

# 规格书 SPECIFICATION

标准品  
STANDARD FAN

风机型号 FAN MODEL **B3P280-EC092-100**

## 1. 适用范围 SCOPE

本电动机规格书适用于3相直流无刷电动机的技术规定  
其中没有特别指明处均遵从中国国家强制性产品认证和CE认证，且满足欧盟ErP要求  
THIS SPECIFICATION IS SPECIFIED FOR 3-PHASE DC BRUSHLESS MOTOR.  
ITEMS EXCEPT HAVING INDICATED IN THE SPECIFICATION, ARE APPLIED TO CHINA COMPULSORY PRODUCT CERTIFICATION AND CE, AND TO MEET THE EU ErP REQUIREMENTS.

## 2. 规格 SPECIFICATIONS

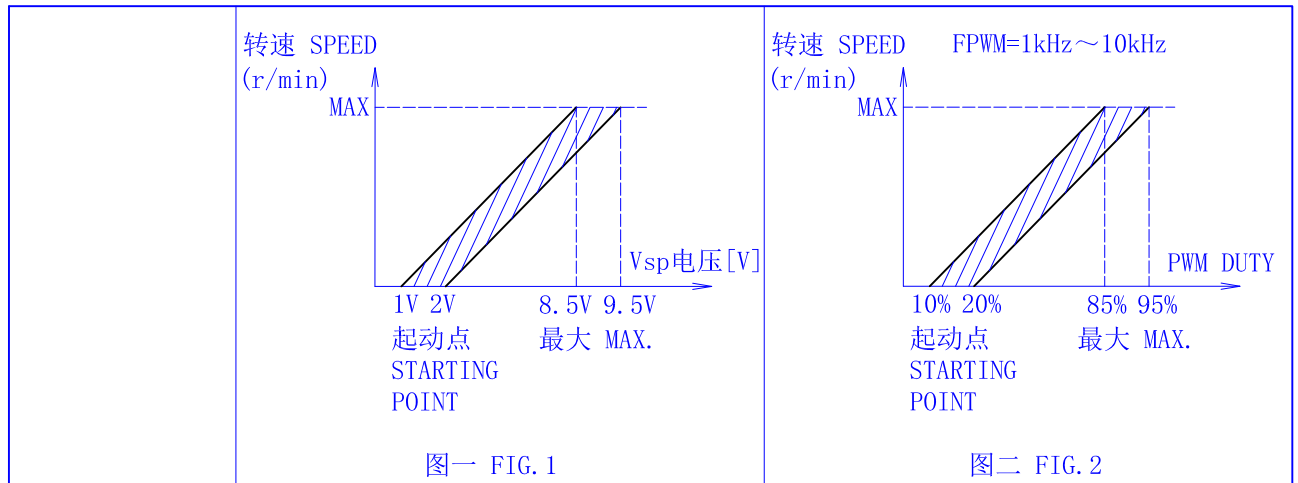
| 项目 ITEM                               | 内容 SPECIFICATION              |  |         | 备注 DESCRIPTION   |
|---------------------------------------|-------------------------------|--|---------|--|
| 电气特性<br>ELECTRICAL<br>CHARACTERISTICS | 电压 VOLTAGE                    | AC220  | [V]     | 范围: AC200-277V<br>RANGE  |
|                                       | 频率 FREQUENCY                  | 50/60  | [Hz]    |  |
|                                       | 转速 SPEED                      | 2000 ±10%                                      | [r/min] |  |
|                                       | 功率 POWER                      | △ 105 ±16%                                     | [W]     |  |
|                                       | 电流 CURRENT                    | △ 0.75 ±16%                                    | [A]     |  |
|                                       | 最大风量 AIR FLOW                 | 1915 MAX.                                      | [m³/h]  |  |
|                                       | 噪音 NOISE                      | 69 ±6  | [dBA]   |  |
|                                       | 泄漏电流<br>LEAKAGE CURRENT       | 3.5 MAX.                                       | [mA]    | 测试条件 AC260V 3S<br>TESTING CONDITIONS   |
|                                       | 绝缘耐压<br>DIELECTRIC RESISTANCE | AC1800V  |         | 1S 跳闸电流10mA<br>TRIPPING CURRENT  |
|                                       | 绝缘等级 INSULATION CLASS         | B 级 CLASS                                      |         |  |
|                                       | 控制方式 CONTROL INPUT            | 0-10V Vdc/PWM                                  |         | 见图一、二 SEE FIG. 1、2   |
|                                       | 输出电源 OUTPUT                   | +10Vdc   |         |  |
|                                       | 转速信号 TACH OUTPUT              | 1 PULSE/R                                      |         | 占空比 DUTY 30%~70%须在+10V与TACH<br>OUTPUT间连接10KΩ上拉电阻/IT NEEDS<br>10KΩ PULL-UP RESISTANCE BETWEEN<br>+10V LINE AND TACH OUTPUT LINE |
|                                       | 保护方式 :<br>PROTECTED MODE      | OVER-TEMPERATURE/OVER-CURRENT/LOCKED PROTECTED |         |  |

