



PLANT STANDARD

HPBP TIRUCHIRAPPALLI

BPS 017204

Rev. No. 03

PAGE 1 OF 4

RATING PLATE-WALL DESLAGGER

0.0 SCOPE

This standard covers the requirements of Rating Plate for wall deslagger.

1.0 SPECIFICATION AND REFERENCE STANDARDS

Dimensions and preferred sizes	Fig.1 of this standard
Tolerance	Medium to IS: 2102
Material	CuSn37 HA, 1.6 mm thick acc. to IS 410
BHEL monogram	Acc. to corporate standard AA 040 1120
Lettering style	Acc. to corporate standard AA 042 1403
Finish	See clauses 2.0 to 2.5 of this standard
Technical delivery conditions	Acc. to corporate standard AA 085 1411

2.0 FINISH

- 2.1 All rating plates shall be manufactured by etching and shall meet the following technical and other requirements.
- 2.2 TOP PORTION: All letters of the name of the company and monogram with border shall be raised and bright nickel plated. The background shall be etched and finished black (stoving enamel).
- 2.3 MIDDLE PORTION:
- 2.3.1 The following details of this portion shall be raised and bright nickel plated.

Revisions

Brought upto date

Approved

STANDARDS SECTION
CONTRACT ENGINEERING AND CO-ORDINATION
HPBP, TIRUCHIRAPPALLI

Rev. No. 03

Amd. No.

Reaffirmed

Prepared

Issued

Dt of 1st Issue

Dt. 18.01.97

Dt.

Year

STANDARDS

STANDARDS

JAN. 1984



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- All letters of the name of the equipment.
- All 'pads' on which the rating particulars shall appear.

2.3.2 The following details of this portion shall be etched and finished black (stoving enamel).

- All letters, numerals etc. of the rating details appearing on the pads.
- All the dividing lines separating the pads from each other.
- Remaining area in the background

2.4 BOTTOM PORTION: All letters shall be raised and bright nickel plated. Remaining area in the background shall be etched and finished black (stoving enamel).

2.5 Border around the rating plate and the two dividing lines shall be raised and bright nickel plated.

3.0 DESIGNATION

A rating plate of size 180 mm length and 108 mm width to this standard shall be designated as :

3.1 On drawings

- a) Description column : RATG PL-WB 180x108
- b) Drawing number column : BPS 017204
- c) Material spec. column : Brass
- d) Material code column : 22 073 649

3.2 Ordering description

For placing indents, issuing enquiries and on purchase orders, ordering description given below shall be followed.

