



SPECIFICATION FOR APPROVAL

Customer : _____
Description : EST MOTOR (Energy Saving Technology Motor)
Customer Part No. _____ REV. : _____
Delta Model No. MR83A2PE-105S00 REV. : 02
Sample Issue No. _____
Sample Issue Date : NOV. 08 2017

PLEASE SEND ONE COPY OF THIS SPECIFICATION BACK AFTER YOU SIGNED APPROVAL FOR PRODUCTION PRE-ARRANGMENT.

APPROVED BY:

DATE :

DELTA ELECTRONICS, INC.
TAOYUAN PLANT
252, SHANG YING ROAD, KUEI SAN INDUSTRIAL ZONE
TAOYUAN SHIEN, TAIWAN, R.O.C.
TEL:886-(0)3-3591968
FAX:886-(0)3-3591991

Delta Electronics, Inc.
No.252, Shanying Rd., Guishan Dist.,
Taoyuan City 333, Taiwan (R.O.C.)

TEL : 886-(0)3-3591968
FAX : 886-(0)3-3591991

STATEMENT OF DEVIATION

NONE

DESCRIPTION:

Delta Electronics, Inc.
No.252, Shanying Rd., Guishan Dist.,
Taoyuan City 333, Taiwan (R.O.C.)

TEL : 886-(0)3-3591968
FAX : 886-(0)3-3591991

Specification for approval

Customer : _____

Description : EST MOTOR (Energy Saving Technology Motor)

Customer P/N : _____

rev. : _____

Delta model no. : MR83A2PE-105S00

Delta Safety Model No.: MR83A2PE-10

Sample revision. : 02

Issue no.: _____

Sample issue date : NOV. 08 2017

Quantity : _____

1. SCOPE:

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE AC TO DC BRUSHLESS MOTOR.

2. CHARACTERS:

UNLESS SPECIFIED, ALL READINGS AND TESTS ARE BASED ON 25°C, 65% RH.

ITEM	DESCRIPTION
NOMINAL VOLTAGE	230 VAC (50 / 60Hz)
NOMINAL VOLTAGE RANGE	200 ~ 240 VAC
INPUT POWER 1 (FREE AIR) MOTOR LOADING	12.5 W TYP. Aluminum impeller Φ 230mm, 28°, t=0.7mm
INPUT POWER 2 (FREE AIR) MOTOR LOADING	7.5 W TYP. Aluminum impeller Φ 254mm, 22°, t=0.9mm
INPUT POWER (MAX, LOAD)	25W MAX.
OUTPUT POWER (MAX, LOAD)	15W MAX.
SPEED	1300 \pm 10% R.P.M.
INSULATION TYPE	UL: CLASS B
SAFETY	CE, UL, TUV ATEX
INSULATION STRENGTH	10 MEG OHM MIN. AT 500 VDC (BETWEEN FRAME AND (+) TERMINAL)
DIELECTRIC STRENGTH	5 mA MAX. AT 500 VAC 50/60 Hz ONE MINUTE, (BETWEEN FRAME AND (+) TERMINAL)

(continued)

PART NO:

DELTA MODEL: MR83A2PE-105S00

ROTATION	CLOCKWISE DIRECTIONS FROM NAME PLATE SIDE
OVER CURRENT SHUT DOWN	THE CURRENT WILL SHUT DOWN, WHEN ROTOR LOCKED.
LEAD WIRE	UL SVT 18AWG / 2C (105°C) -LF- BLUE WIRE (N) BROWN WIRE (L)

3. RECOMMENDED IMPELLER: (Aluminum impeller)

IMPELLER DIAMETER	22°	28°	34°
Φ154mm	V	V	V
Φ172mm	V	V	V
Φ200mm	V	V	V
Φ230mm	V	V	V
Φ254mm	V	V	
Φ300mm			

PART NO:

DELTA MODEL: MR83A2PE-105S00

4. MECHANICAL:

- 4-1. DIMENSIONS----- SEE DIMENSIONS DRAWING
- 4-2. FRAME----- PLASTIC UL: 94V-0
- 4-3. IMPELLER----- PLASTIC UL: 94V-0
- 4-4. BEARING SYSTEM----- TWO BALL BEARINGS
- 4-5. WEIGHT-----0.63 KILOGRAMS(REF.)
- *4-6. INGRESS PROTECTION LEVEL ----- IP 54
(*IP TEST CONDITION IS BASED ON IEC 60529)