| RoHS指令对应<br>CONFORM TO RoHS<br>INSTRUCTIONS | 角度公差<br>Angle Tolerance | 夹角短边的长度范围(unit mm)<br>Classification of a shorter side of subjected angle |         |          |           | 普通公差<br>General<br>Tolerance | 尺寸范围 (unit mm)<br>Classification of basic dimension |        |          |           |
|---|-------------------------|---|---------|----------|-----------|------------------------------|---|--------|----------|-----------|
|   |                         | X≤10  | 10<X≤50 | 50<X≤120 | 120<X≤400 |                              | X≤6   | 6<X≤30 | 30<X≤120 | 120<X≤400 |
|   | 公差Tolerance             | ±1°   | ±30'    | ±20'     | ±10'      | 公差 Tolerance                 | ±0.1  | ±0.2   | ±0.3     | ±0.5      |

|           |             |                       |                      |          |                   |       |                  |
|-----------|-------------|-----------------------|----------------------|----------|-------------------|-------|------------------|
| 02        | '22-11-01   | EC-AFL-2022-0183      | 误记变更                 | JSOT32   | 材 质<br>MATERIAL   | ----- | B3P280-EC092-100 |
| 01        | '20-05-15   | EC-AFL-2020-0033      | 机种名, 参数变更            | JSOG01   |                   |       |                  |
| 00        | '16-04-20   | -----                 | 00初版                 | JSOW06   | 表 面 处 理<br>FINISH | ----- | 风机/电机型号 MODEL    |
| 改版<br>SYM | 年月日<br>DATE | 图面变更号<br>REVISION NO. | 变 更 事 项<br>REVISIONS | 设计<br>BY |                   |       |                  |

|                            |                            |                            |                            |                                  |      |                 |                   |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------------|------|-----------------|-------------------|
| 制 图<br>DRAWN               | 设 计<br>DESIGNED            | 检 图<br>CHECKED             | 检 印<br>CHECKED             | 比 例<br>SCALE                     | FREE | 品 名<br>TITLE    | 规格书 SPECIFICATION |
| 艾弗洛<br>'22-11-01<br>JSOT32 | 艾弗洛<br>'22-11-01<br>JSOT32 | 艾弗洛<br>'22-11-02<br>JSOG01 | 艾弗洛<br>'22-11-02<br>JSOG01 | 三角法<br>THIRD ANGLE<br>PROJECTION |      | 图 号<br>DWG. NO. | A112-0043-02      |
| 艾弗洛 AFL                    |                            |                            |                            |                                  |      | 页<br>SHEET      | 1/6               |

A



B

|                                     |  |  |
|-------------------------------------|--|--|
| 机械特性<br>MECHANICAL<br>SPECIFICATION | 外观 APPEARANCE                                | 不能有影响商品质量的伤痕和污迹<br>THERE SHOULD NOT BE ANY DEFECTS AND DIRTY WHICH SPOIL GOODS VALUE |
|                                     | 质量 MASS                                      | 约 APPROX 3.1 [Kg]  |
|                                     | 电机引线引拔强度<br>LEAD WIRE PULLED<br>OUT STRENGTH | 20 [N/根]以上 MIN.  |
|                                     | 寿命 L10<br>LIFE                               | 40000 [h] MIN.   |

