


SHANGHAI JIANGNAN CHANGXING HEAVY INDUSTRY CO., LTD

Hull No. : H2431/2432/2433

# 5100TEU CONTAINER VESSEL

## SHORE CONNECTION BOX

DESIGNED BY		DRAWING NO.	TC06P174-1
COMPARED BY		REVISION	A
CHECKED BY		CLASS	GL
APPROVED BY		DATE	2007-09-27
 <b>TERASAKI</b> <i>Ensuring Service, Maintaining Quality</i>		TERASAKI (CHINA) ELECTRIC CO., LTD	

# VOL

GENERAL SPECIFICATION .....	SE
ABBREVIATION .....	AB
BREAKING CAPACITY .....	BC
NAME PLATE .....	N
OUTLINE VIEW.....	OV
GRAPHICAL SYMBOL.....	GS
PARTS LIST.....	PL
SCHEMATIC DIAGRAM.....	SD



ABBR.	DESCRIPTION	ABBR.	DESCRIPTION	ABBR.	DESCRIPTION
A	AMMETER	FSS	FLICKER STOP SWITCH	SCR	SILICON CONTROLLED RECTIFIER
AC	ALTERNATING CURRENT	GCS	GOVERNOR MOTOR CONTROL SWITCH	SEC	SECOND
ACB	AIR CIRCUIT BREAKER	GL	GREEN LIGHT	SG	SHAFT GENERATOR
AG	AUXILIARY GENERATOR	GSP	GROUP STARTER PANEL	SHS	SPACE HEATER SWITCH
AS	AMMETER SWITCH	H	HEATER/HOUR	SHT	SHUNT TRIP
ASS	AUTO SYNCHRO SWITCH	HM	RUNNING HOUR METER	ST	STARTER
ASCS	AUTO SYNCHRO & LOAD SHIFT SWITCH	IL	INCANDESCENT LAMP	STD	SHORT TIME DELAY
ATR	ACB RESET SWITCH	ILS	INCANDESCENT LAMP SWITCH	STR	SHORT CIRCUIT TROUBLE RESET
AUS	AUXILIARY SWITCH	INST	INSTANTANEOUS	SY	SYNCHROSCOPE
AUTO	AUTOMATIC	INV	INVERTER	SYS	SYNCHROSCOPE SWITCH
AUX	AUXILIARY	IRM	INSULATION RESISTANCE METER	STT	ENG START SWITCH
AVR	AUTOMATIC VOLTAGE REGULATOR	KS	KNIFE SWITCH	STP	ENG STOP SWITCH
AST	FULL AUTO START	KSDT	KNIFE SWITCH DOUBLE THROW	SL	STANDBY LIGHT
ASP	FULL AUTO STOP	KSTT	KNIFE SWITCH TRIPLE THROW		
BCS	BREAKER CONTROL SWITCH	LSS	AUTO LOAD SHIFT SWITCH	T	TEMPERATURE METER/THERMOMETER
BL	BELL	LTD	LONG TIME DELAY	TB	TERMINAL BLOCK
BL	BLUE LIGHT	LTS	LAMP TEST SWITCH	TCS	TRANSFORMER CONNECTING LINK
BS	BUZZER STOP	MANU	MANUAL	TG	TURBO GENERATOR
BZ	BUZZER	MC	MAGNETIC CONTACTOR	TL	TRANSPARENT LIGHT
CCC	CROSS CURRENT COMPENSATOR	MCCB	MOLDED CASE CIRCUIT BREAKER	TMS	TEMPERATURE METER SWITCH THERMOMETER SWITCH
COS	CHANGE OVER SWITCH	MG	MOTOR GENERATOR/MAIN GENERATOR	TPB	TRIP PUSH BUTTON
CS	CONTROL SWITCH	MIN	MINUTE	TT	TEST TERMINAL
DC	DIRECT CURRENT	M/S	MACHINE SIDE	TS	EG SEQUENCE TEST SWITCH
DG	DIESEL GENERATOR	MSB	MAIN SWITCHBOARD	UVRY	UNDERVOLTAGE RELAY
DM	DIMMER	MV	MAGNETIC VALVE	UVT	UNDERVOLTAGE TRIP
DS	DISCONNECTING SWITCH	NP	NAMEPLATE	V	VOLTMETER
ECS	ENGINE CONTROL SWITCH	OCR	OVERCURRENT RELAY	VAR	VARMETER
EG	EMERGENCY GENERATOR	OL	ORANGE LIGHT	VR	VOLTAGE REGULATOR
ELS	EARTH LAMP SWITCH	OVRY	OVERVOLTAGE RELAY	VS	VOLTMETER SWITCH
EIL	EMERGENCY LIGHT	PBS	PUSH BUTTON SWITCH	W	WATTMETER
ES	EXCITATION SWITCH	PF	POWER FACTOR METER	WH	WATT HOUR METER
ESB	EMERGENCY SWITCHBOARD	PSI	PHASE SEQUENCE INDICATOR	WL	WHITE LIGHT
ETR	ENG RESET SWITCH	PSL	PHASE SEQUENCE INDICATING LAMP	WIL	WORKING LIGHT
F	FREQUENCY METER	PSC	PHASE SEQUENCE CHECK SWITCH	YL	YELLOW LIGHT
FL	FLUORESCENT LAMP	RA	REACTOR	TSS	TRANSFORMER SELECT SWITCH
FLS	FLUORESCENT LAMP SWITCH	RL	RED LIGHT		
FS	FREQUENCY METER SWITCH	RPRY	REVERSE POWER RELAY		

