

TO : **MAGSELLS**

NO : PRJ-04381

DATE: 2014-02-20

< FINAL . REVISED >

# S P E C I F I C A T I O N

DEVICE SPECIFICATION FOR

HIGH VOLTAGE TRANSFORMER.

MODEL NAME (PART NO.)

**MST1000P**

MAGSELLS PART CODE

■ CUSTOMER'S RECEIVE

DATE : \_\_\_\_\_

RECEIVED BY	CHECKED BY	ISSUED BY	IN CHARGE OF PART

■ SUPPLIER

PRESENTED BY : DIGITAL POWER COMMUNICATIONS CO., LTD.

DRAWN BY : \_\_\_\_\_

DESIGNED BY : \_\_\_\_\_

CHECKED BY : \_\_\_\_\_

APPROVED BY : \_\_\_\_\_  \_\_\_\_\_

SPECIFICATION FOR H.V.T	PART NUMBER	CUSTOMER
DPES - H - E - 04381	MST1000P	MAGSELLS

1. SCOPE

THIS SPECIFICATION APPLIES TO TRANSFORMER PART NO. MST1000P FOR USING IN MICROWAVE OVEN WHICH IS MANUFACTURED BY MAGSELLS

2. APPLICABLE SAFETY STANDARD : IEC.PUB 335-2-25 & 335-1 CLASS 1

3. APPEARANCE AND CONSTRUCTION.

- 3.1 APPEARANCE : TRANSFORMER SHALL BE FREE FROM SUCH DEFICIENCIES AS DEFORMATION, CRACK OR RUST IN APPEARANCE.
- 3.2 TYPE, DIMENSION AND MARKING : SEE ATTACHED CONSTRUCTION DRAWING NUMBER PRJ-04381
- 3.3 CLASSIFICATION OF TERMINAL : #250 FASTON TABS & RECEPTACLES.

4. MECHANICAL PERFORMANCE.

- 4.1 COMPRESSED STRENGTH OF TERMINALS : TERMINALS SHALL BE WITHSTAND WITHOUT BREAKING OR LOOSENING WHEN A STATIC LOAD OF 10 kg FOR 15 SECONDS IS APPLIED IN THE DIRECTION OF PULLING OUT TO THE TERMINAL.

5. ELECTRICAL PERFORMANCE

- 5.1 RATED PRIMARY VOLTAGE : AC 230 V
- 5.2 RATED FREQUENCY : 50 Hz
- 5.3 SECONDARY VOLTAGE.

CODE	NO-LOAD VOLTAGE (R.M.S)	DEVIATION
HIGH VOLTAGE(S1)	AC 2350 V	± 50 V
FILAMENT VOLTAGE(S2)	AC 3.38 V	± 0.1 V

- 5.4 NO-LOAD CURRENT : NO-LOAD CURRENT SHALL BE LESS THAN 8.0 A AT 50 Hz, AC 230 V SUPPLY.

- 5.5 NO-LOAD WATTAGE LOSS : NO-LOAD WATTAGE LOSS SHALL BE LESS THAN 105 W AT 50 Hz, AC 230 V SUPPLY.

- 5.6 DIELECTRIC STRENGTH AND INDUCED VOLTAGE TEST : TRANSFORMER SHALL BE WITHSTAND AS FOLLOWING STATEMENT.

ITEM APPLIED POINT	STANDARD	MASS PRODUCTION
	APPLIED VOLTAGE(RMS)AND TIME	APPLIED VOLTAGE(RMS)AND TIME
PRIMARY WINDING - CORE	50 Hz, AC 2000 V, 1 MINUTE	50 Hz, AC 2500 V, 3 SECONDS
FILAMENT WINDING - CORE	50 Hz, AC 10000 V, 1 MINUTE	50 Hz, AC 10500 V, 3 SECONDS
FILAMENT WINDING - PRIMARY WINDING	50 Hz, AC 10000 V, 1 MINUTE	50 Hz, AC 10500 V, 3 SECONDS
INDUCED VOLTAGE - TEST	400 Hz, AC 690 V, 18SECONDS	400 Hz, AC 690 V, 3 SECONDS

