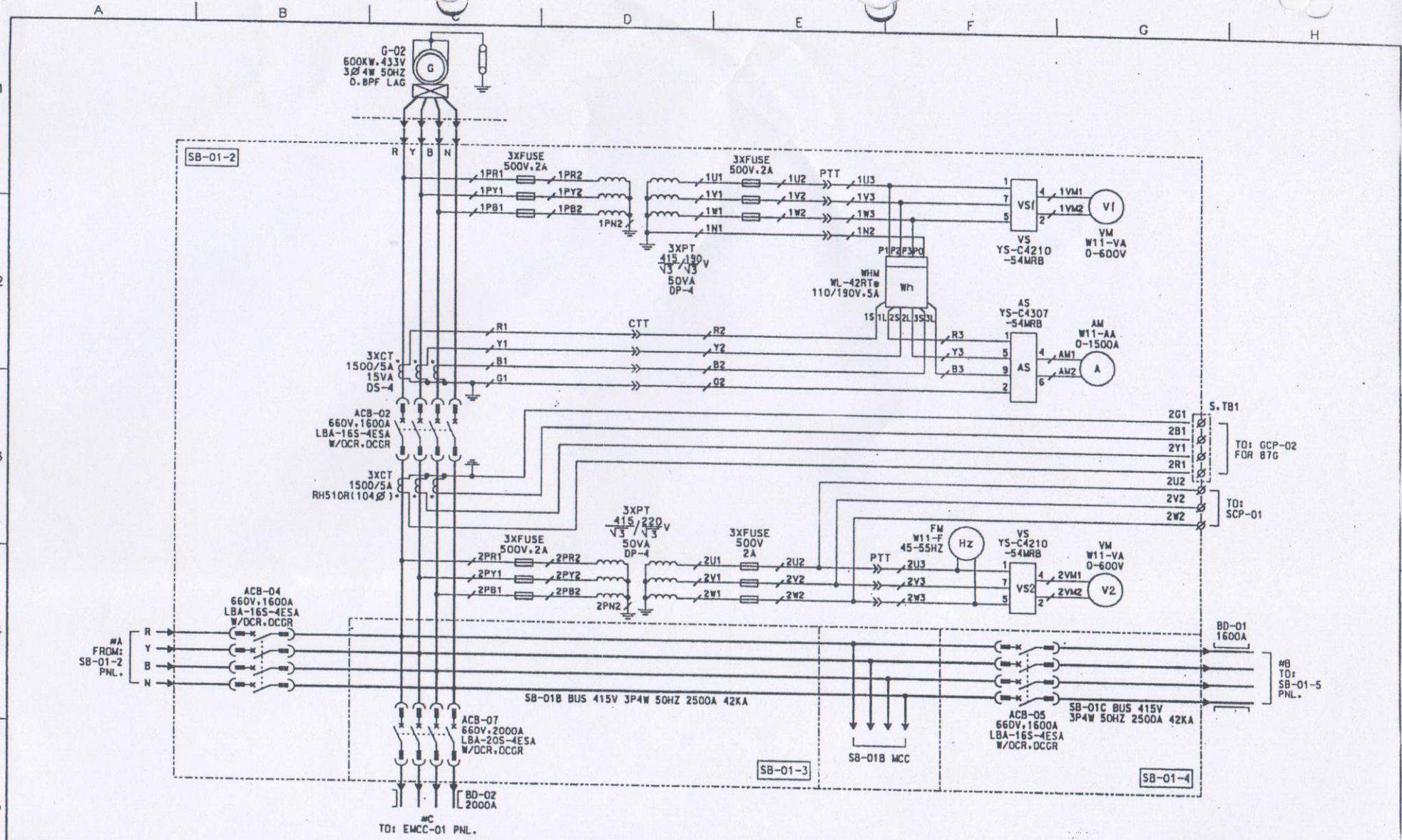
**OIL & GAS DEVELOPMENT COMPANY LIMITED**  
 INSTALLATION OF PIRKOH COMPRESSION AT QADIRPUR

COMPUTER CODE 0106-ELD-6705  
 SHEET SIZE A1  
 SCALE 1:100  
 REPLACES DWS. NO.