MOLDED CASE CIRCUIT BREAKERS (MANUFACTURER:TERASAKI)

GL

TYPE	MAXIMUM CURRENT RATING (A)	AC450V		AC240V		AC125V		DC250V	USED	
		RATED BREAKING CURRENT (kA) Sym.RMS	RATED MAKING CURRENT (kA) Asym.peak	RATED BREAKING CURRENT (kA) Sym.RMS	RATED MAKING CURRENT (kA) Asym.peak	RATED BREAKING CURRENT (kA) Sym.RMS	RATED MAKING CURRENT (kA) Asym.peak	RATED BREAKING CURRENT (kA)		
XE	XE100NS	100	10	18.5	25	52.5	42*2	95.6*2	7.5	
XS	XS50NB	50	10	18.5	25	52.5	42*2	95.6*2	7.5	
	XS100NB	100	25	52.5	50	105			15	
	XS225NS	225	25	52.5	50	105			40	
	XS400CS	400	30	63	50	105				
	XS400NS	400	42	88.2	85	187				
	XS400NE	400	42	88.2	85	187				
	XS600CS	600	30	63	50	105				○
	XS600NS	600	50	105	85	187				
	XS600NE	600	50	105	85	187				
	XS800CS	800	30	63	50	105				
	XS800NS	800	50	105	85	187				
	XS800NE	800	50	105	85	187				
	XS1200NE	1200	65	143	100	220				
	XS1600NE	1600	85	187						
XS2000NE	2000	85	187							
XH	XH50NS	50	42	88.2	85	187				
	XH100NS	100	42	88.2	85	187				
	XH225NS	225	42	88.2	85	187				
	XH225NE	225	42	88.2	85	187				
	XH800PS	800	85	187						
TL	TL-100F	100	120	288						
	TL-225F	225	120	288					40	
	TL-400E	400	120	288					40	
	TL-600NE	600	125	298					40	
	TL-800NE	800	125	298						
	TL-100C	100	180	415						
	TL-225B	225	180	415						
	TL-400	400	180	415						
	TL-600	600	180	415						
	TL-800	800	180	415						
	TL-1000NE	1000	125	298						
	TL-1200NE	1200	125	298						
	TB	TB-5D	10			2.5*3	4.1*3	43.5*1	101.6*1	
TB-5P		15-50			5*3	8*3	43.5*1	101.6*1		