- 5.7 INSULATION RESISTANCE : INSULATION RESISTANCE BETWEEN EACH WINDING, AND CORE, EXCEPT SECONDARY WINDING AND CORE, SHALL BE MORE THAN 100 M $\Omega$  MEASURED WITH DC 500V INSULATION RESISTANCE TESTER BEFORE LOADING.
- 5.8 D.C.RESISTANCE AT 20 °C
- (1) PRIMARY : 0.898 + 5%  $\Omega$
  - (2) SECONDARY : 63.9 + 5%  $\Omega$
6. ENVIRONMENTAL PERFORMANCE.
- 6.1 HEAT RESISTANCE : IMMEDIATELY AFTER BEING PLACED IN A ROOM FOR 48 HOURS MAINTAINED AT 220°C AMBIENT TEMPERATURE, TRANSFORMER SHALL CONFORM WITH THE ABOVE PARAGRAPH 5-6 AND ALSO INSULATION RESISTANCE SHALL BE MORE THAN 10 M $\Omega$ .
- 6.2 MOISTURE RESISTANCE : IMMEDIATELY AFTER BEING PLACED IN A ROOM FOR 96 HOURS IN SUCH CONDITION THAT IS MAINTAINED AT 90 - 95% RELATIVE HUMIDITY AND 40  $\pm$  2°C TEMPERATURE, AND WIPED A DROP OF WATER, TRANSFORMER SHALL BE CONFORM WITH THE ABOVE PARAGRAPH 5-6 AND ALSO INSULATION RESISTANCE SHALL BE MORE THAN 10 M $\Omega$ .
7. OUTGOING INSPECTION.
- 7.1 100% INSPECTION ITEMS : NO - LOAD CURRENT, NO - LOAD WATTAGE LOSS, SECONDARY OPEN VOLTAGE, ITEM 5-6 TEST, APPEARANCE AND CONSTRUCTION.
- 7.2 SAMPLING INSPECTION ITEMS : THE ITEMS OF THE SAMPLING INSPECTION SHALL BE COIL RESISTANCE, INSULATION RESISTANCE, DIMENSION AND AUDIBLE SOUND TEST, INCLUDING THE 100% INSPECTION ITEMS AS THE ABOVE PARAGRAPH 7-1.
- 7.3 THE SAMPLING INSPECTION DATA ACCORDING TO 7-2 AND 100% DIELECTRIC WITHSTAND TEST DATA SHALL BE SUBMITTED FOR EACH LOT. (N=5)
8. OTHERS.
- 8.1 AUDIBLE SOUND TEST : WHEN APPLIED WITH 1.2 TIMES OF THE RATED PRIMARY VOLTAGE, TRANSFORMER SHALL BE MAKE NO LOUDER SOUND THAN 50dB. AT THE DISTANCE OF 30cm FROM IT.
- 8.2 INSULATION CLASS : CLASS 220
- 8.3 MAGNETRON :
- 8.4 CONDENSER : 1.1  $\mu$ F
- 8.5 OUTPUT POWER : 1000 W
- 8.6 WEIGHT : 6.42 Kg
- 8.8 MANUFACTURER : DIGITAL POWER COMMUNICATIONS CO.,LTD.  
#23, 17TH BLOCK, BANWOL INDUSTRIAL COMPLEX.  
491-1. MOKNAE DONG. ANSAN-CITY. KYUNGKI-DO. KOREA
- D Y POWER SYSTEM (M) SDN BHD  
LOT 17245, 4TH MILES, JALAN GENTING OFF JALAN KAPAR,  
42100 RANTAU PANJANG, KLANG,  
SELANGOR DARUL EHSAN, MALAYSIA.
- DPC NANTONG CO.,LTD.  
#8 BINJIANG ROAD, HUIFENG TOWN, QIDONG CITY,  
JIANGSU PROVINCE, CHINA
- DPC FOSHAN CO.,LTD.  
#1 KEYE ROAD, BEIJIAO INDUSTRY PARK, BEIJIAO TOWN,  
SHUNDE CITY, GUANGDONG, CHINA

## DECLARATION OF INSULATION

TYPE OF OBJECT : **MST1000P**

MANUFACTURER : DIGITAL POWER COMMUNICATIONS CO.,LTD.

#23 17TH BLOCK, BANWOL INDUSTRIAL COMPLEX,  
491-1, MOKNAE-DONG, ANSAN-CITY, KYUNGKI-DO, REPUBLIC OF KOREA

D Y POWER SYSTEMS (M) SDN.BHD.

LOT 17245, 4TH MILES, JALAN GENTING OFF JALAN KAPAR,  
42100 RANTAU PANJANG KLANG, SELANGOR  
DARUL EHSAN, MALAYSIA.

DPC NANTONG CO.,LTD.

#8 BINJIANG ROAD, HUIFENG TOWN, QIDONG CITY,  
JIANGSU PROVINCE, CHINA

DPC FOSHAN CO., LTD.