C

## 3. 环境要求 ENVIRONMENTAL REQUIREMENT

|  |             |                       |
|--|-------------|-----------------------|
| 保存温度<br>STORAGE TEMPERATURE RANGE      | -25~60 [°C] |                       |
| 使用·保存湿度<br>OPERATING, STORAGE HUMIDITY | 30~95 [%]RH | 无结露<br>NON CONDENSING |
| 使用温度范围<br>OPERATING TEMPERATURE RANGE  | -20~60 [°C] |                       |

D

E

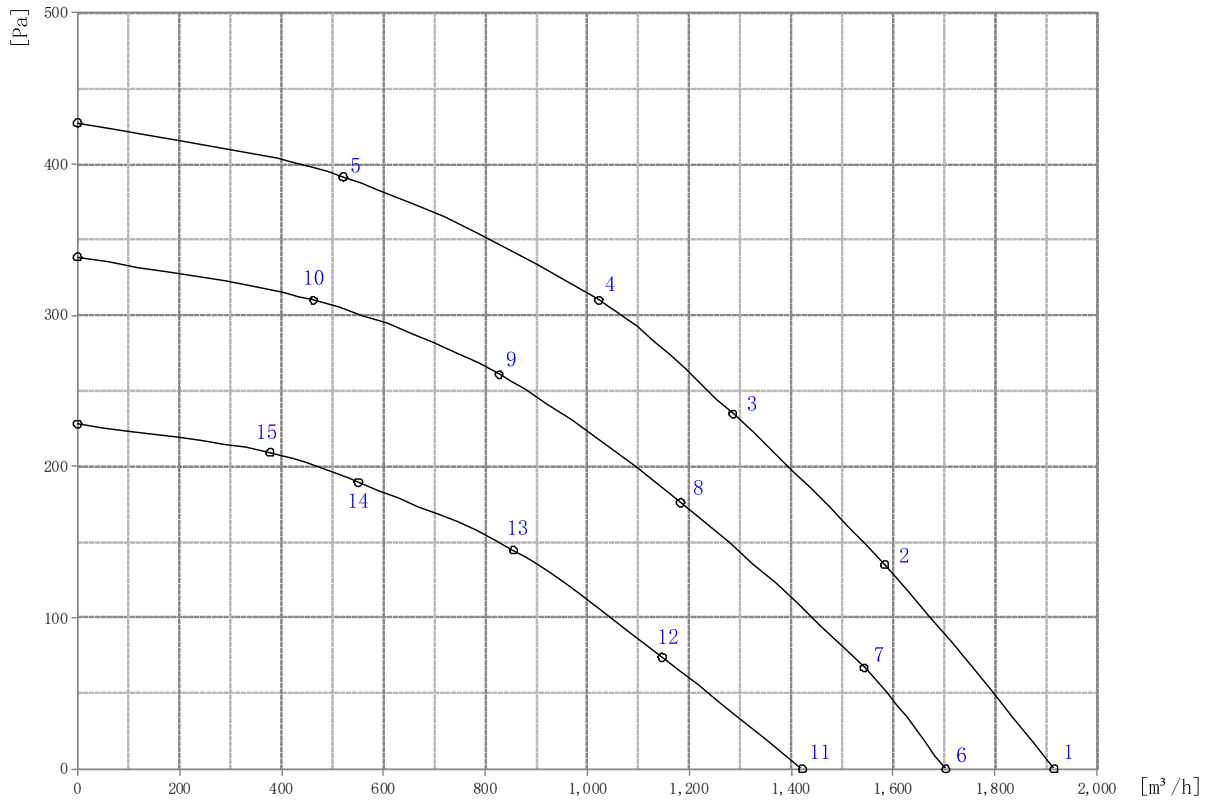
## 4. 使用注意事项 NOTE IN USE

- |   |  |
|---|--|
| A | (1) 本电机内未设接线反接等保护线路<br>SINCE THIS MOTOR HAS NO REVERSING CONNECTION  |
|   | (2) 起动时电流过大会损坏电机 请防止电流峰值超过2.5A<br>TO PREVENT MOTOR DAMAGED BY OVER STARTING CURRENT, THE PEAK CURRENT CAN NOT EXCEED 2.5A  |
|   | (3) 风机运转时不可插拔风机引线插头<br>PLEASE DO NOT PERFORM EXTRACTION AND INSERTION OF THE CONNECTOR UNDER REVOLUTION<br>IRRESPECTIVE OF POWER ON AND POWER OFF                                    |
|   | (4) 本风机通风冷却 使用时请考虑风机周边的通风条件<br>FAN CAN BE COOLED BY VENTILATION, PLEASE CONSIDER VENTILATED CONDITION AROUND THE<br>FAN WHEN USING IT  |
|   | (5) 轴承部不可受到冲击<br>DO NOT ADD SHOCK TO THE BALL BEARING  |
|   | (6) 拿取风机时不可拎风机引线 引线过度受力时内部焊接部分可能脱落<br>DO NOT CARRY WITH LEAD WIRES WHEN HANDLE A FAN, IF ADD HUGE STRENGTH TO LEAD WIRES<br>THAT THE SOLDERED PART IN FAN MAY BE SHED                |
| B | (7) 防止冲击电压破坏风机 电源线上请不要采用继电器或其它机械开关<br>DO NOT USE RELAY OR OTHER MECHANICAL SWITCH ON POWER SUPPLY LINE, BECAUSE IMPACT<br>VOLTAGE MAY DAMAGE THE FAN                                 |
|   | (8) 按本规格书中的规格评价风机 若工作点规格需要变更 请与本公司联系<br>EVALUATE THE FAN REFER TO THIS SPECIFICATIONS. IF THE LOAD OR POWER SUPPLY VOLTAGE<br>OF THE MOTOR SHOULD BE CHANGED, PLEASE CONTACT WITH US |

## 5. 其它 OTHERS

- |   |  |
|---|--|
| C | (1) 本款风机的知识产权属于本公司 在本款风机的使用上不会发生专利问题 应用本风机形成有关产品<br>或方法及新的技术方案造成专利侵权 本公司不予保证 请贵公司特别注意<br>THE INTELLECTUAL ASSET OF THE FAN IN THE FORM OF PATENT BELONGS TO OUR CORPORATION<br>SO ANY PATENT PROBLEM WILL NOT BE CAUSED DURING THE ACTUAL APPLICATION. OUR CORPORATION<br>WILL NOT BE RESPONSIBLE FOR ANY PATENT DISPUTE OR PROBLEM THAT CAUSED BY THE PRODUCT<br>METHOD AND NEW TECHNIQUE PROJECT WHICH ARE DEVELOPED BY USING THIS FAN |
|   | (2) 贵公司保证未经本公司许可 不得将此技术规格书泄漏给其它任何第三方<br>IT SHOULD BE ASSURED THAT THIS SPECIFICATION CAN NOT BE REVEALED TO ANY THIRD PARTY<br>WITHOUT THE CONSENT OF OUR CORPORATION  |
|   | (3) 本电机Pb Cr(VI+) Cd Hg PBB PBDE 6种物质的含有量满足RoHS指令(2002/95/EC)的要求<br>MATERIALS OF MOTOR CONTAIN SIX SUBSTANCES Pb Cr(VI+) Cd Hg PBB AND PBDE, THOSE CONTENTS<br>COMPLY WITH THE RoHS INSTRUCTION  |