○---USED

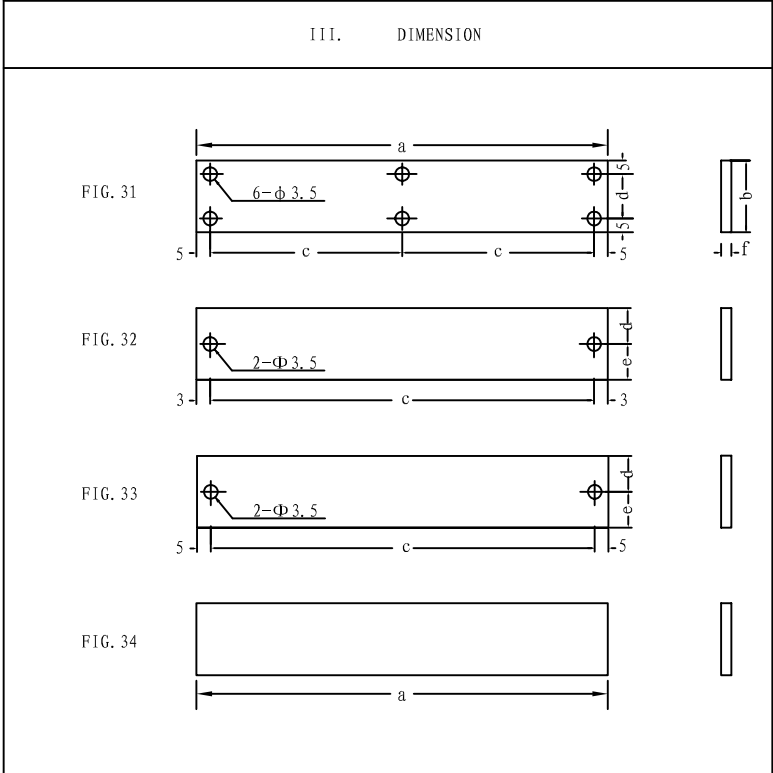
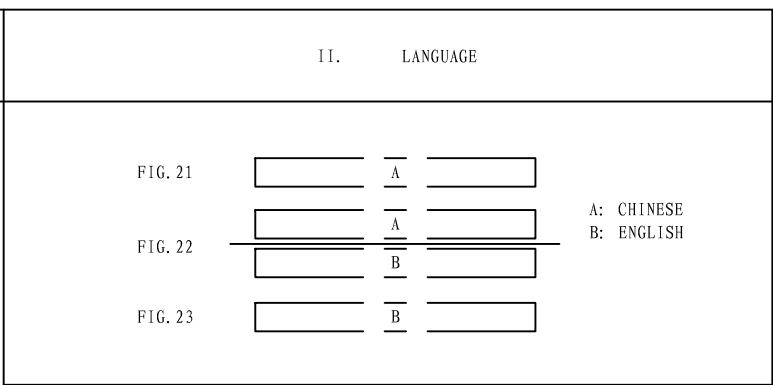
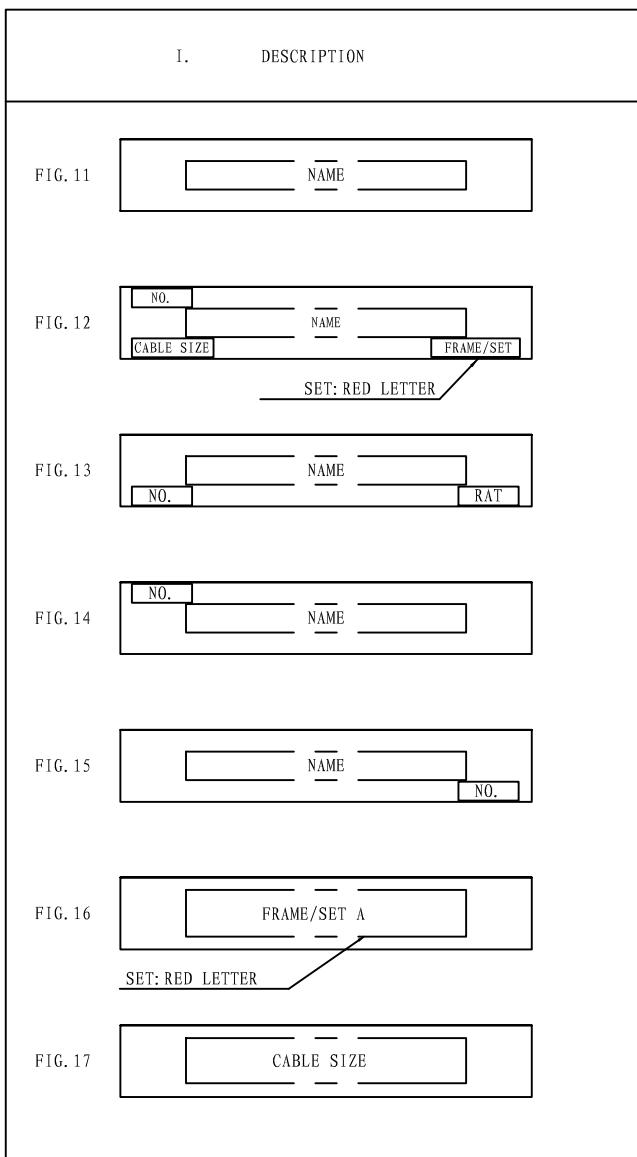
NOTE: \*1 --- AT AC 110V  
 \*2 --- AT AC 120V  
 \*3 --- AT AC 220V

