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APC715

The controller of the APC715 pump unit is designed for motor controlled pump systems. It allows automatic start / stop, data measurement, alarm protection, as well as remote control, remote measurement and remote communication function. Using the control function GOV (Motor Speed Controller), the controller can stabilize the output / input pressure through GOV. The CANBUS interface (SAE J1939) allows the controller to communicate with several engines that are equipped with the J1939 interface.

Product code: 6040001
Power supply: DC (8-35) V
Dimensions of the box: 266 * 182 * 45 (mm)
Cutting panel: 214 * 160 (mm)
Temp. Operating: (- 25 ~ + 70) ℃
Weight: 0.95kg

COMPLETE DESCRIPTION

APC715 Pump Unit Controller is designed for pump systems which controlled by engine. It allows automatic start/stop, data measurement, alarm protection as well as remote control, remote measurement and remote communication function. Utilizing the GOV (Engine Speed Governor) control function, the controller is able to stabilize the outlet/inlet pressure via GOV. CANBUS (SAE J1939) interface enables the controller to communicate with various engine which fitted with J1939 interface.

APC715 Pump Unit Controller fit with LCD display, optional languages interface (including English, Chinese or other languages); simultaneously the exact parameters of pump unit and engine are indicated by the LCD display on the front panel and the controller is reliable and easy to use.

APC715 Pump Unit Controller adopt powerful 32-bit ARM microprocessor technology with precision parameters measuring, fixed value adjustment, time setting and set value adjusting and etc. The majority of parameters can be configured from front panel and all the parameters can be set using PC (via USB port) and can be adjusted and monitored with the help of RS485 ports. It can be widely used in a number of pump control system with compact structure, simple connections and high reliability

Performance and characteristics

1. 480x272 pixel, 4.3 inches coloured TFT-LCD with backlight, multilingual interface (including English, Chinese or other languages) which can be chosen at the site, making commissioning convenient for factory personnel.

2. Improved LCD wear-resistance and scratch resistance due to hard screen acrylic.

3. Silicon panel and pushbuttons for better operation in high/low temperature environment.

4. RS485 communication port enabling remote control, remote measuring, remote communication via ModBus protocol.

5. Equipped with CANBUS port and can communicate with J1939 genset. Not only can you monitoring frequently-used data (such as water temperature, oil pressure, engine speed, fuel consumption and so on) of ECU machine, but also control start, stop, raising speed and speed droop via CANBUS port.

6. GOV Function; outlet pressure and inlet pressure can be adjusted via GOV function. GOV port: Relay output; Analog output (for speed control unit); CANBUS port (for engine control unit).

7. The controller detects not only engine speed but also gearbox speed.

8. Water pressure curve and flow curve are user-defined.

9. 10 analog sensors; sensors can switch between resistor type and current type using jumper.

10. More kinds of curves of temperature, oil pressure, fuel level can be used directly and users can define the sensor curves by themselves.

11. Precision measure and display parameters about Engine and pump unit; e.g. engine high water temperature, low oil pressure, over speed, high water pressure, low water pressure, over flow and other kinds of fault indication and protection function.

12. There are two kinds of speed adjustment ways: manually and automatically; users can adjust the speed on the panel.

13. Idle control function; the genset will slow down to idle running automatically when the clutch releases.

14. All output ports are relay-out;

15. PLC programming function; can be applied to complex system.

16. Parameter setting: parameters can be modified and stored in internal FLASH memory and cannot be lost even in case of power outage; most of them can be adjusted using front panel of the controller and all of them can be modified using PC via USB or RS485 ports.

17. Multiple crank disconnect conditions (speed sensor, oil pressure) are optional;

18. Widely power supply range DC(8~35)V, suitable to different starting battery voltage environment;

19. Event log, real-time clock, scheduled start & stop pump unit (can be set as start pump unit once a day/week/month whether with load or not);

20. Accumulative total run time A and B. Users can reset it as 0 and re-accumulative the value which make convenience to users to count the total value as their wish.

21. Can control engine heater, cooler and fuel pump.

22. With maintenance function. Actions can be set when maintenance time out;

23. All parameters used digital adjustment, instead of conventional analog modulation with normal potentiometer, more reliability and stability;

24. Waterproof security level IP55 due to rubber seal installed between the controller enclosure and panel fascia;

25. Metal fixing clips enable perfect performance in high temperature environment;

26. Modular design, anti-flaming ABS plastic enclosure, pluggable connection terminals and embedded installation way; compact structure with easy mounting.

PARAMETER LIST

Function Item	Parameter
Display	4.3 inches TFT-LCD (480*272)
Operation Panel	Silicon Rubber
Language	Chinese & English & Others
Digital Input	9
Analogue Input	10
Digital Output	12
Monitor Interface	RS485
Programmable Interface	USB/RS485
RTC & Event Log	●
Scheduled Start/Stop	●
CANBUS	●

Function Item	Parameter
GOV	●
Dual-Battery Start Output	●
Internal PLC Logic	●
Dual Speed Sampling	●
Inlet / Outlet Pressure	●
Capacity / Head	●
Maintenance	●
IP Protection Class	IP55
DC Supply	DC(8～35)V
Case Dimensions(mm)	266*182*45
Panel Cutout(mm)	214*160
Operating Temp.	(-25～+70)℃

Application