THIS DOCUMENT IS THE PROPERTY OF ENAR & THE CONTENTS MUST BE TREATED AS CONFIDENTIAL



5																				
4																				
3																				
2																				
1	FOR REVISION	98.06.15	S.H.WON	Y.H.KIM																
0	ISSUED FOR APPROVAL	98.05.12	S.H.WON	Y.H.KIM	H.K.CHO	J.H.AHN														
REV.	DESCRIPTION	DATE	DRWN	DSGN	CHKD	APPD	CUSTOMERS					TITLE	SCALE	W18e29+0.01e	WORK NO.	988029	REVISION	1	SHEETS	
							PIRKOH GAS FIELD COMPRESSION HYUNDAI ENG. / PAKISTAN					THREE LINE DIAGRAM OF LV SWGR. SB-01-1 PANEL								
							LG Industrial Systems Co., Ltd.					DIMENSION	MM	3RD ANGLE PROJECTION	DWG NO.	W4-20-07199-110				



5						
4						
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1	FOR REVISION	98.06.15	S.H.WON	Y.H.KIM		
0	ISSUED FOR APPROVAL	98.05.12	S.H.WON	Y.H.KIM	H.K.CHO	J.H.AHM
REV.	DESCRIPTION	DATE	DRWN	DSGN	CHKD	APPD

CUSTOMERS

PIRKOH GAS FIELD COMPRESSION  
HYUNDAI ENG. / PAKISTAN

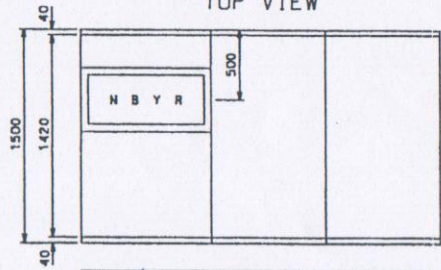
**LQ Industrial Systems Co., Ltd.**

TITLE		THREE LINE DIAGRAM OF LV SWGR. SB-01-2, SB-01-3 & SB-01-4 PANEL		REV.	1
SCALE	1/8"=29'0.02"	WORK NO	988029	SHEETS	
DIMENSION	MM	3RD ANGLE PROJECTION	DWG NO	W4-20-07199-111	



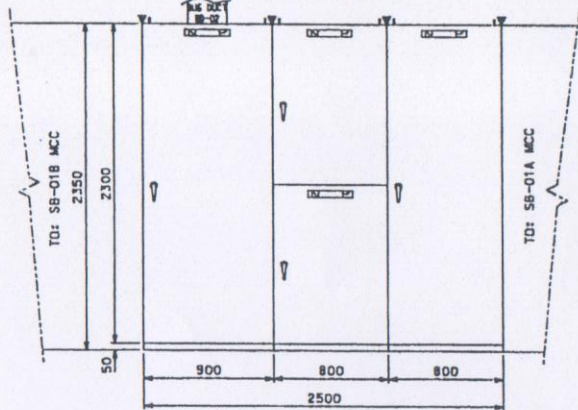
A B C D E F G H

TOP VIEW

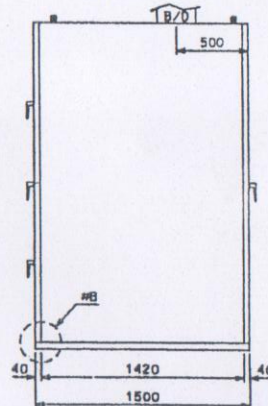


SB-01-3	SB-01-2	SB-01-1	PANEL NO.
ACB-07 PNL.	ACB-04 PNL. ACB-02 PNL.	ACB-01 PNL.	NAME PLATE
1200 Kg	1500 Kg	1200 Kg	WEIGHT

FRONT VIEW



SIDE VIEW

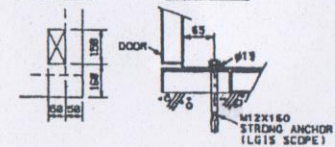


\* NOTE :