Rating plate - wall deslagger to BPS 017204



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4.0 ADDITIONAL INFORMATION

4.1 Copies of the following standards shall be enclosed along with purchase order.

a) BPS 017 204

b) AA 040 1120

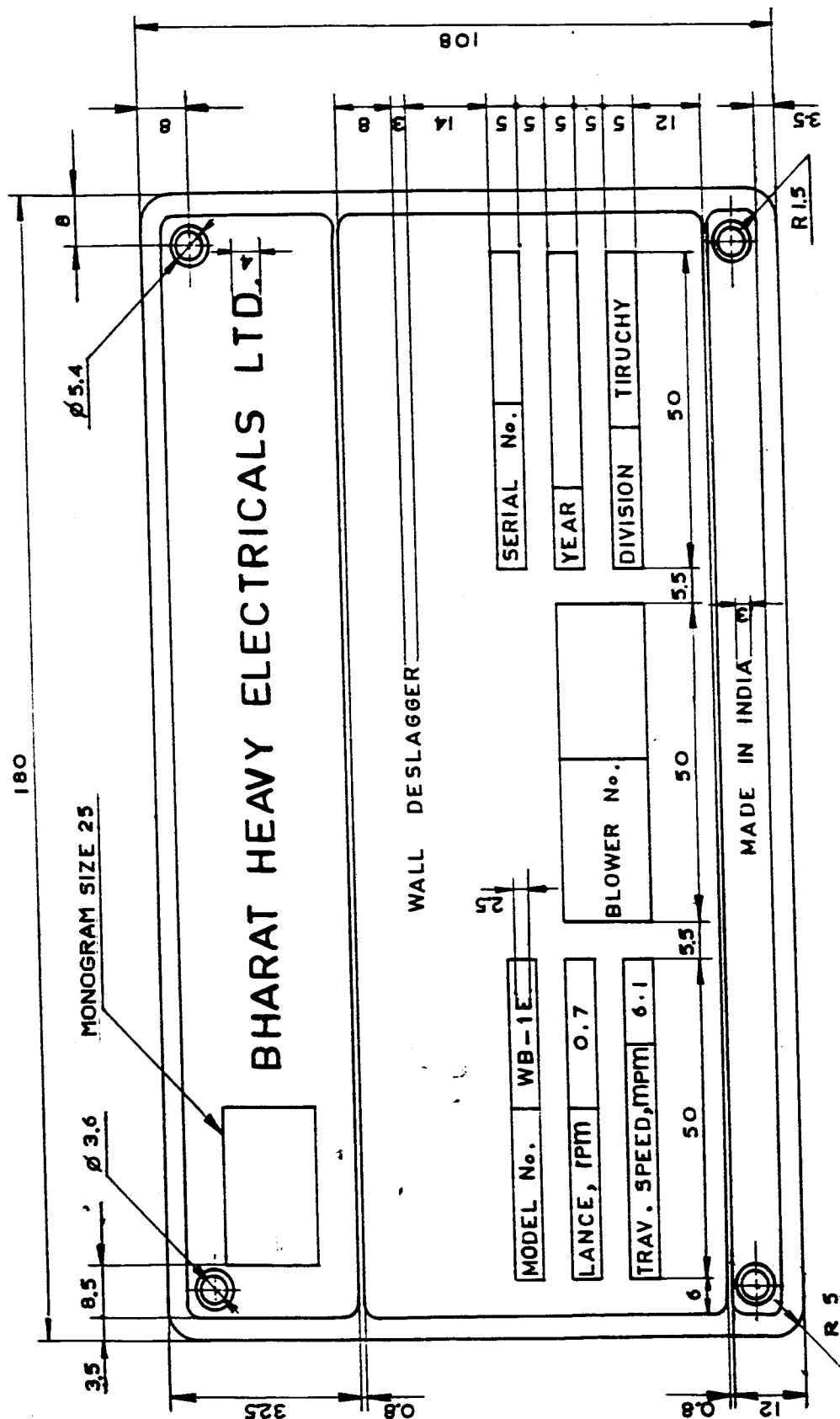
c) AA 042 1403

d) AA 085 1411

4.2 Material code shall be painted at the back of each piece.

4.3 The figure shown is for illustration only and supplier has to submit drawings to actual size for approval before effecting bulk supplies.

FIG. 1



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HPBP TIRUCHIRAPALLI

BPS : 017510

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DIRECTION PLATE

(STRAIGHT DIRECTION INDICATOR)

1 SCOPE

1.1 This standard stipulates the requirements of the Direction plate to be put on the equipments/products of BHEL.

1.2 This standard supersedes the earlier version of BPS: 017510

2 DESIGNATION

2.1 A straight direction plate B x L = 20x75 shall be designated as:

Straight direction plate 20x75 - BPS: 017510

2.1.1 On design documents:

- 1) Description column: NPL DTN PLATE 20x75
- ii) Drawing No. column: 017510 2075
- iii) Material specn column: Brass
- iv) Material code column : 22 074 128