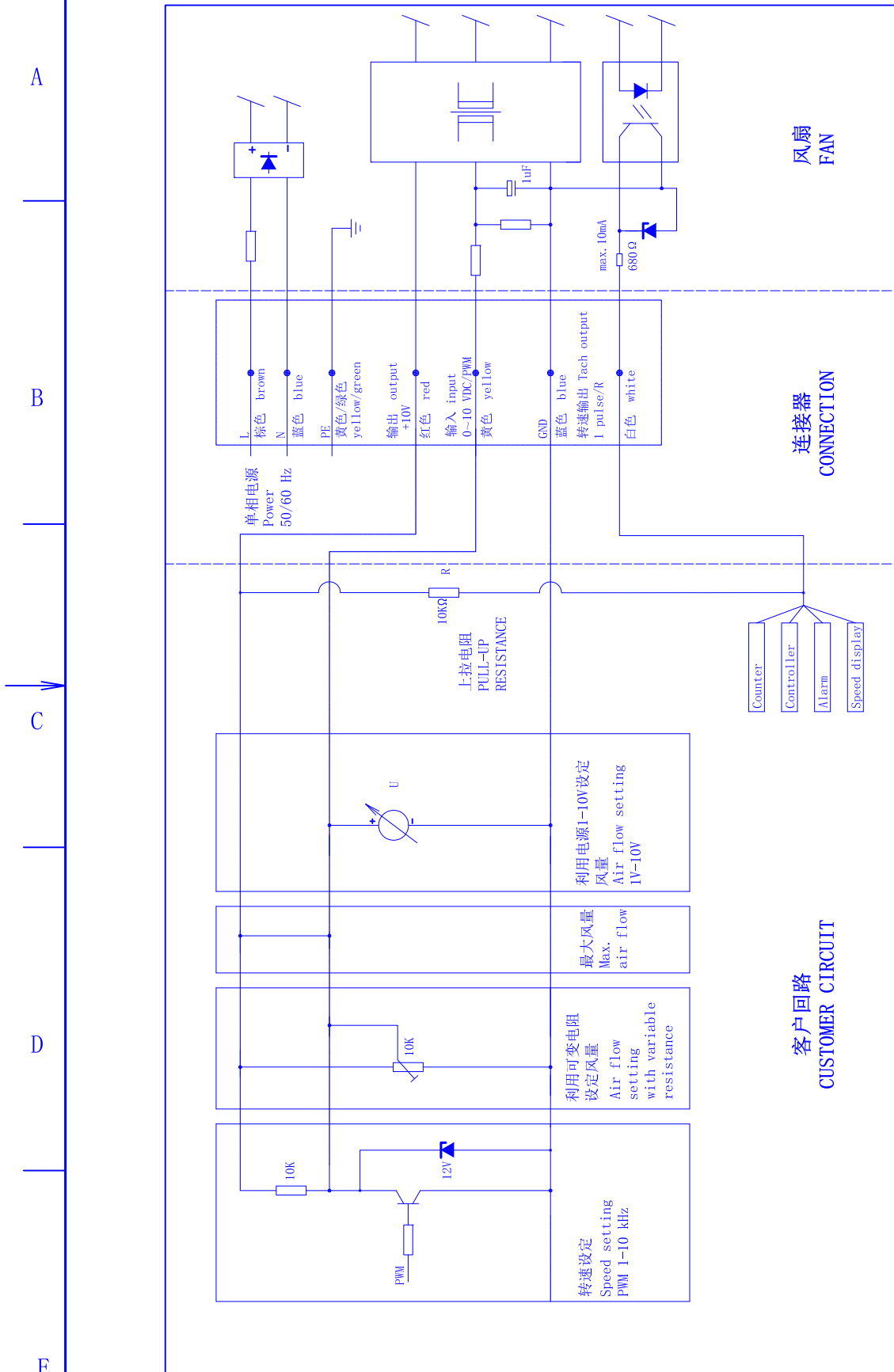
6. P-Q曲线图 