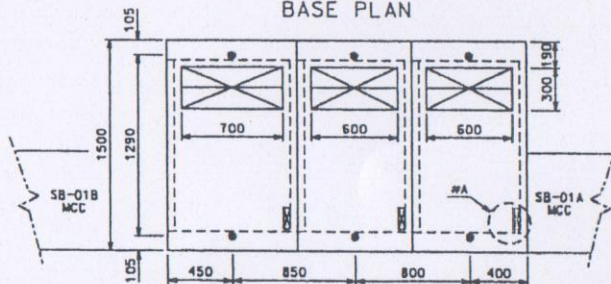
1. ▽ : SHIPPING SPLIT
2. PAINTING COLOR  
1) INSIDE : MUNSELL NO. 7.58G 6/2  
2) OUTSIDE : MUNSELL NO. 7.58C 6/2

\*A DETAIL

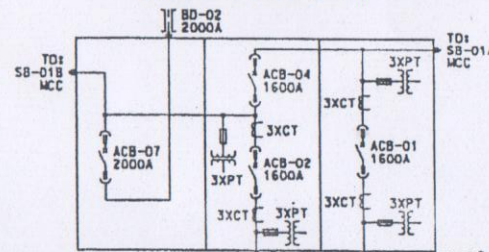
\*B DETAIL



BASE PLAN



SKELETON DIAGRAM



6-3xct 3xpt 6-3xct 3xpt  
B502X3E-9 10-000x3E-02

5						
4						
3						
2						
1	FOR REVISION	98-06-15	S.H.WON	Y.H.KIM		
0	ISSUED FOR APPROVAL	98-05-12	S.H.WON	Y.H.KIM	H.K.CHO	J.H.AHN