2.2 On indents: Direction plate (Straight direction indicator-BPS: 017510)

2.3 On purchase orders/enquiries: While issuing enquiries/ purchase orders a copy of this standard shall be enclosed

3 COMPLIANCE WITH STANDARDS**3.1 Dimensions**

3.1.1 Direction plate and arrow sizes etc shall be as shown in the figure and Table 1.

3.2 Material: Cold rolled brass sheet grade CuZn37, 1/4Hard t IS: 410.

REVISIONS

DATE

APPROVED

STANDARDS SECTION
ENGINEERING AND DEVELOPMENT CENTRE
HPBP TIRUCHIRAPALLI

PREPARED

ISSUED

DATE

HPBP TIRUCHY

EDC/Standards

20.08.84



PLANT STANDARD

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BPS: 017510

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- 3.3 Finish: Arrow and border shall be raised and bright nickel plated, followed by chromium plating according to IS: 4827. The thickness of nickel plating shall be 20 microns minimum and the chromium plating 0.3 microns minimum.

4 TEST REQUIREMENTS

- 4.1 Before finalising the purchase order the samples of the plate shall be procured and humidity test, resistant to salt spray test conducted according to corporate standard AA 040 12 02.

4.2 Accelerated weather proof test

- 4.2.1 The paint should not show any sign of deterioration when subjected to accelerated weathering test of 21 days in accordance with clause A4 of IS: 2932.

5 FIXING HOLES AND SCREWS

- 5.1 Dimensions of fixing holes, size etc shall be as shown in Figure. Screw size shall be as shown in Table 1.

6 MARKING AND PACKING

- 6.1 BPS code 017510 2075 and material code (22 074 128) shall be painted at the back of each direction plate.
- 6.2 Each direction plate should be suitably packed in polythene cover (500 microns thickness) so as to avoid any damage to the finish during transit/storing.

7 NOTE

- 7.1 The background of arrow shall be etched and finished black. The depth of etching shall be 100 to 500 microns.
- 7.2 Weight is calculated on the basis that brass weighs 8.6 kg/dm^3 .
- 7.3 Sharp edges shall be rounded off and burrs removed.

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PLANT STANDARD

HPBP TIRUCHIRAPPALLI

BPS 017538

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Rev. No. 01

PAGE 1 OF 3

CIRCULAR NAME PLATE FOR VALVES

0.0 SCOPE

This standard covers the requirements of Circular name plate for valves.

1.0 SPECIFICATION AND REFERENCE STANDARDS

Dimensions and preferred sizes	Fig.1 and table 1 of this standard
Tolerance	Medium to IS: 2102
Material	Aluminium sheet of thickness 1 mm
Lettering style	According to corporate standard AA 042 1403
Finish	See clause 2.1 of this standard
Technical delivery conditions	Acc. to clause 3.0 to 3.3.2 of this standard

2.0 FINISH

2.1 Name plates shall be hard anodized according to IS:6057 incorporating matter, letters and border in blue colour with white background.

3.0 TECHNICAL REQUIREMENTS

3.1 GENERAL

3.1.1 The surface shall be free of cracks, blisters and damages. Sharp edges shall be rounded off.

3.1.2 Samples of the name plates shall be obtained and tested in the laboratory for durability of the material, anodizing and weather proofness before bulk supply is effected.

3.2 MARKING. Back side of each name plate shall be marked with material code given by BHEL and with manufacturer's identification.

Revisions

Brought upto date

Approved

STANDARDS SECTION
CONTRACT ENGINEERING AND CO-ORDINATION
HPBP, TIRUCHIRAPPALLI

Rev. No. 01

Amd. No.

Reaffirmed

Prepared

Issued

Dt of 1st Issue

Dt. 18.01.97

Dt.

Year

STANDARDS

STANDARDS

MAR 1986

**PLANT STANDARD**

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3.3 PACKING.

3.3.1 Before packing, each name plate shall be applied with transparent synthetic adhesive film.

3.3.2 Each name plate shall be suitably packed in polythene cover (500 microns thickness minimum) in order to avoid any damage to the surface during transit/storage etc.

4.0 DESIGNATION

A circular name plate for valve of size 24 to this standard shall be designated as :

4.1 On drawings

a) Description column : NPL CIR VALVE 24

b) Drawing number column : BPS 017538 0024

c) Material spec. column : Aluminium

d) Material code column : 22 074 555

4.2 Ordering description

For placing indents, issuing enquiries and on purchase orders, ordering description given below shall be followed.