5. ENVIRONMENTAL:

- 5-1. OPERATING TEMPERATURE----- -20 TO +60 DEGREE C
- 5-2. STORAGE TEMPERATURE----- -40 TO +85 DEGREE C
- 5-3. OPERATING HUMIDITY----- 5 TO 90 % RH
- 5-4. STORAGE HUMIDITY----- 5 TO 95 % RH

6. PROTECTION:

- 6-1. LOCKED ROTOR PROTECTION

- 6-2. OVER CURRENT PROTECTION

- 6-3. MOTOR OVER TEMP. PROTECTION

7. RE OZONE DEPLETING SUBSTANCES:

- 7-1. NO CONTAINING PBBs, PBBOs, CFCs, PBBEs, PBDPEs AND HCFCs.

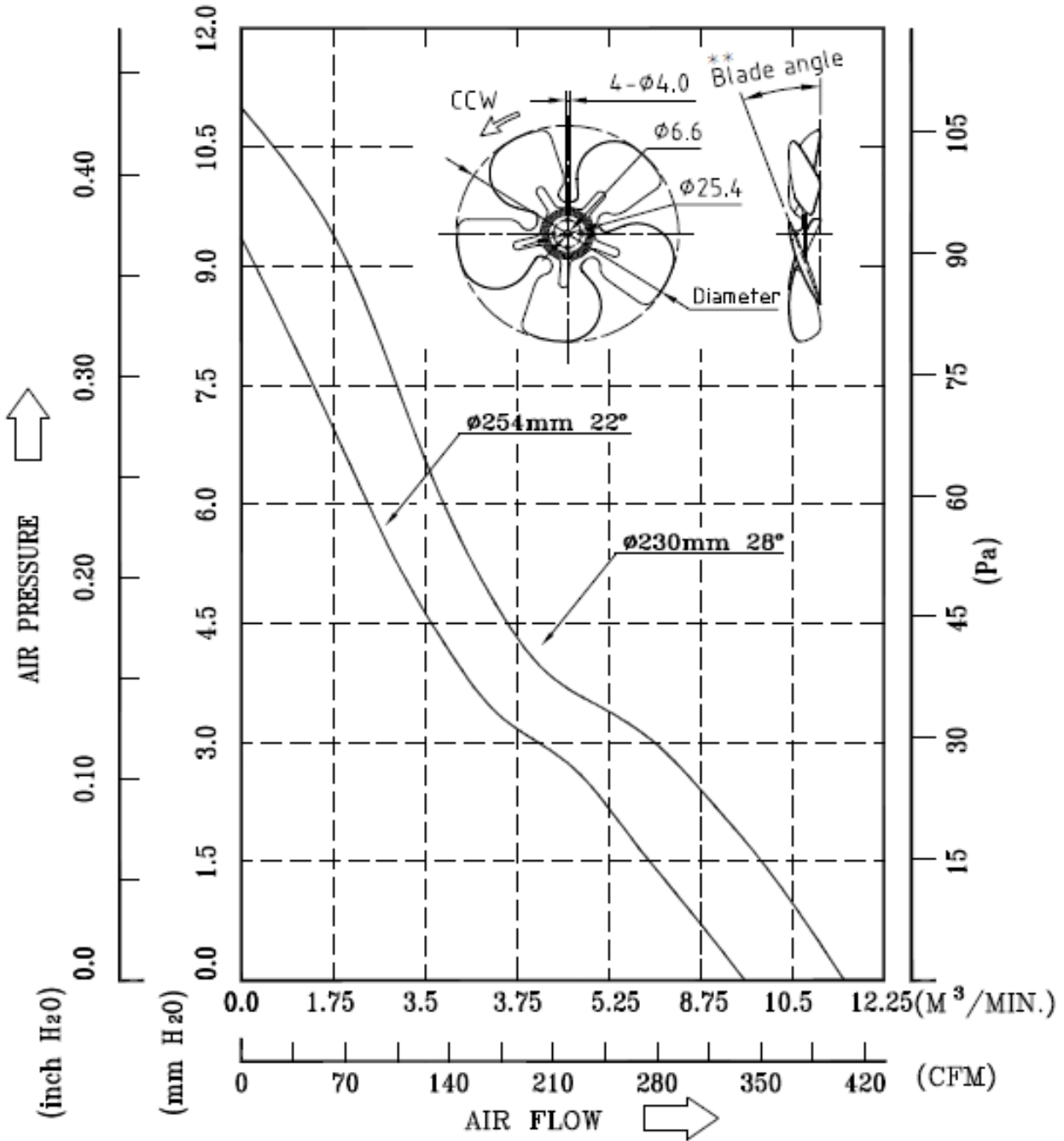
8. PRODUCTION LOCATION

- 8-1. PRODUCTS WILL BE PRODUCED IN CHINA.

PART NO:

DELTA MODEL: MR83A2PE-105S00

9. $\Phi 230\text{mm}(9\text{inch})$ & $\Phi 254\text{mm}(10\text{inch})$ metal blade P & Q CURVE: (REF.)



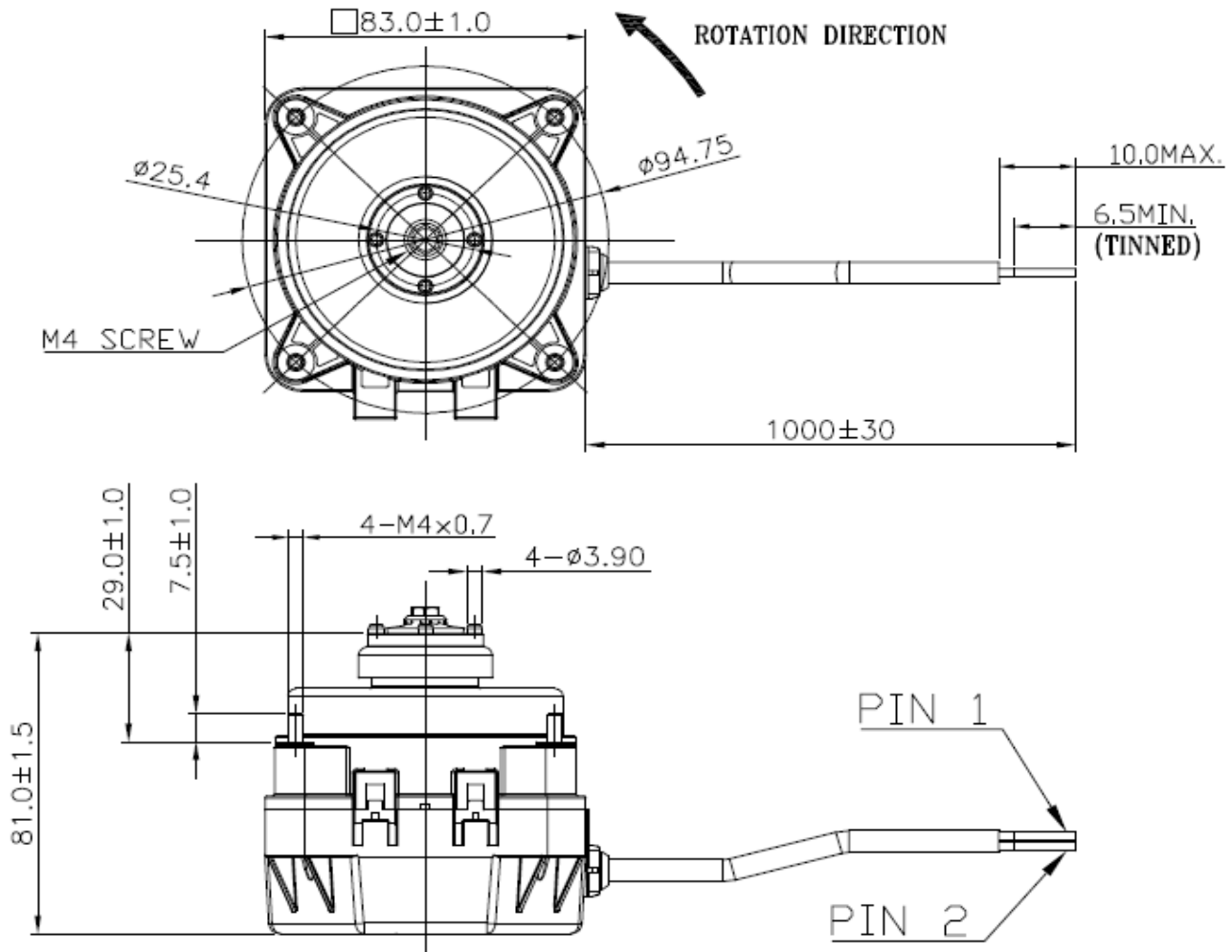
*TEST CONDITION: INPUT VOLTAGE-----OPERATION VOLTAGE
TEMPERATURE-----ROOM TEMPERATURE
HUMIDITY-----65%RH

