

ALL DIMENSIONS ARE IN MILLIMETRES

NOTE: -

01. ALL LOCKS AND KEY EXCHANGE BOXES SHALL BE SUITABLE FOR OUTDOOR CONDITION.
02. ITEM NO.10 INTER LOCK WITHOUT KEY MAY BE SUPPLIED WITH BASIC LETTERS AS BELOW.
- 18 NUMBERS EACH AS 1A11 TO 9A11 AND 1A21 TO 9A21
72 NUMBERS AS 1A1 22 NUMBERS AS CA1
18 NUMBERS AS HA1 18 NUMBERS AS DA1
03. ITEM NO.11 INTER LOCK WITH KEY MAY BE SUPPLIED WITH BASIC LETTERS 18 NUMBERS AS EA1.
04. FOR THE DETAILS OF ITEM NO. 11 REFER DRAWING NO. 3-00-119-26291.
05. THE SCHEME OF INTERLOCKING IS DRAWN FOR THE FOLLOWING CONDITIONS.
- ALL RECTIFIER TRANSFORMERS ARE ENERGISED.
ALL DISCONNECTING SWITCHES ARE ON.
ALL ACCESSIBLE INSPECTION DOORS OF EP ARE CLOSED.
06. ITEM NO. 12 IS NOT SHOWN IN THIS DRAWING.
07. THE DIRECTION OF ARROW RIGHT FROM THE TOP INDICATES THE SEQUENCE OF STEPS TO BE FOLLOWED IN THE SAME ORDER FOR OPENING THE INSULATOR HOUSING, HOPPER, CASING INSPECTION DOORS AND DISCONNECTING SWITCH DOORS.
08. USE OF MASTER KEY DURING NORMAL CONDITION IS STRICTLY PROHIBITED.
09. SPRING LOADED METAL CAPS SHALL BE PROVIDED AS AN INTEGRAL PART OF ALL INTERLOCKS INCLUDING ROTARY SWITCHES EXCEPT ITEM NUMBERS 02 TO 09.
10. THE KEY EXCHANGE BOXES SHALL BE ACCOMMODATED IN A SUITABLE INTERLOCK ENCLOSURE BOX WITH SUFFICIENT CLEARANCE FOR OPERATIONS. THE ENCLOSURE BOX SHALL BE DESIGNED FOR IP-55 PROTECTION. VARIOUS KEY EXCHANGE BOXES SHALL BE ACCOMMODATED IN INTERLOCK ENCLOSURE BOX AS GROUPED BELOW.
- ITEM NO. 02, 03, 04 & 05 IN ONE BOX
ITEM NO. 06 & 07 IN TWO BOXES
ITEM NO. 08 & 09 IN ONE BOX
11. THE INTERLOCKING ARRANGEMENT SHOWN IN THIS DRG. IS FOR ESP-A OF BOILER-1 THE ARRANGEMENT IS IDENTICAL TO OTHER ESPS
12. MAXIMUM 6 LOCKS SHALL BE PROVIDED IN A ROW IN EACH KEY EXCHANGE BOX.