Circular name plate for valves, size 24 to BPS 017538

5.0 ADDITIONAL INFORMATION

5.1 Copies of the following standards shall be enclosed along with purchase order.

a) BPS 017 538

b) AA 042 1403

5.2 The figure shown is for illustration only and supplier has to submit drawings to actual size for approval before effecting bulk supplies,

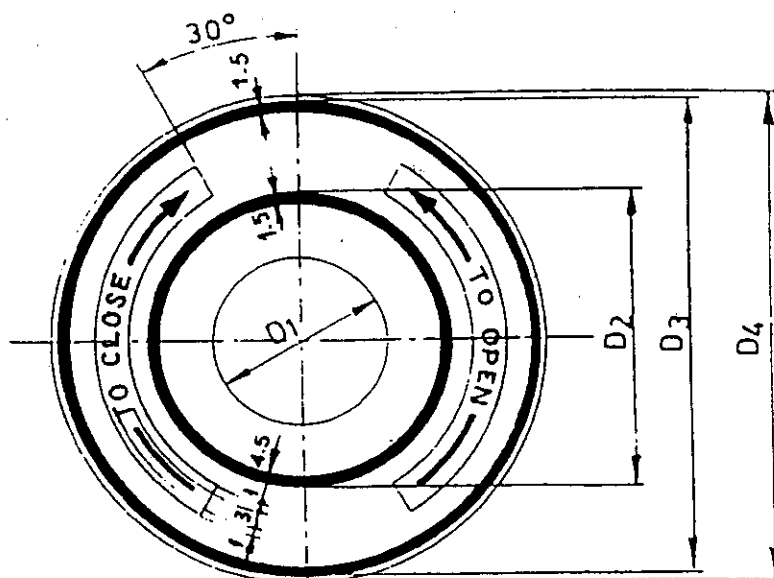


Figure 1

TABLE 1

(All dimensions in millimetres)

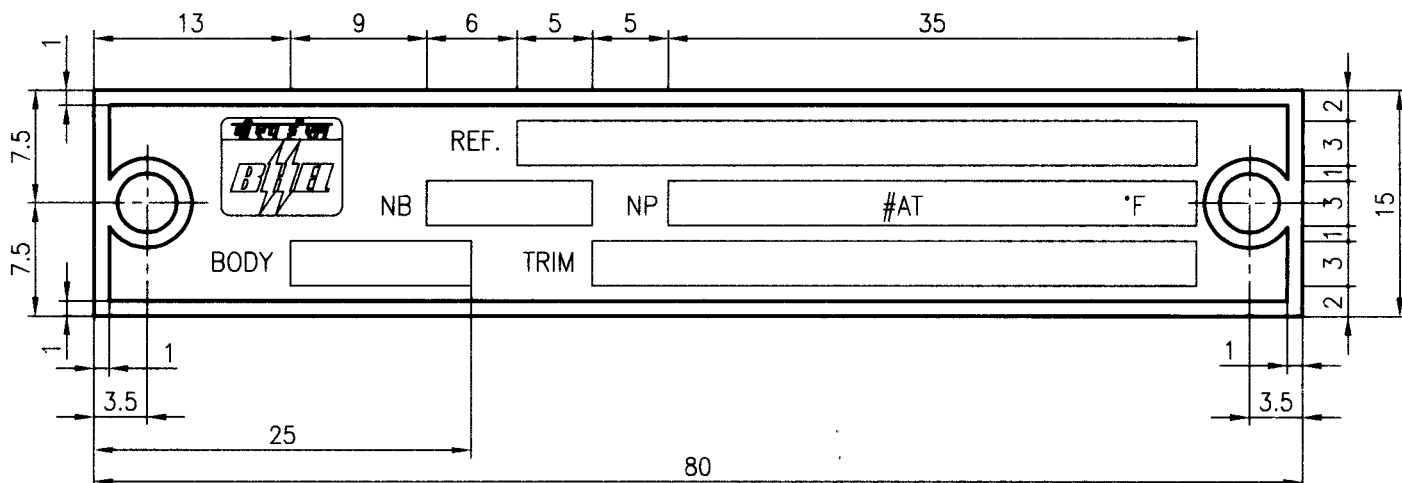
Nomi- nal size	D ₁	D ₂	D ₃	D ₄	Corresponding size of hand- wheel retain- ing nut	wt/1000 pieces in kg
6	6.4	34	60	62	M6	7.47
8	8.4	34	60	62	M8	7.41
10	10.5	34	60	62	M10	7.33
12	13.0	34	60	62	M12	7.22
16	17.0	34	60	62	M16	6.98
20	21.0	39	65	67	M20	7.95
24	25.0	44	70	72	M24	3.95
27	28.0	49	75	77	M27	10.10
30	31.0	56	82	84	M30	11.97
36	37.0	61	87	89	M36	12.87
39	40.0	66	92	94	M39	14.21
42	43.0	71	97	99	M42	15.61
45	46.0	71	97	99	M45	15.09
52	54.0	81	107	109	M52	17.60
56	58.0	81	107	109	M56	16.72
60	62.0	106	132	134	M60	27.71
64	66.0	92	118	120	M64	19.72