#1 KEYE ROAD, BEIJIAO INDUSTRIAL PARK, BEIJIAO, SHUNDE,  
FOSHAN, GUANGDONG, CHINA

REG. NO :

TYPE NO. : D P C - R

INSULATION CLASS : CLASS 220

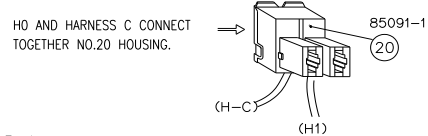
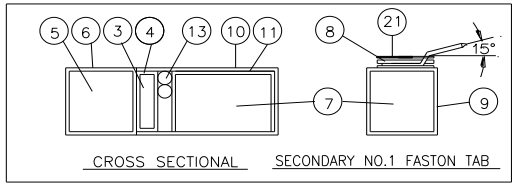
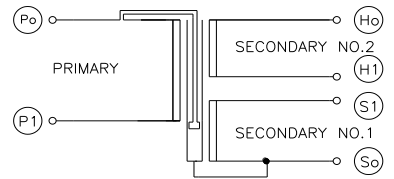
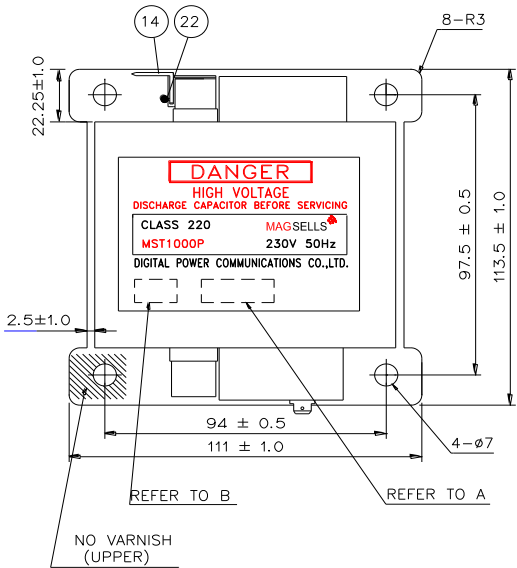
CLASSE 220

DECLARATION ISSUED BY : SEUNG YOUNG AHN 

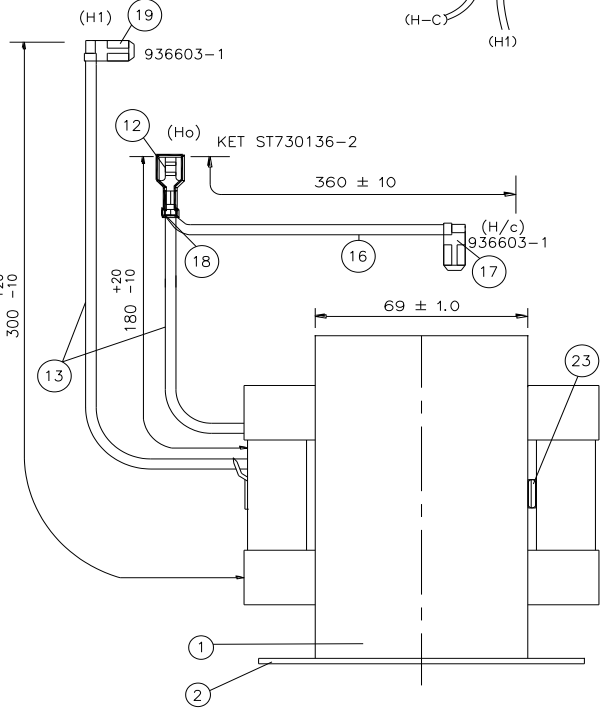
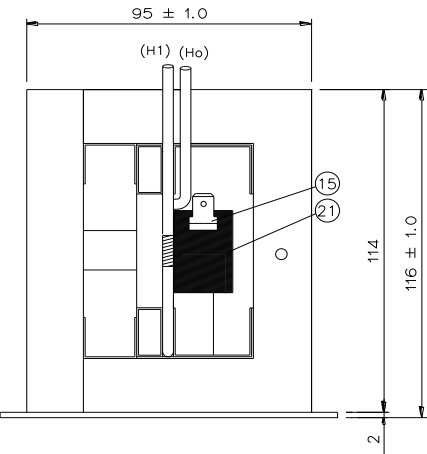
DATE : Feb. 20 . 2014