P-Q CURVES

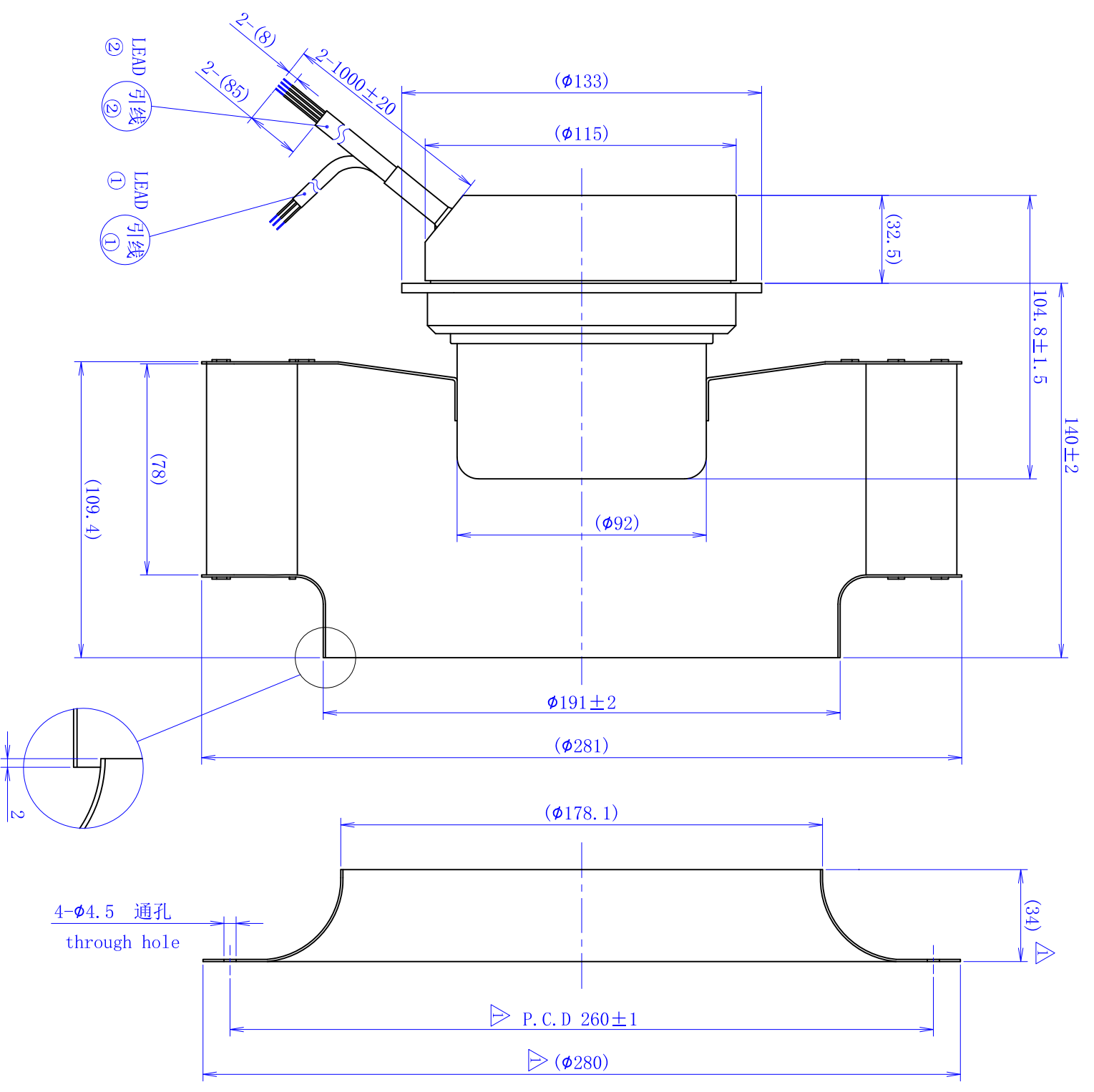