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER RELEVANT QCP/QP

REV	DATE	ALTERED K.P.LEON <i>Johny</i>
01	23.03.00	CHD & APPD <i>Mike</i>

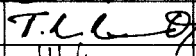
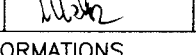
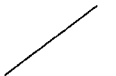
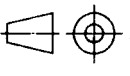
DIMENSION 80 WAS 75.
 DIMENSION 25 INTRODUCED.
 DIMENSION 35 WAS 30.
 TRIM SPACING INCREASED BY 5mm.
 REFER DCN:CS: **1081**

SIZE OF LETTERS		~Wt./1000 in kg.
ENAMELLED	PUNCHED	
2.0	1.5	4.43



NOTES:

1. MATERIAL : 18/8 CR.NI. STEEL SHEET 0.5 mm THICK.
2. THE NAME PLATE SHALL HAVE RAISED BRIGHT POLISHED LETTERS. SPACES FOR DATA, EMBLEM AND BORDER ON ETCHED BLACK BACKGROUND.
3. THE MATERIAL OF WHICH THE BODY AND THE TRIM ARE MADE SHALL BE INDICATED BY CODES AS PER MSS-SP:25.
4. SCREW NAILS FOR FIXING NAME PLATES: SCREW NAILS SIZE 3 x 8 AS PER APPLICABLE STANDARDS.
5. THE NOMINAL BORE 'NB' WILL REPRESENT THE NOMINAL PIPE SIZE IN INCHES AND NOMINAL PRESSURE 'NP' WILL REPRESENT PRIMARY SERVICE PRESSURE IN (psig) AND CORRESPONDING SERVICE TEMPERATURE IN °F.
6. THE NAME PLATE SHALL BE CRACK-RESISTING SO THAT WHEN BENT THE ETCHING DOES NOT CRACK.
7. THE LOCATION OF THE NAME PLATE ON VALVES SHALL BE SPECIFIED BY THE DESIGNER.
8. AFTER FINALISING THE PURCHASE ORDER, SAMPLES OF THE NAME PLATE SHOULD BE TESTED IN THE LABORATORY FOR DURABILITY OF MATERIAL, ETCHING QUALITY ETC. BEFORE BULK SUPPLY IS EFFECTED.
9. THE EMBLEM SHALL BE BASED ON LATEST APPLICABLE STANDARDS.