INSULATION MATERIALS	MANUFACTURER	TRADE NAME OR TYPE NO.	CHEMICAL COMPOSITION IF POSSIBLE ACC TO IEC 85.	CHARACTERISTICS/ DIELECTRIC MEC. THERMAL PROPERTIES.	INSULATION CLASS ACC TO IEC 85/ MAX. SERVICE TEMP.
WIRE INSULATION	E. I DU PONT DE NEMOURS & CO., INC	NOMEX #410 #411 NMN	ARAMID PAPER	220 °C	CLASS R 220 °C
COILFORMER / BOBBIN / COIL / SLOT / INSULATION	LG CABLE & MACHINERY LTD. TAIHAN ELECTRIC WIRE CO.,LTD. HYE SUNG ELECTRIC WIRE CO.,LTD.	RATED 220°C	BASE COAT : POLYESTERIMIDE OVER COAT : POLYAMIDEIMIDE  BASE COAT : POLYESTER OVER COAT : POLYAMIDEIMIDE	220 °C	CLASS R 220 °C
LAYER INSULATION	E. I DU PONT DE NEMOURS & CO., INC.	NOMEX #410 #411 NMN	ARAMID PAPER	220 °C	CLASS R 220 °C
IMPREGNATING SUBSTANCES	NOROO PAINT & INK CO.,LTD.	DVB-2152	UNSATURATED POLYESTER VARNISH	220 °C	CLASS R 220 °C
BONDING AGENT					
OTHER INSULATION MATER- IAL/ETC./					
SEALED UNITS FOR REFRIGERATORS.					
LUBRICANT					
COOLING LIQUID					

DECLARATION ISSUED BY : DIGITAL POWER COMMUNICATIONS CO., LTD.



BRACKET SPOT WELDING ON MADE 4 POSITIONS



\* A - FOR PRODUCTION CONTROL \* B - FOR PRODUCTION LOCATION

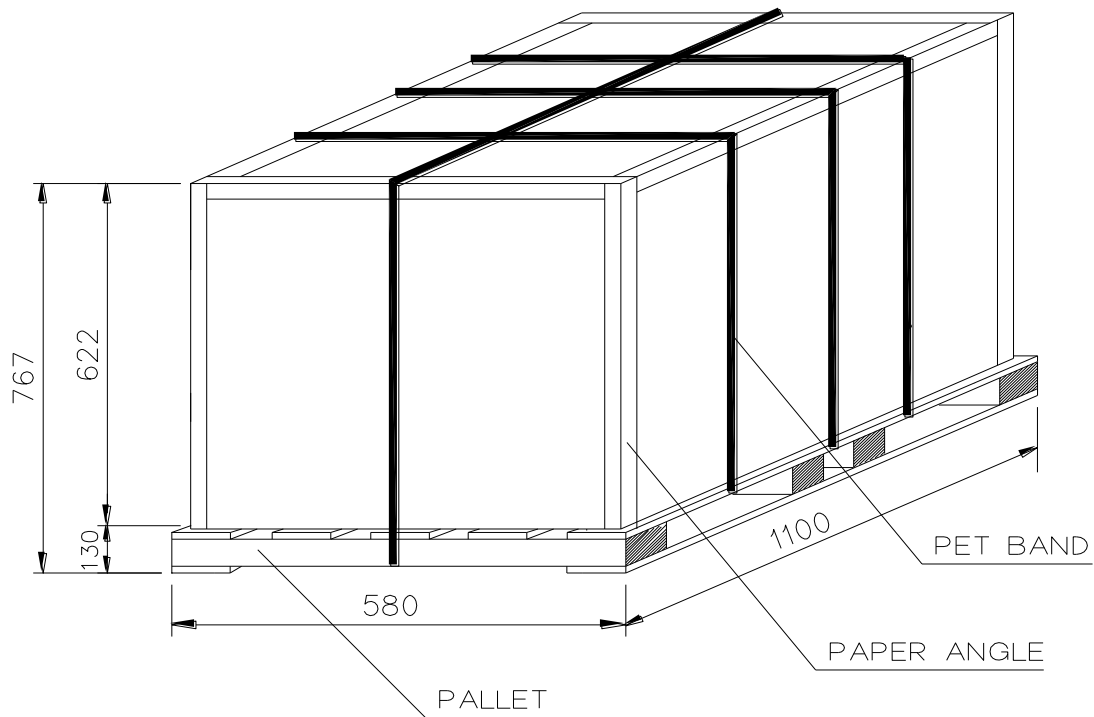
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YEAR MONTH DAY TIME

\* YEAR : D ; '2013 E ; '2014 F ; '2015

DPC : KOREA  
DPC-M : MALAYSIA  
DPC-c : CHINA(DPC NANTONG CO.,LTD)  
DPC-S : CHINA(DPC FOSHAN CO.,LTD)