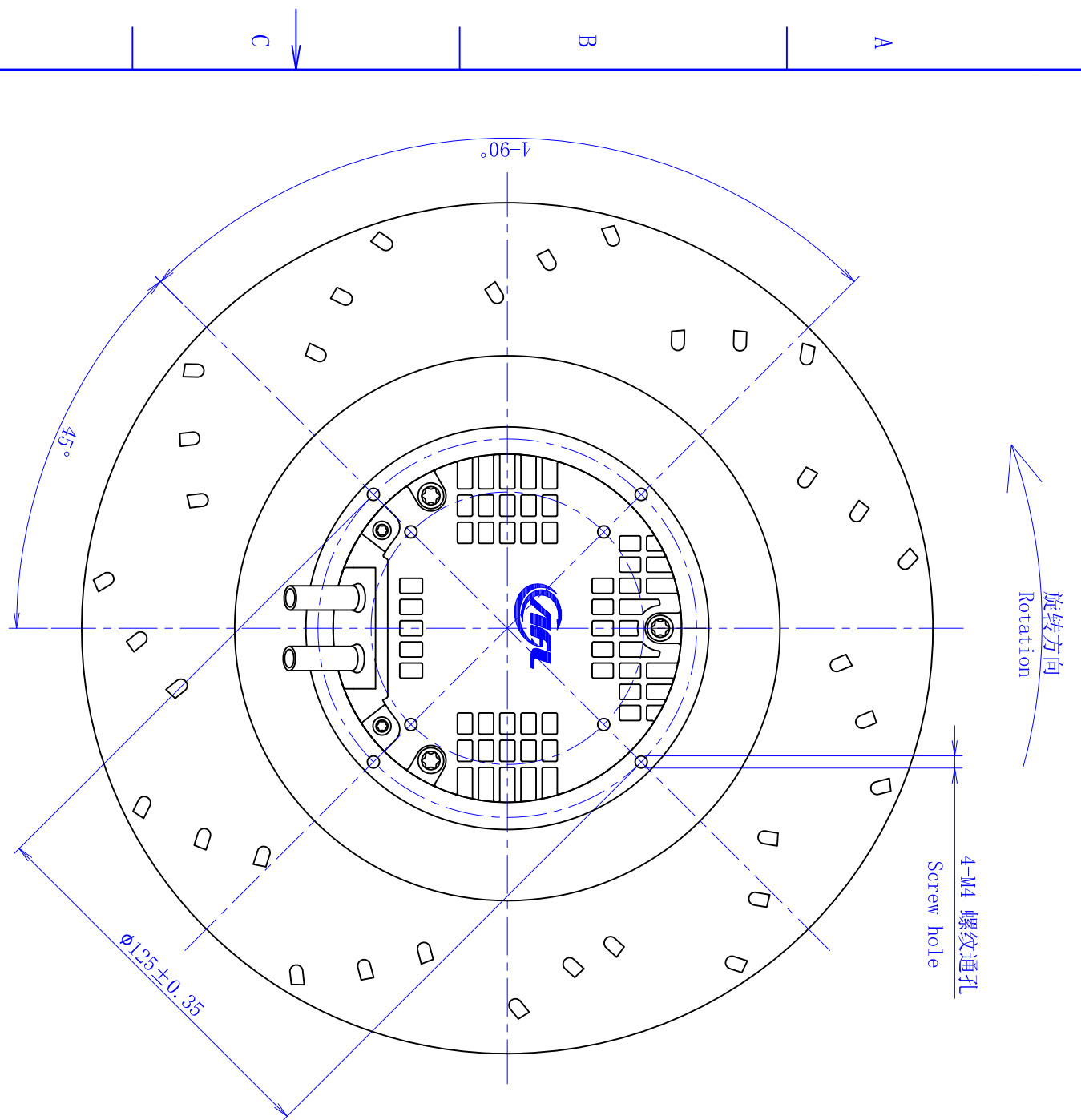


