GCE 光彩电器

GCJB-2 主机转速显示产品说明书

GCJB-2 Main Engine Speed Display Unit Product Instruction

GUANG CAI® ELECTRIC

河南光彩电器有限公司
China GCE Co.,Ltd

产品采用微处理器 MPU 控制技术设计，面板采用 PVC 贴膜技术，触摸式按键，具有结构小巧、安装使用方便、美观、性能可靠等优点。符合 CCS 及国外船级社规范的相关要求。
Microprocessor MPU control technique is adopted for the product's design, in addition PVC overlay technique and touch key are adopted for the panel. The product possesses advantages as small, nice, convenient for installation and use, reliable performance etc. It conforms with the relative specifications and requirements of CCS and overseas classification society.

一、主要电气参数
Main electric parameter

①工作电压：DC24V（±20%-30%） 1A；
Working Voltage: DC24V(±20%-30%)1A；
②环境温度：-10℃～+55℃；
Ambient Temperature: -10 ℃+55 ℃
③相对湿度：≤RH95%(+40℃)；
Relative Humidity: ≤RH95% (+40℃)
④电磁兼容性能：设备中有严密的抗干扰措施，满足相关规范要求；
Electro magnetic compatibility: equipment possesses rigorous anti-jamming measures, satisfying the relative specifications and requirements.
⑤设备具有防振及防潮湿、防盐雾、防霉菌的措施；
Equipments possess measures as anti-vibration, moisture proof, anti- salt mist and anti-fungus.
⑥报警输出类型：无源触点；
Alarm output type: dry contact;
⑦触点最大容量： DC36V/1A；
Contact maximum capacity：DC36V/1A；
⑧防护等级：IP44
Protection Degree: IP22

该产品符合国际电工委员会 IEC-92-230 标准及我国现行《钢质海船入级建造规范》，满足国际海上人命安全公约（SOLAS）
The product conforms IEC-92-230 standard and "Steel Sea-Going Ship Classification Construction Rules "which is current in our country, besides accords with SOLAS.

二、输入、
Input

1、单双磁阻式探头输入(如果需要判断正倒转接两个探头)
Single or double reluctance probe input (co-rotation and counter-rotation is if required to be connected with 2 probes)
2、直流电源 24V 输入
DC24V input

三、输出接口、
Output interface:

1. 正车指示灯
Ahead running indicating lamp
2. 倒车指示灯

Astern running indicating lamp

3. 停车指示灯
   Shut down indicating lamp
4. 超速指示灯
   Over-speed indicating lamp
5. 主机转速模拟量输出(转速表)±10V　　2 路
   Main engine rotational speed analog output (tachometer)±10V　　2-route
6. 主机转速模拟量输出 4-20Ma　　1 路
   Main engine rotational speed analog output 4-20Ma　　1-route
7. 正车信号　　开关量(无源触点 1A)
   Ahead signal　　Binary(dry contact 1A)
8. 倒车信号　　开关量(无源触点 1A)
   Astern signal　　Binary(dry contact 1A)
9. 停车信号　　开关量(无源触点 1A)
   Shut down signal　　Binary(dry contact 1A)
10. RS485 通讯总线
    RS485 communication bus
11. CAN-BUS 通讯总线
    CAN-BUS communication bus

四、主要功能:
Main functions:

1. 自由设置量程（1~9000Rpm）
   Free set for the range (1~9000Rpm)
2. 自由齿轮齿数设置（1~1000Rpm）
   Free set for teeth number of gear (1~1000Rpm)
3. 自由报警上限设置（1~9000Rpm）
   Free set for alarm high limit (1~9000Rpm)
4. 正车,倒车,停车指示 Ahead, Astern, stop indication
5. 超速报警指示
   Overspeed alarm indication
6. 超速输出
   Overspeed output
7. 数字速度显示
   Number speed display
8. 超量程错误指示
   Over range error indication
9. 模拟仪表显示
   Analog meter display
10. 4-20Ma 输出
    4-20Ma output
11. 可提供两种数据总线接口
    2 kinds of data bus interface are provided.