NO	DESCRIPTION	Q'TY	SPECIFICATION
	VARNISH		UNSATURATED POLYESTER VARNISH "DVB-2152" NOROO PAINT & INK CO., LTD. "93947"
23	PROTECTOR	1EA	TYPE BM-1 165A (165°C)
22	PROTECTOR TAB	1EA	BRASS STRIP
21	SECONDARY COVER	1EA	MICA Min 0.35mm THICK, ARAMID PAPER #411 0.25/0.38mm THICK.DUPONT
20	HOUSING	1EA	POSITIVE LOCK HOUSING #250 PART NO : "85091-1" AMP PART NO : "MG630823"KET PART NO : "HP25039K-2" ZUCH
19	SECONDARY NO.2 COIL TERMINAL	1EA	BRASS STRIP, POSITIVE LOCK TERMINAL #250. PART NO: "936603-1" AMP.OR #250. PART NO: "ST730573-3" KET. #250. PART NO: "TF2503K-3" ZUCH
18	HEAT SHRINKABLE TUBE	1EA	HEAT SHRINKABLE TUBE 105°C 600V Ø6
17	HARNESS C TERMINAL	1EA	BRASS STRIP, POSITIVE LOCK TERMINAL #250. PART NO: "936603-1" AMP.OR #250. PART NO: "ST730573-3" KET.OR #250. PART NO: "TF2503K-3" ZUCH
16	HARNESS C WIRE	1EA	SILICONE RUBBER WIRE.0.8Ø(REDF)
15	SECONDARY FASTON TAB	1EA	EQUIVALENT TO AMP #250
14	PRIMARY FASTON TABS	2EA	EQUIVALENT TO AMP #250
13	SECONDARY NO.2 COIL	1EA	SILICONE RUBBER WIRE.0.8Ø(REDF)
12	SECONDARY NO.2 COIL TERMINAL	1EA	BRASS STRIP, FASTON TERMINAL #250 PART NO: "ST730136-2" KET PART NO : "TP25013K-2" ZUCH
11	SECONDARY NO.1 COIL INSULATOR	2EA	MICA 0.25mm THICK.
10	SECONDARY NO.1 COIL INSULATOR	2EA	ARAMID PAPER #410,NMN 0.18mm THICK. DUPONT.
9	SECONDARY NO.1 COIL END INSULATOR	2EA	ARAMID PAPER #411 0.18mm THICK. DUPONT.
8	SECONDARY FASTON TAB ANCHOR BOARD	1EA	ARAMID PAPER #410, NMN 0.3mm THICK. DUPONT. OR PBT(GP-2306F) MIN 1mm THICK.HYUNDAI BOBIN
7	SECONDARY NO.1 COIL	1EA	MW35C POLYESTERIMIDE POLYAMIDEIMIDE COATING WIRE
6	PRIMARY INSULATOR	2EA	ARAMID PAPER #410,NMN 0.18mm THICK. DUPONT.
5	PRIMARY COIL	1EA	MW35C POLYESTERIMIDE POLYAMIDEIMIDE COATING WIRE
4	PASS CORE INSULATOR	2EA	PRESS BOARD 0.38mm THICK. ABEGAWA DENKI CO ARAMID PAPER #411 0.25/0.38mm THICK.DUPONT.
3	PASS CORE	2EA	LAMINATED ELECTRICAL STEEL 0.5mm THICK.
2	MOUNTING BRACKET	1EA	STEEL 2 mm THICK.
1	CORE	1EA	LAMINATED ELECTRICAL STEEL 0.5mm THICK.
NO	MATERIAL	Q'TY	SPECIFICATION

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- . PRODUCT WEIGHT PER A PCS : ABOUT 6.42 KG
- . TOTAL PRODUCT WEIGHT PER A PALLET : 6.42 KG X 140 Pcs=ABOUT 898.8 KG
- . PACKING WEIGHT PER A PALLET : ABOUT 20 KG
- . TOTAL WEIGHT PER A PALLET : 898.8 KG+ 20 KG=ABOUT 918.8KG
- . PRODUCT QUANTITY PER A PALLET :
  - 7 IN A ROW BY 4 COLUMN X 5 LAYER= 140 Pcs
- . PALLET QUANTITY ( 1100 x 580 ) X 20 = 20 Pcs
- . CONTAINER TOTAL WEIGHT IN 20'FT CONTAINER :
  - 918.8 KG X 20 Pcs= ABOUT 18,376KG
- . TOTAL QUANTITY OF PRODUCTS IN 20'FT CONTAINER :
  - 140 Pcs X 20 Pcs = 2,800 Pcs

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