① --- WITH INSTANTANEOUS TRIP

② --- WITHOUT INSTANTANEOUS TRIP

FUSE						
MANUFACTURER	TYPE	RATED CURRENT (A)	RATED VOLTAGE (V)	RATED BREAKING CURRENT		USED
				AC (KA)	DC (KA)	
LEGRAND	HRC	Up to 25	500	100		○

○ -----USED



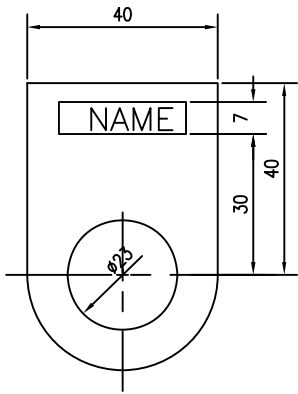
I	II	III	TYPE	a	b	c	d	e	f	REMARKS
FIG.	FIG.	FIG.								
11		31	U1	315	63	152.5	5.3	-	3	
11	23	31	U2	200	40	95	30	-	2	
11		34	U5S	63	25	-	-	-	2	
11	23	33	U6	63	16	53	8	8	2	
11	23	34	U7	50	12.5	-	-	-	2	
11		33	U7S	50	12.5	40	6.25	6.25	2	
11		33	U9	100	40	90	20	20	2	
11	23	33	U10	100	25	90	12.5	12.5	2	
12		32	U13	40	25	34	12.5	12.5	2	
13	23	34	U14	63	12.5	-	-	-	2	
12		33	U15	90	50	80	25	25	2	
12	23	33	U16	90	35	80	17.5	17.5	2	
12		33	U17	90	70	80	52.5	17.5	2	
13	23	34	U20	29	25	-	-	-	2	
16		34	U51	25	8	-	-	-	1	
17		34	U52	25	8	-	-	-	1	
12	23	33	U53	80	40	70	20	20	2	
11	23	33	U54	63	40	53	20	20	2	
11		33	U55	66	12.5	56	6.25	6.25	2	
11	23	33	U56	100	50	90	25	25	2	
11		33	U80	80	20	70	10	10	2	
15	23	34	LN13	26.7	19.7	-	-	-	1	
11	23	34	LN12	36	30	-	-	-	1	
12	23	33	LN21	75	35	65	17.5	17.5	2	
12	23	33	LN22	50	35	40	17.5	17.5	2	

NOTE:  
 GENERAL PLATE  
 MATERIAL --- ACRYLIC  
 LETTER --- BLACK (REVERSE ENGRAVED)  
 GROUND --- WHITE

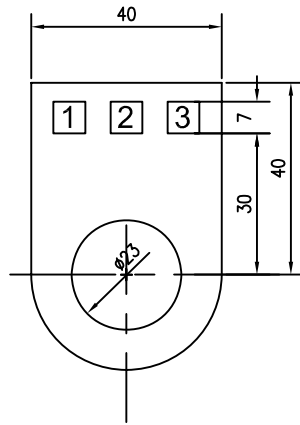




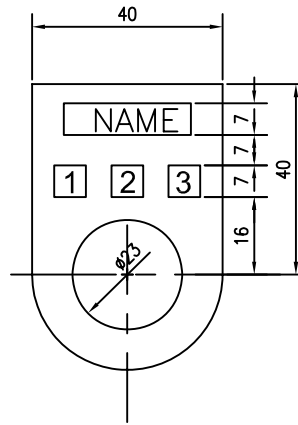
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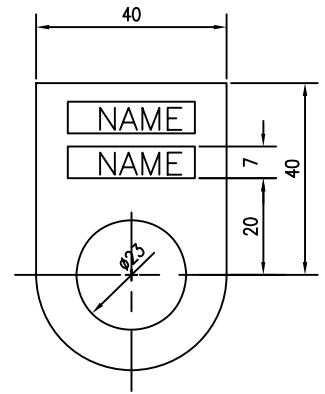
TYPE "CS2"



TYPE "CS3"



TYPE "CS4"