五：硬件组成

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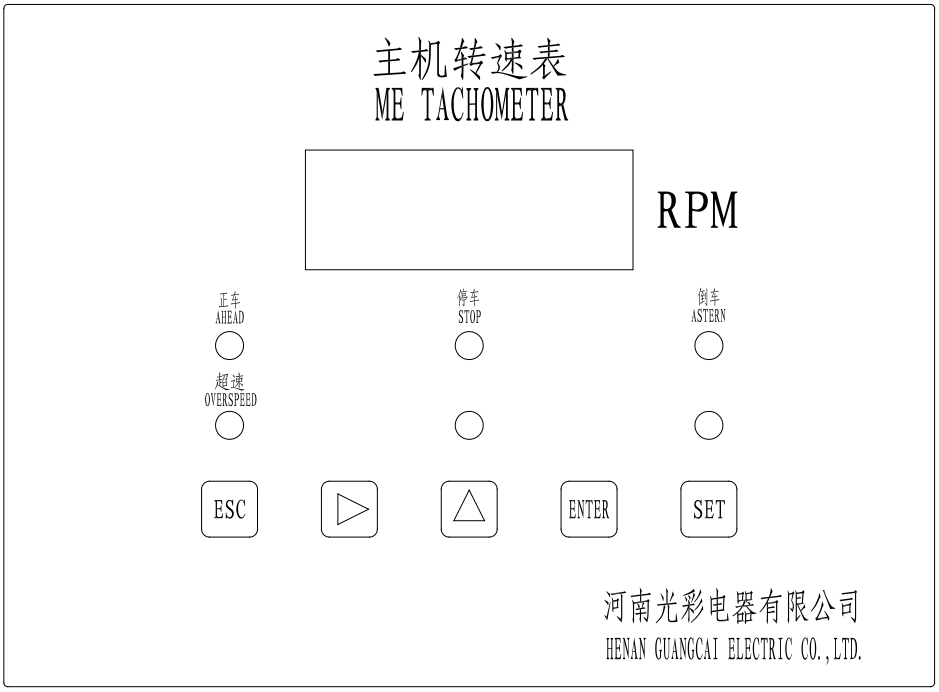
Hardware's composition:

1. 显示面板
   Display panel
2. GCCJ-01-14 转速检测模块
   GCCJ-01-14 speed detecting module
3. 双转速传感器
   Double speed sensor

六、面板示意图
Panel schematic diagram



七、操作说明
Operating instruction

当仪表上电后，仪表显示当前转速值。
The meter will indicate the current RPM after being energized.

一、参数设置
Parameter setting

1、 输入密码
Enter password

在仪表正常显示时，按[SET]键进入参数设置菜单，上排数码管显示 0000，此时可输入密码，按[→][↑]键可移动位和调整数值，按[←]键，如果密码正确，可进入下一个设置参数；如果密码不正确，则退出设置菜单。按[ESC]键，也可退出设置菜单。

During the normal indication of meter. Press [SET] to enter into menu "parameter setting","0000" is displayed on the decatron, at this moment may enter password, and press [→][↑] to shift the bit

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or adjust the value, press [←] to enter into the next setting parameter if the password is correct, or to exit this setting menu if the password is incorrect.[ESC] is also can be used to exit the setting menu.

2、 设置量程
Set the range

此时数码管显示 L，此时可设置量程，按[←]键，进入设置，按[→] [↑]键可移动位和调整数值，按[←]键确认并保存，进入下一个参数设置。如果不设置此项可按[SET]键进入下一个设置参数。按[ESC]键，也可返回到上一级设置菜单。

Here "L" is displayed on the dekatron, and the range can be set at this moment, press [←] to enter into setting, and press [→][↑] to shift the bit or adjust the value, press [←] to acknowledge and save and enter into the next parameter setting. If this item is not set, also may press [SET] to enter into the next setting parameter.[ESC] is also may used to back to the last menu.

3、 设置齿数
Set the Teeth No.

此时数码管显示 F，此时可设置齿数，按[←]键，进入设置，按[→] [↑]键可移动位和调整数值，按[←]键确认并保存，进入下一个参数设置。如果不设置此项可按[SET]键进入下一个设置参数。按[ESC]键，也可返回到上一级设置菜单。

Here "F" is displayed on the dekatron, and the range can be set at this moment, press [←] to enter into setting, and press [→][↑] to shift the bit or adjust the value, press [←] to acknowledge and save and enter into the next parameter setting. If this item is not set, also may press [SET] to enter into the next setting parameter.[ESC] is also may used to back to the last menu.