REV.	DESCRIPTION	DATE	DRWN	DSGN	CHKD	APPD

CUSTOMERS

PIRKOH GAS FIELD COMPRESSION  
HYUNDAI ENG. / PAKISTAN

TITLE

OUT LINE DRAWING OF  
LV PANEL (1/4)

REV.  
1



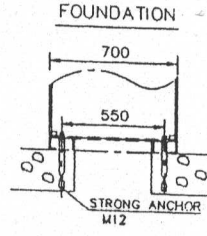
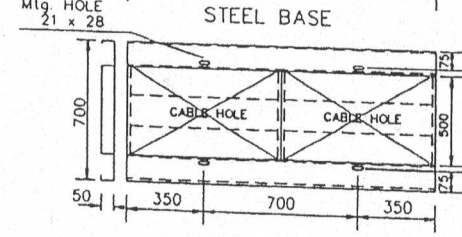
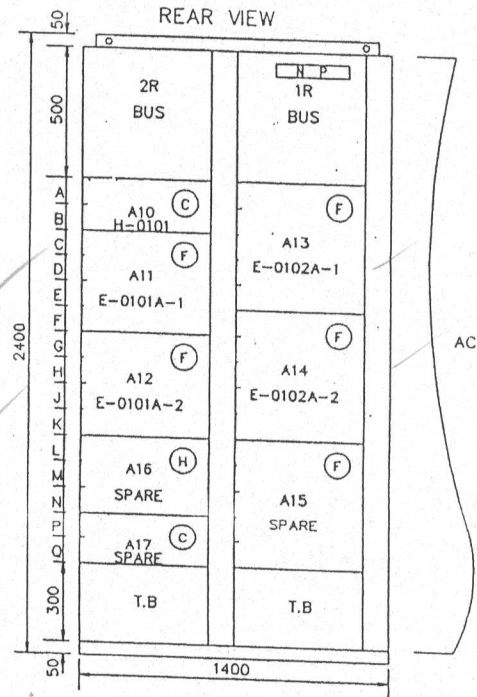
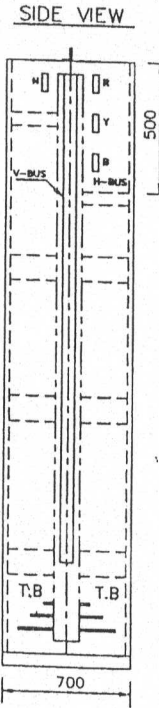
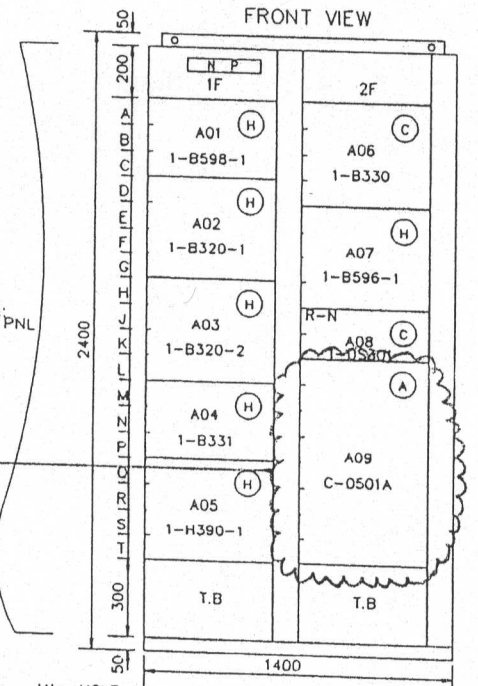
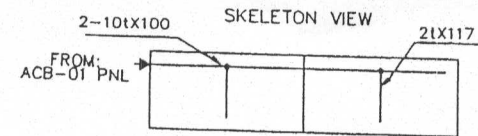
LG Industrial Systems Co., Ltd.