-	-	-	-	-	-	-	-	-	-	-
NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No	
 BHARAT HEAVY ELECTRICALS LTD. UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI 620014. 365-122					DRN	NAME K.P.LEON	SIGN 	DATE 23.03.2k	NO.OF VAR	
					CHD	T.R.R.MURTHY		23.03.2k		
					APPD	K.S.RAMAN		23.03.2k		
DEPT VL			SCALE	WEIGHT (KG).	REFERENCE INFORMATION				NO. OF ITEMS	
CODE 320			2:1	---	Component Code : 220746490000 CAD :C404047					
TITLE					CARD CODE	DRAWING NO.			REV	
NAME PLATE FOR VALVES (SS)					U 01	4-V-1373-04047			01	

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PLANT STANDARD

HPBP TIRUCHIRAPPALLI

BPS 017545

Rev. No. 02

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CAUTION PLATE (FOR MANUAL OPERATION)

0.0 SCOPE

This standard covers the requirements of Caution Plate for manual operation.

1.0 SPECIFICATION AND REFERENCE STANDARDS

Dimensions and preferred sizes	Fig.1 of this standard
--------------------------------	------------------------

Material	CuSn37 HA, 0.5mm thick acc. to IS 410
----------	--

Lettering style	Acc. to corporate standard AA 042 1403
-----------------	---

Finish	See clause 2.1 to 2.2 of this standard
--------	---

Technical delivery conditions	Acc. to corporate standard AA 085 1411
-------------------------------	---

2.0 FINISH

2.1 All caution plates shall be manufactured by etching and shall meet the technical delivery conditions.

2.2 All letters of the caution plate and border shall be raised and bright nickel plated. The back ground shall be etched and finished black (stoving enamel).

Revisions
BROUGHT UPTO DATE

Approved
STANDARDS SECTION
CONTRACT ENGINEERING AND CO-ORDINATION
HPBP, TIRUCHIRAPPALLI

Rev. No. 02

Amd. No.

Reaffirmed

Prepared

Issued

Dt of 1st Issue

Dt. 04.10.97

Dt.

Year

STANDARDS

STANDARDS

AUG 1984



PLANT STANDARD

HPBP TIRUCHIRAPPALLI

BPS 017545

Rev. No. 02

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3.0 DESIGNATION (typical case)

A caution plate of size 20 mm width and 80 mm length to this standard shall be designated as:

3.1 On drawings

- a) Description column : CAUTION PL MANUAL
- b) Drawing number column : BPS 017545
- c) Material spec. column : Brass
- d) Material code column : 22 074 720

3.2 Ordering description

For placing indents, issuing enquiries and on purchase orders, ordering description given below shall be followed.

Caution plate of size 20 x 80 to BPS: 017545

4.0 ADDITIONAL INFORMATION

4.1 Copies of the following standards shall be enclosed along with purchase order.

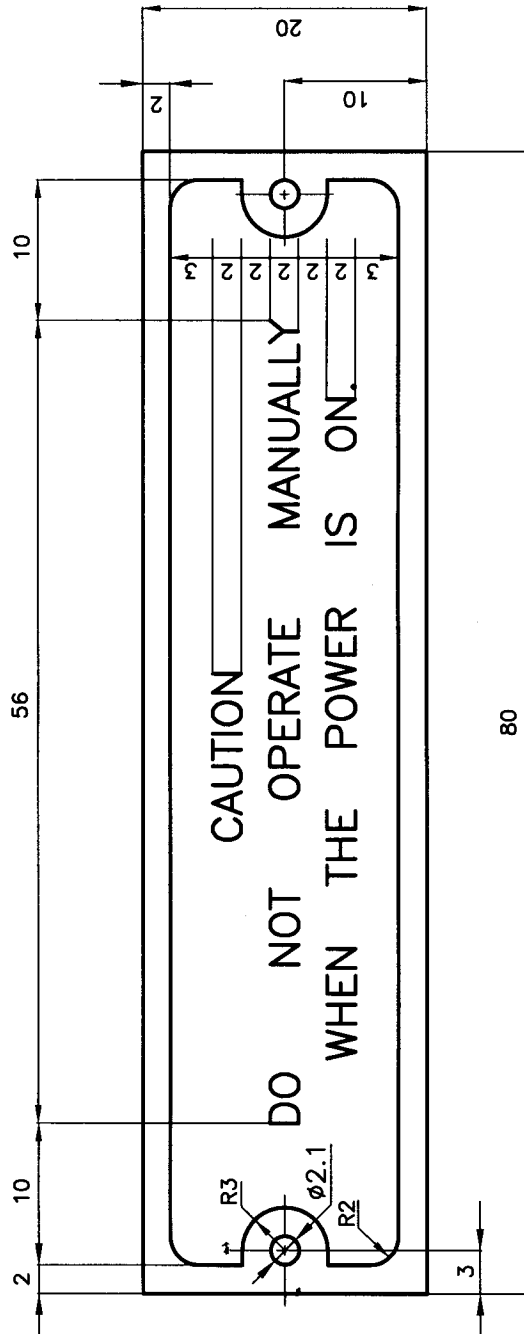
- a) BPS 017 545
- b) AA 042 1403
- c) AA 085 1411