4、 设置齿数启动成功转速值
Set the RPM for successful startup

此时数码管显示 H1，此时可设置启动成功转速值，当转速值大于设置值时，输出一个开关量信号。按[←]键，进入设置，按[→] [↑]键可移动位和调整数值，按[←]键确认并保存，进入下一个参数设置。如果不设置此项可按[SET]键进入下一个设置参数。按[ESC]键，也可返回到上一级设置菜单。

Here "H1" is displayed on the dekatron, at this moment may set the RPM for successful startup, a binary signal is to be output when the RPM is more than setting value, press [←] to enter into setting, and press [→][↑] to shift the bit or adjust the value, press [←] to acknowledge and save and enter into the next parameter setting. If this item is not set, also may press [SET] to enter into the next setting parameter.[ESC] is also may used to back to the last menu.

5、 设置运行转速值
Set the running RPM

此时数码管显示 H2，此时可设置运行转速值，当转速值大于设置值时，输出一个开关量信号。按[←]键，进入设置，按[→] [↑]键可移动位和调整数值，按[←]键确认并保存，进量信号。按[←]键，进入设置，按[→][↑]键可移动位和调整数值，按[←]键确认并保存，进入下一个参数设置。如果不设置此项可按[SET]键进入下一个设置参数。按[ESC]键，也可返回到上一级设置菜单。

Here "H5" is displayed on the dekatron, at this moment may set the overspeed RPM, a binary signal is to be output when the RPM is more than setting value, press [←] to enter into setting, and press

[→][↑] to shift the bit or adjust the value, press [←] to acknowledge and save and enter into the next parameter setting. If this item is not set, also may press [SET] to enter into the next setting parameter.[ESC] is also may used to back to the last menu.

6、 设置模块地址
Set the module address

此时数码管显示 Add，此时可设置模块地址。按[←]键，进入设置，按[→] [↑]键可移动位和调整数值，按[←]键确认并保存，进入下一个参数设置。如果不设置此项可按[SET]键进入下一个设置参数。按[ESC]键，也可返回到上一级设置菜单。

Here "Add" is displayed on the dekatron, at this moment may set the module address. Press [←] to enter into setting, and press [→][↑] to shift the bit or adjust the value, press [←] to acknowledge and save and enter into the next parameter setting. If this item is not set, also may press [SET] to enter into the next setting parameter.[ESC] is also may used to back to the last menu.

八：接线图：
Wiring diagram

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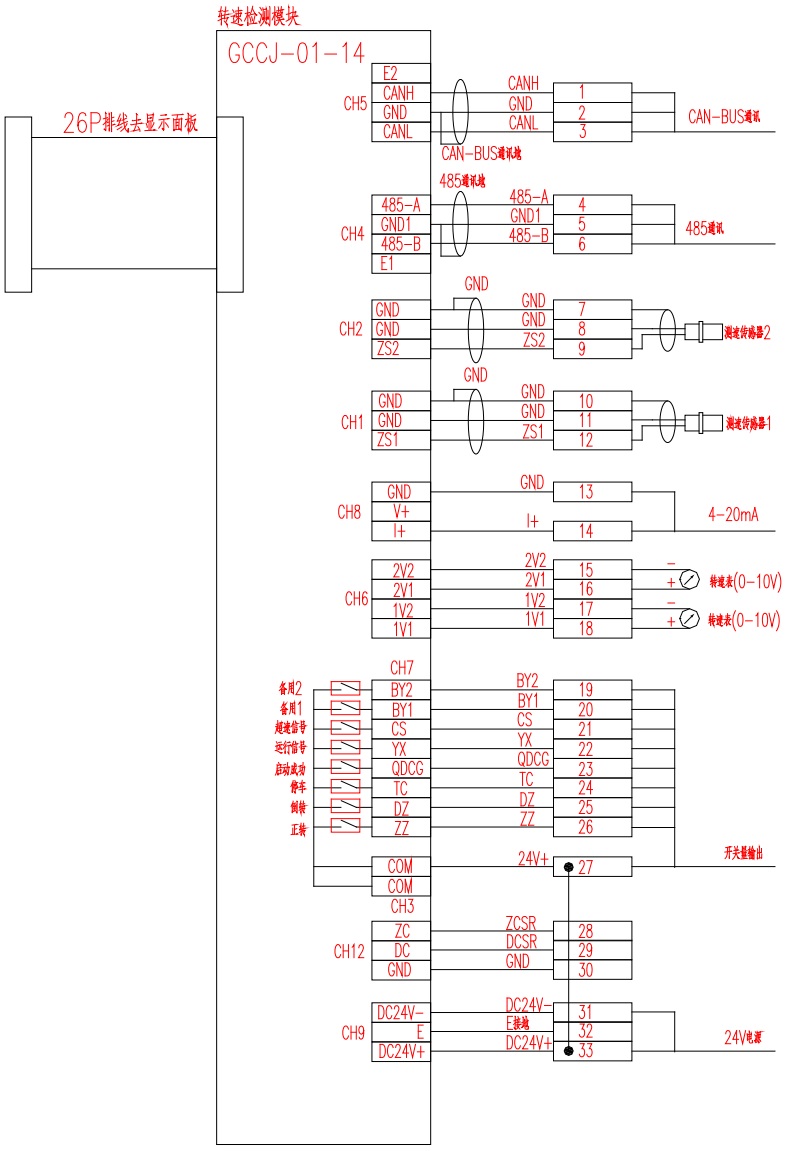