SCALE	1/8x29p0.05e	WORK NO	988029
DIMENSION	MM	3RD ANGLE PROJECTION	DWG NO W4-20-07199-101

SHEETS

B C D E F G H

A B C D E F G H

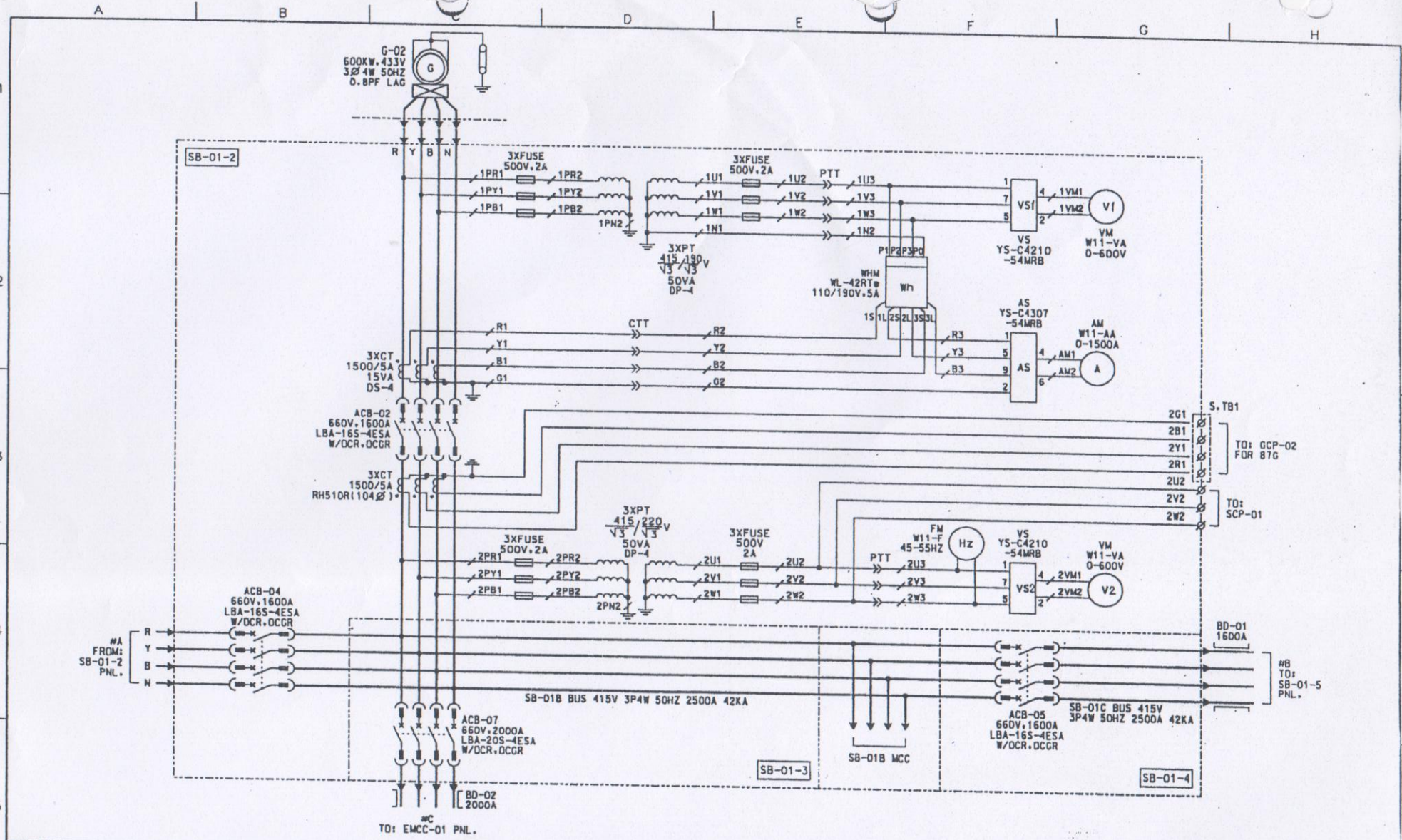


3 The starter A09 (Instrument Air Compressor) should be relocated to the rear side of SB-01B panel # 1R-A. See specification for dismantling works section 1.2

REV.	DESCRIPTION	DATE	DRWN	DSCN	CHKD	APPD
1	ISSUED FOR APPROVAL	98.5.13	C.Y.T			

CUSTOMERS	PIRKOH GAS FIELD COMPRESSION HYUNDAI ENG. / PAKISTAN		TITLE	OUT LINE DIAGRAM OF SB-01A MCC	
	SCALE	80290001		WORK NO	988029
LG Industrial Systems Co., Ltd.		DIMENSION	MM	3RD ANGLE PROJECTION	DWG NO
				W4-20-07199-307	

LCIS-D-AJ(297x420mm)



5						
4						
3						
2						
1	FOR REVISION	98.06.15	S.H.WON	Y.H.KIM		
0	ISSUED FOR APPROVAL	98.05.12	S.H.WON	Y.H.KIM	H.K.CHO	J.H.AHM
REV.	DESCRIPTION	DATE	DRWN	DSGN	CHKD	APPD