**DIMENSIONAL TOLERANCES: ANGLES: $\pm 1.5^\circ$

PART NO:

DELTA MODEL: MR83A2PE-105S00

10. DIMENSION DRAWING:



NOTES: 1. THIS PRODUCT IS RoHS COMPLIANT

2. LEAD WIRE

UL SVT 18AWG / 2C (105°C) -LF-

PIN1: BLUE WIRE (N)

PIN2: BROWN WIRE (L)

PART NO:

DELTA MODEL: MR83A2PE-105S00

11. SAFETY LABEL:

LABEL 1: SAFETY MARK



LABEL 2: CE REQUEST ADDRESS LABEL (OPTIONAL BY SHIPPING REGION)

EU Contact Address :
Delta Electronics (Netherlands) BV
Zandsteen 15, 2132 MZ Hoofddorp, The Netherlands

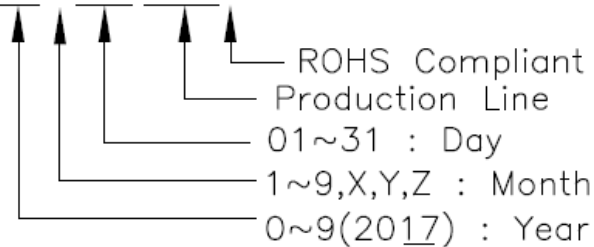
Notes:

Date Code Definition :

Example: 2017/2/20

Production Line: M01, M02, ...

17220M35F





Application Notice

- 1. Delta will not guarantee the performance of the products if the application condition falls outside the parameters set forth in the specification.**
- 2. A written request should be submitted to Delta prior to approval if deviation from this specification is required.**
- 3. Please exercise caution when handling fans/motor. Damage may be caused when pressure is applied to the impeller, if the fans/motor are handled by the lead wires, or if the fan/motor was hard-dropped to the production floor.**
- 4. Except as pertains to some special designs, there is no guarantee that the products will be free from any such safety problems or failures as caused by the introduction of powder, droplets of water or encroachment of insect into the hub.**
- 5. The above-mentioned conditions are representative of some unique examples and viewed as the first point of reference prior to all other information.**
- 6. Delta fans/motor without special protection are not suitable where any corrosive fluids are introduced to their environment.**
- 7. Please ensure all fans/motor are stored according to the storage temperature limits specified. Do not store fans/motor in a high humidity environment. We highly recommend performance testing is conducted before shipping, if the fans/motor have been stored over 6 months.**
- 8. Not all fans/motor are provided with the Lock Rotor Protection feature. If you impair the rotation of the impeller for the fans/motor that do not have this function, the performance of those fans/motor will lead to failure.**
- 9. Please be cautious when mounting the fan/motor. Incorrect mounting of fans/motor may cause should be excess resonance, vibration and subsequent noise.**
- 10. It is important to consider safety when testing the fans/motor. A suitable fan guard fitted to the fan/motor to guard against any potential for personal injury.**
- 11. Except where specifically stated, all tests are carried out at room (ambient) temperature and relative humidity conditions of 25°C, 65% RH. The test value is only for fan/motor performance itself.**