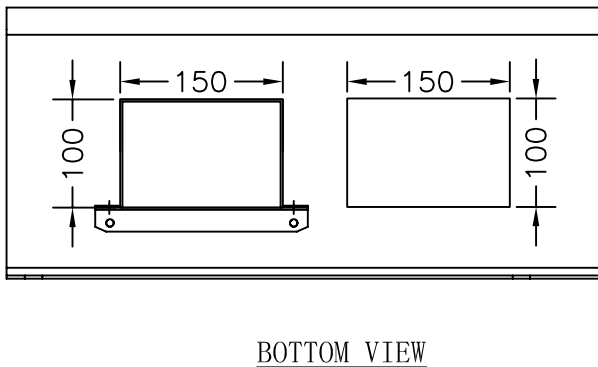
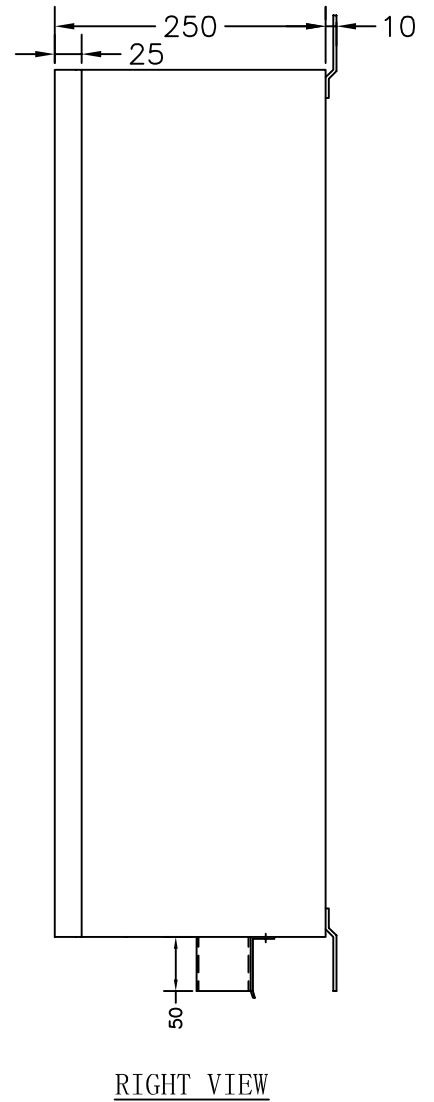
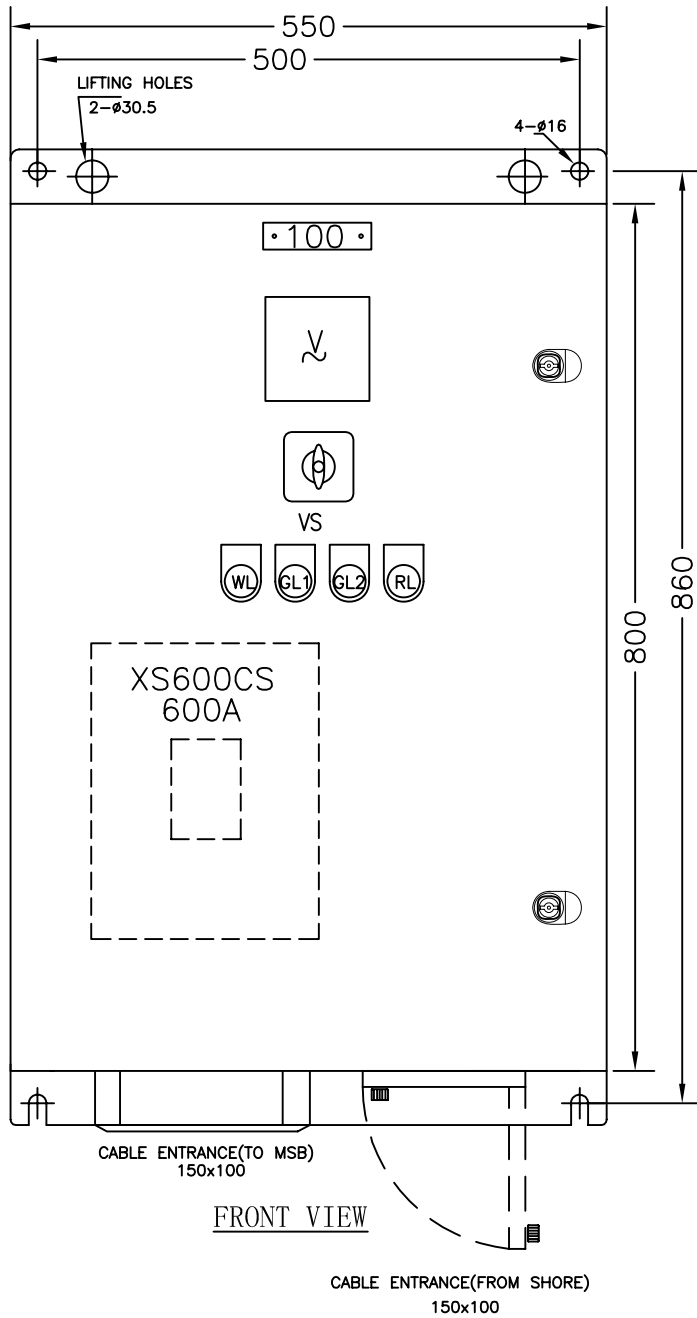
**NOTE:**