CUSTOMERS

PIRKOH GAS FIELD COMPRESSION  
HYUNDAI ENG. / PAKISTAN

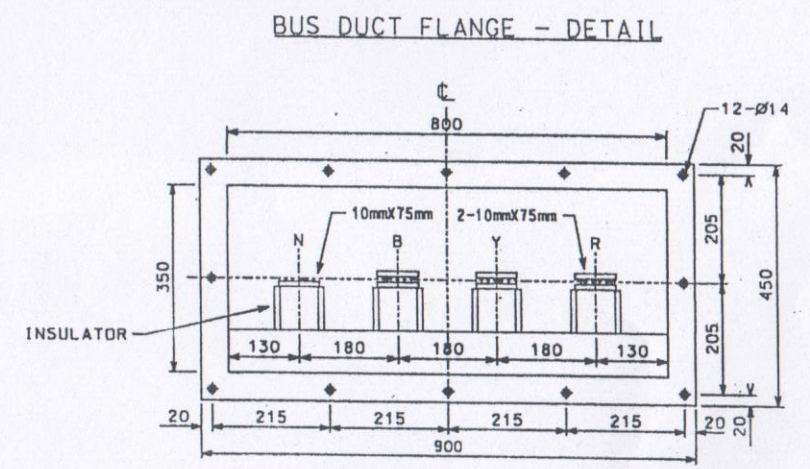
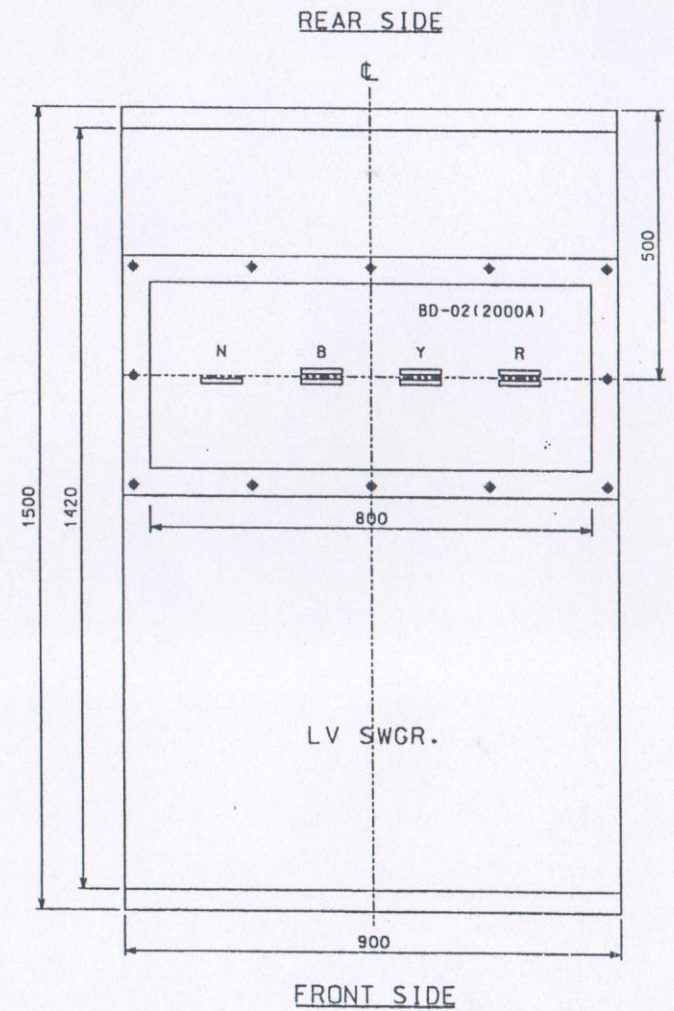
LQ Industrial Systems Co., Ltd.

TITLE		THREE LINE DIAGRAM OF LV SWGR. SB-01-2, SB-01-3 & SB-01-4 PANEL		REV.	1
SCALE	1/8"=29'0.02"	WORK NO	988029	SHEETS	
DIMENSION	MM	3RD ANGLE PROJECTION	DWG NO	W4-20-07199-111	



A B C D E F G H

1  
2  
3  
4  
5



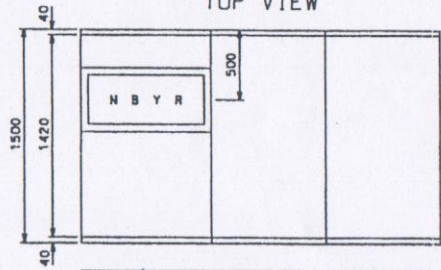
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0	ISSUED FOR APPROVAL	98.05.12	S.H.WON	Y.H.KIM	<i>YH</i>	<i>HW</i>
REV.	DESCRIPTION	DATE	DRWN	DSGN	CHKD	APPD

CUSTOMERS	PIRKOH GAS FIELD COMPRESSION HYUNDAI ENG. / PAKISTAN		TITLE	LV SWGR & BUS DUCT (BD-01) FLANGE DETAIL DRAWING OF SB-01-3 PANEL		REV.	0
	SCALE	1:1		WORK NO.	988029	SHEETS	
	DIMENSION	MM	3RD ANGLE PROJECTION	DWG NO.	W4-20-07199-204		