| 项目<br>ITEM | 电压<br>VOLTAGE | 频率<br>FREQUENCY | 转速<br>SPEED | 功率<br>POWER | 电流<br>CURRENT | 转速<br>SPEED | 项目<br>ITEM | 电压<br>VOLTAGE | 频率<br>FREQUENCY | 转速<br>SPEED | 功率<br>POWER | 电流<br>CURRENT | 转速<br>SPEED |
|------------|---------------|-----------------|-------------|-------------|---------------|-------------|------------|---------------|-----------------|-------------|-------------|---------------|-------------|
| 单位<br>UNIT | [V]           | [Hz]            | [r/min]     | [W]         | [A]           | [r/min]     | 单位<br>UNIT | [V]           | [Hz]            | [r/min]     | [W]         | [A]           | [r/min]     |
| 1          | 220           | 50              | 2008        | 129         | 0.88          | 2000        | 11         | 220           | 50              | 1476        | 52          | 0.38          | 1450        |
| 2          | 220           | 50              | 1990        | 153         | 1.04          |             | 12         | 220           | 50              | 1469        | 64          | 0.46          |             |
| 3          | 220           | 50              | 1998        | 181         | 1.21          |             | 13         | 220           | 50              | 1459        | 73          | 0.52          |             |
| 4          | 220           | 50              | 1999        | 181         | 1.25          |             | 14         | 220           | 50              | 1458        | 69          | 0.50          |             |
| 5          | 220           | 50              | 2007        | 167         | 1.13          |             | 15         | 220           | 50              | 1461        | 63          | 0.45          |             |
| 6          | 220           | 50              | 1779        | 91          | 0.64          | 1780        | --         | --            | --              | --          | --          | --            | --          |
| 7          | 220           | 50              | 1782        | 103         | 0.72          |             | --         | --            | --              | --          | --          | --            |             |
| 8          | 220           | 50              | 1780        | 127         | 0.87          |             | --         | --            | --              | --          | --          | --            |             |
| 9          | 220           | 50              | 1777        | 131         | 0.90          |             | --         | --            | --              | --          | --          | --            |             |
| 10         | 220           | 50              | 1781        | 112         | 0.78          |             | --         | --            | --              | --          | --          | --            |             |