九：外形及开孔尺寸图：

Outline and perforation dimension drawing

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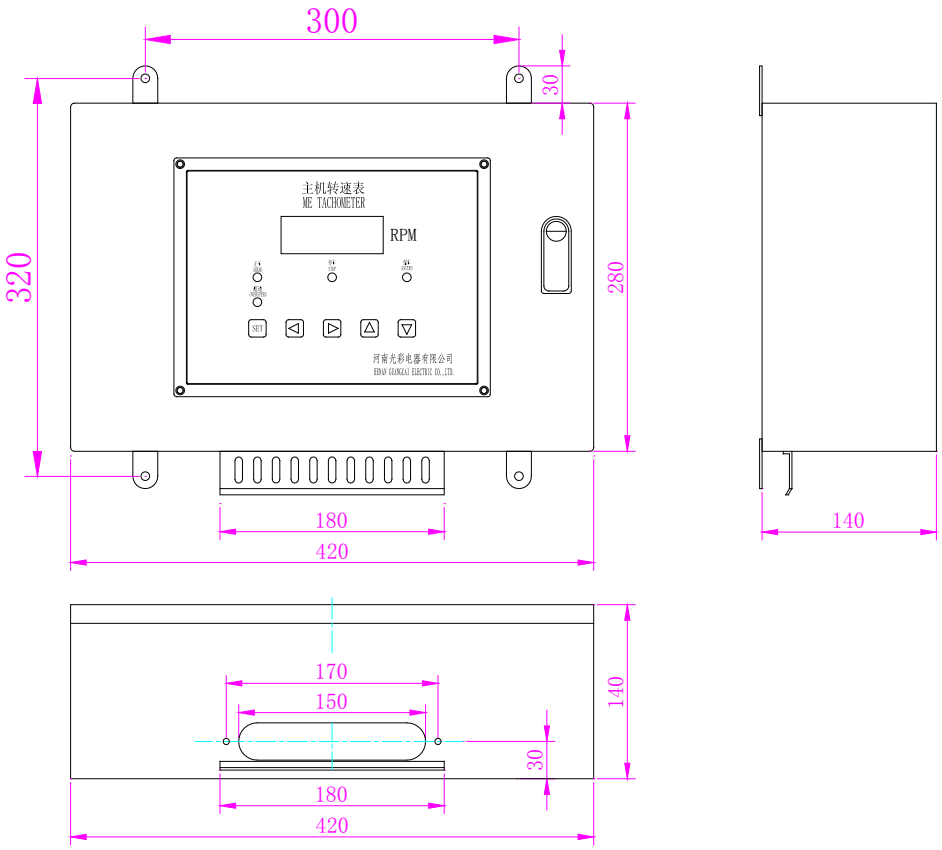

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