**LG Industrial Systems Co., Ltd.**

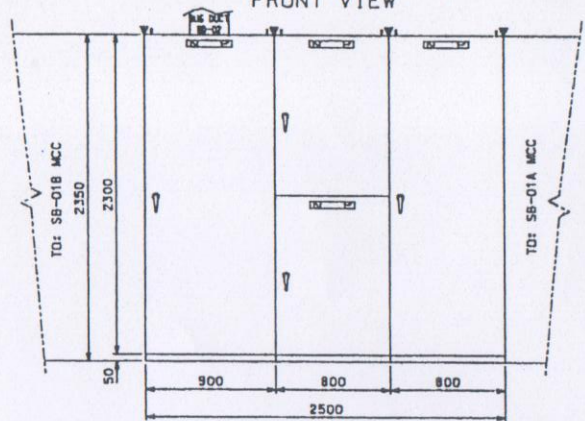
A B C D E F G H

TOP VIEW

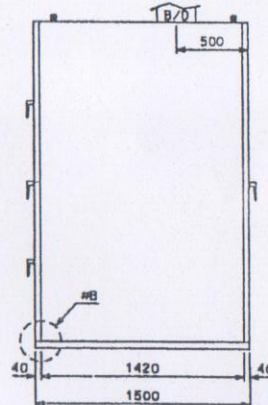


SB-01-3	SB-01-2	SB-01-1	PANEL NO.
ACB-07 PNL.	ACB-04 PNL. ACB-02 PNL.	ACB-01 PNL.	NAME PLATE
1200 Kg	1500 Kg	1200 Kg	WEIGHT

FRONT VIEW



SIDE VIEW

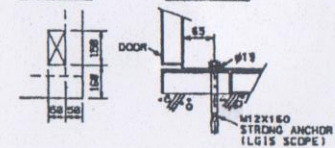


\* NOTE :

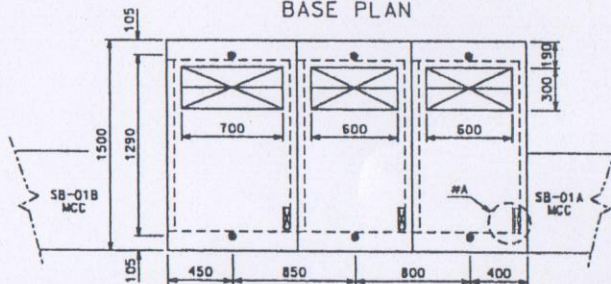
1. ▽ : SHIPPING SPLIT
2. PAINTING COLOR  
1) INSIDE : MUNSELL NO. 7.58G 6/2  
2) OUTSIDE : MUNSELL NO. 7.58C 6/2

\*A DETAIL

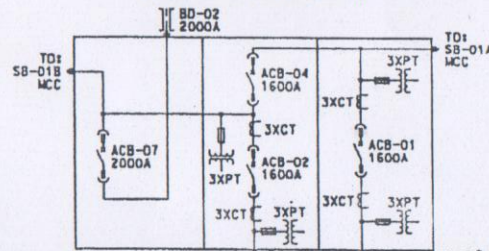
\*B DETAIL



BASE PLAN



SKELETON DIAGRAM



6-3xctx24q 6-3c24038  
B502X3E-9 10-0000X3E  
0-02

5						
4						
3						
2						
1	FOR REVISION	98-06-15	S.H.WON	Y.H.KIM		
0	ISSUED FOR APPROVAL	98-05-12	S.H.WON	Y.H.KIM	H.K.CHO	J.H.AHN
REV.	DESCRIPTION	DATE	DRWN	DSGN	CHKD	APPD

CUSTOMERS

PIRKOH GAS FIELD COMPRESSION  
HYUNDAI ENG. / PAKISTAN

TITLE

OUT LINE DRAWING OF  
LV PANEL (1/4)

REV.  
1



LG Industrial Systems Co., Ltd.

SCALE	1/8x29p0.05e	WORK NO	988029
DIMENSION	MM	3RD ANGLE PROJECTION	DWG NO W4-20-07199-101

SHEETS

B C D E F G H