7. 控制方式及应用

NOTES ON VARIOUS CONTROL POSSIBILITIES AND THEIR APPLICATIONS





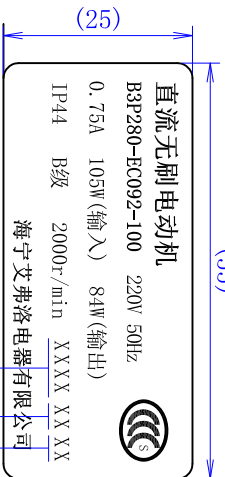
【引线①式样】  
LEAD WIRES ASS'Y ①  
电线 WIRES: 3\*AWG18

| NO. | 信号名<br>SIGNAL | 颜色<br>COLOR         | 规格<br>SPEC  |
|-----|---------------|---------------------|-------------|
| 1   | L             | 棕<br>BROWN          | AC220V/50Hz |
| 2   | N             | 蓝<br>BLUE           | AC220V/50Hz |
| 3   | PE            | 黄/绿<br>YELLOW/GREEN | 接地<br>EARTH |

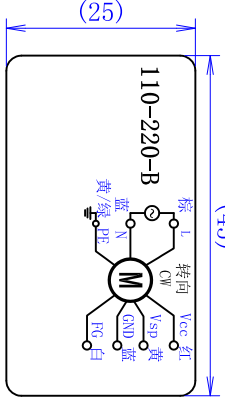
【引线②式样】  
LEAD WIRES ASS'Y ②  
电线 WIRES: 4\*AWG22

| NO. | 信号名<br>SIGNAL | 颜色<br>COLOR | 规格<br>SPEC |
|-----|---------------|-------------|------------|
| 1   | GND           | 蓝<br>BLUE   | GND        |
| 2   | Vsp           | 黄<br>YELLOW | 0-10V/PWM  |
| 3   | Vcc           | 红<br>RED    | DC10V输出    |
| 4   | FG            | 白<br>WHITE  | 1 Pulse/R  |

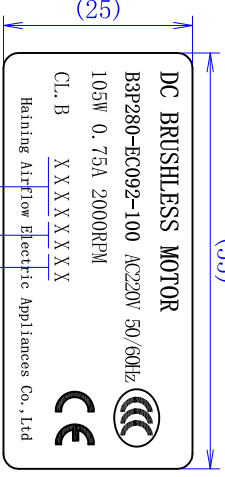
【铭牌一内容】 (55)



【铭牌二内容】 (45)



【LABEL ONE CONTENTS】 (55)



【LABEL TWO CONTENTS】 (45)