4.2 Material code shall be painted at the back of each piece.

4.3 Supplier has to submit drawings to actual size for approval before effecting bulk supplies.

CAUTION PLATE

(FOR MANUAL OPERATION)



(ALL DIMENSIONS IN MILLIMETRES)

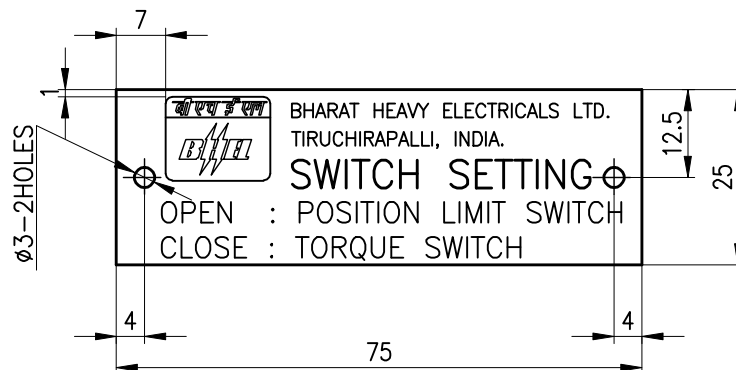
FIG:1

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FOR TOLERANCES OF UNTOLERANCED DIMENSIONS

ALL DIMENSIONS ARE IN MILLIMETRES.
DURING MANUFACTURE REFER RELEVANT QCP/QP

REV	DATE	ALTERED
		CHD & APPD



APPLICATION:

FOR ALL MOTOR OPERATED VALVES
EXCEPT 100mm & ABOVE 1500 CLASS AND ABOVE GATE VALVES

NOTES:

1. MATERIAL IS STAINLESS STEEL
2. THICKNESS OF THE PLATE 1mm
3. MONOGRAM SHALL BE BASED ON CORPORATE STANDARD No. AA0401120 REV.1
4. THE NAME PLATE SHALL BE CRACK RESISTING SO THAT WHEN BENT, THE PLATING DOES NOT CRACK
5. THE NAME PLATE SHALL HAVE RAISED BRIGHT WHITE LETTERS, EMBLEM ETC ON ETCHED BLACK BACKGROUND

		96466063							
NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No
BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI 620014. 365-122					DRN	NAME V.BAIRAVAN	SIGN	DATE 08.10.10	NO.OF VAR
					CHD	S.SATHEES		08.10.10	
					APPD	K.RAJASEKARAN		08.10.10	
DEPT VL		SCALE N.T.S	WEIGHT (KG).	REFERENCE INFORMATIONS					NO. OF ITEMS
CODE 320									
TITLE NAME PLATE (FOR CONVENTIONAL VALVES)				CARD CODE U 01	DRAWING NO. 4-V-G004-19240				REV

Size A4