13	INTERLOCK ENCLOSURE BOX	4	ESP ROOF/WALK WAY AT COLLECTING ELECTRODE RAPPING MOTOR
12	MASTER KEY	2	LOOSE SUPPLY
11	INTERLOCK WITH KEY	18	DISCONNECTING SWITCH 'OFF' POSITION
10	INTERLOCK WITHOUT KEY	144	CASING INSPECTION DOORS, DISCONNECTING SWITCH DOORS, DISCONNECTING SWITCH 'ON' POSITION, INSU. HOUSING DOORS AND HOPPER AND HOPPER INSPECTION DOORS.
09	KEY BOX WITH 1 END LOCK WITHOUT KEY AND 9 FRONT LOCKS WITH KEYS	2	KEY EXCHANGE BOX ENCLOSURE AT HOPPER AREA.
08	KEY BOX WITH 1 END LOCK WITHOUT KEY AND 11 FRONT LOCKS WITH KEYS	2	KEY EXCHANGE BOX ENCLOSURE ON ESP ROOF.
07	KEY BOX WITH 1 END LOCK WITHOUT KEY AND 9 FRONT LOCKS WITH KEYS	2	KEY EXCHANGE BOX ENCLOSURE ON ESP ROOF.
06	KEY BOX WITH 1 END LOCK WITHOUT KEY AND 12 FRONT LOCKS WITH KEYS	6	KEY EXCHANGE BOX ENCLOSURE ON ESP ROOF.
05	KEY BOX WITH 1 END LOCK WITHOUT KEY AND 5 FRONT LOCKS WITH KEYS	1	KEY EXCHANGE BOX ENCLOSURE AT COLLECTING ELECTRODE RAPPING MOTOR PLATFORM.
04	KEY BOX WITH 1 END LOCK WITHOUT KEY AND 9 FRONT LOCKS WITH KEYS	1	KEY EXCHANGE BOX ENCLOSURE ON ESP ROOF.
03	KEY BOX WITH 1 END LOCK WITH KEY AND 2 FRONT LOCKS WITHOUT KEYS	1	KEY EXCHANGE BOX ENCLOSURE ON ESP ROOF.
02	KEY BOX WITH 1 END LOCK WITH KEY AND 09 FRONT LOCKS WITHOUT KEYS	2	KEY EXCHANGE BOX ENCLOSURE ON ESP ROOF.
01	ROTARY SWITCH WITH KEY 2 POLES, 415V, 5A, AC FOR BACK OF BOARD MOUNTING	18	ELECTRONIC CONTROLLER DOOR
ITEM	DESCRIPTION	QUANTITY	MOUNTING LOCATION

WORK ORDER NO. R673

OWNER
MAHAGENCO
MAHARASHTRA STATE POWER GENERATION CO. LTD.

CONSULTANT
DEVELOPMENT CONSULTANTS PVT. LTD.
CONSULTING ENGINEERS
KOLKATA MUMBAI CHENNAI NEW DELHI

PROJECT
1x660 MW BHUSAWAL TPS UNIT-6

CONTRACTOR
BHARAT HEAVY ELECTRICALS LTD
UNIT : BOILER AUXILIARIES PLANT
RANIPET 632 406

TITLE
INTERLOCKING SYSTEM FOR
ELECTROSTATIC PRECIPITATOR

CUSTOMER PACKAGE CODE
ESP
SCALE
DRAWING No.
2-00-114-30413

DISCIPLINE
M C E I L
SHEET 01 OF 01
REV 00

JOB No.	
STATUS	
DISTRIBUTION	
TO	
No. OFF	
REV	DATE
ALTD	CHD
APPD	

1A11	2A11	3A11	4A11	5A11	6A11	7A11	8A11	9A11
1A21	2A21	3A21	4A21	5A21	6A21	7A21	8A21	9A21
1B11	2B11	3B11	4B11	5B11	6B11	7B11	8B11	9B11
1B21	2B21	3B21	4B21	5B21	6B21	7B21	8B21	9B21
1C11	2C11	3C11	4C11	5C11	6C11	7C11	8C11	9C11
1C21	2C21	3C21	4C21	5C21	6C21	7C21	8C21	9C21
1D11	2D11	3D11	4D11	5D11	6D11	7D11	8D11	9D11
1D21	2D21	3D21	4D21	5D21	6D21	7D21	8D21	9D21
1E11	2E11	3E11	4E11	5E11	6E11	7E11	8E11	9E11
1E21	2E21	3E21	4E21	5E21	6E21	7E21	8E21	9E21
1F11	2F11	3F11	4F11	5F11	6F11	7F11	8F11	9F11
1F21	2F21	3F21	4F21	5F21	6F21	7F21	8F21	9F21

KEY DIAGRAM

BASIC LETTER REFERENCE
FOR ITEM NO 01 & 10

BASIC LETTER REFERENCE
FOR ITEM NO 02 TO 09

BOILER NUMBER - 1
ESP DESIGNATION (A,B,C,D,E&F)
W.X.Y.Z - MULTIPLICATION KEYS
I - INSULATOR HOUSING
E - FIELD EARTHED
C - CASING
D - DISCONNECTING SWITCH DOOR
H - HOPPER

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