MATERIAL: ACRYLIC

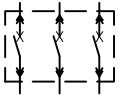
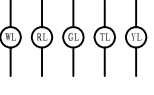

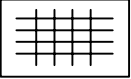
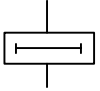

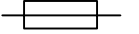
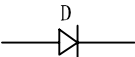

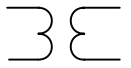


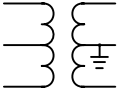


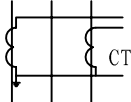
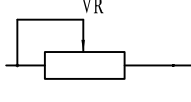


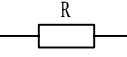

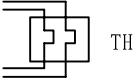
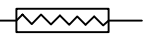











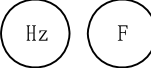



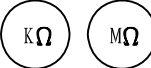





LETTER: BLACK(REVERSE ENGRAVED)

BACKGROUND: WHITE

NAMEPLATE		SYMBOL	NAME				PARTS TYPE	REMARKS
TYPE	QT.		NAME	1	2	3		
CS1	1	WL	SHORE POWER	-	-	-	APW146EW	
CS1	1	GL1	SHORE BREAKER CLOSED	-	-	-	APW146EG	
CS1	1	GL2	PHASE CORRECT	-	-	-	APW146EG	
CS1	1	RL	PHASE WRONG	-	-	-	APW146ER	



GRAPHIC CODE

LEGEND	NAME	LEGEND	NAME	LEGEND	NAME
	ACB, MCCB		INDICATING LAMP		PUSH BUTTON OPEN CONTACT
	CHANGEOVER SWITCH		FLUORESCENT LAMP		PUSH BUTTON CLOSE CONTACT
	FUSE		DIODE		EARTH CONNECTION
	TRANSFORMER		GENERATOR		CHANGEOVER SWITCH OPEN CONTACT
	VOLTAGE TRANSFORMER		GOVERNOR MOTOR		POWER OFF TIMER RELAY OPEN CONTACT
	CURRENT TRANSFORMER		VARIABLE RESISTOR		NORMALLY OPEN CONTACT
	TIMER RELAY		RESISTOR		NORMALLY CLOSE CONTACT
	THERMAL		SHUNT		TIMER RELAY NORMALLY OPEN CONTACT
	PHASE SEQUENCE RELAY		SYNCHROSCOPE		TIMER RELAY NORMALLY CLOSE CONTACT
	POWER OFF TIMER RELAY		VOLTMETER		CHANGEOVER SWITCH CLOSE CONTACT
	REVERSE POWER RELAY		AMMETER		POWER OFF TIMER RELAY CLOSE CONTACT
	STATOR WINDING MONITOR		FREQUENCY METER		
	CONTACTOR & RELAY		POWER FACTOR METER		
	POWER TRANSDUCER		INSULATION RESISTANCE METER		
	RUNNING HOUR METER		KILOWATT METER		
	UNDER VOLTAGE TRIP		KILOWATT HOUR METER		
	SHUNT TRIP				

DEVICE NUMBER	NAME	TYPE	OPERATION VOLTAGE	QT.	REMARKS	REF SHEET No.
WL	SHORE POWER	APW146EW	AC440V	1	IDEC	SD
GL1	SHORE BREAKER CLOSED	APW146EG	AC440V	1	IDEC	SD
GL2	PHASE CORRECT	APW146EG	AC440V	1	IDEC	SD
RL	PHASE WRONG	APW146ER	AC440V	1	IDEC	SD
MCCB	MCCB	XS600CS/600A 3P FC WITH AUX 1C		1	TERASAKI	SD
F1	FUSE	013302		3	LEGRAND	SD
V	VOLTAGE METER	EQ96-X 0-600V RED LINE:450V		1	DEIF	SD
PSI	PHASE SEQUENCE RELAY	DPA51 CM44	AC440V	1	CARLO	SD
VS	VOLTMETER SWITCH	CA10 A004-600		1	K&N	SD

TO MSB NO.2 440V F.P.

