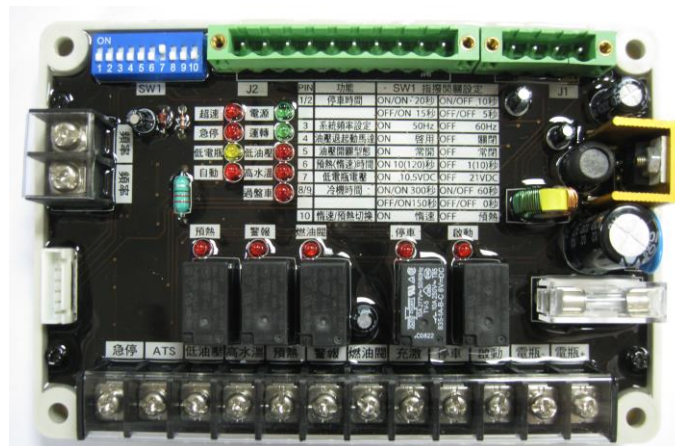


# ARB-18 Controller



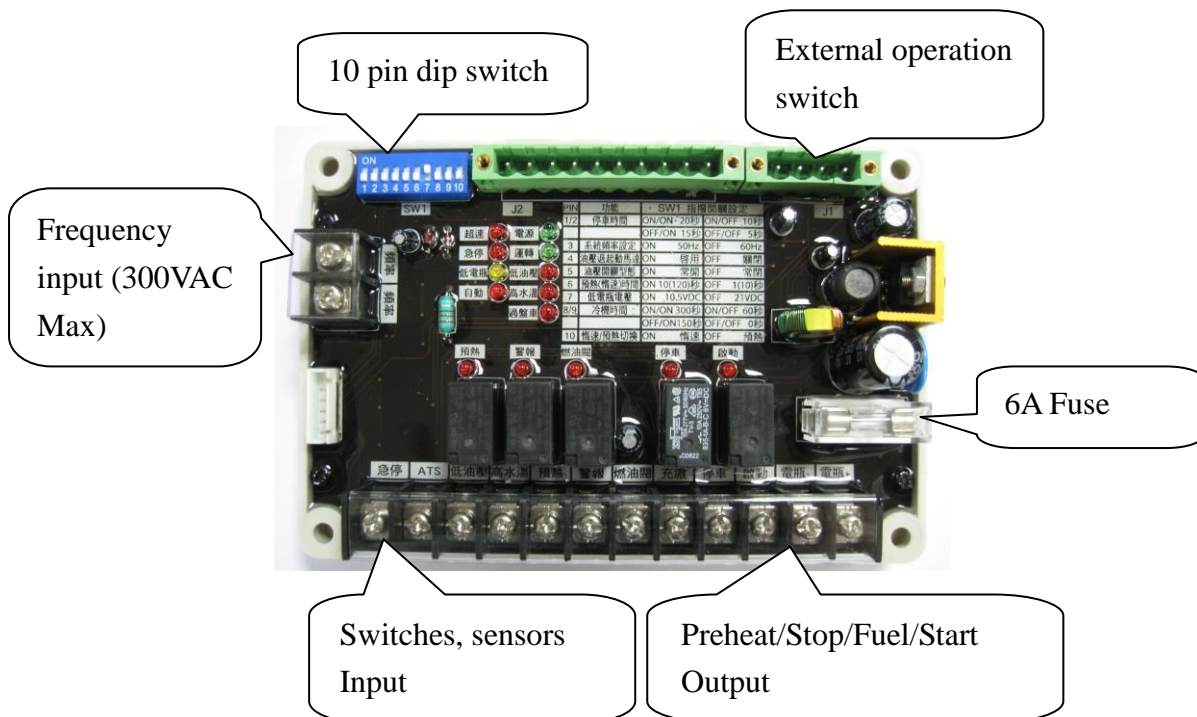
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# 1. Description

ARB-18 is a multi-function diesel engine generator controller. Easy key switch operation requires no special training. Fault protections includes: Emergency stop, over speed, high water temperature, low oil pressure, and over crank. ARB-18 also displays low battery voltage warning and indicates running and power status. ARB-18 equips with terminals provides easy connection and removal. Furthermore, ARB-18 uses 10 pins Dip switch for adjusting the parameter according to system specifications.

# 2. Profile



## A、LED Indication

- Emergency / Auxiliary Shutdown
- Low Battery Warning
- Over Speed Shutdown
- High Water Temperature Shutdown
- Low Oil Pressure Shutdown
- Over Crank
- Run
- Power

## B 、 External Switch

- Off  
Stop running engine or stand still / Reset Alarm.
- Fuel  
Fuel output.
- Crank  
Crank the engine

## C 、 Dip switch settings function

- Pin 1 & Pin 2 : Stop solenoid output timer

Pin1	Pin2	Timer
OFF	OFF	5 sec
ON	OFF	10 sec
OFF	ON	15 sec
ON	ON	20 sec

List 2 Stop Period

- Pin3 : System frequency 【ON : 50Hz ; OFF : 60Hz】
- Pin4 : Disconnect starter by oil pressure switch 【ON : Enable ; OFF : Disable】
- Pin5 : Oil pressure switch type 【ON : Normal Open ; OFF : Normal Close】
- Pin6 : Idle / Pre-heat output delay time 【ON : 10 ( 120 ) Sec ; OFF : 1 ( 10 ) Sec】
- Pin7 : Low DC Volt 【ON : 10.5VDC ; OFF : 21VDC】
- Pin8 & Pin9 Cooling time :

Pin8	Pin9	Cooling time
OFF	OFF	0 Sec
ON	OFF	60 Sec
OFF	ON	150 Sec
ON	ON	300 Sec

List 3 Cooling Time

Pin10 : Idle / Pre-heat Function Select 【ON : Idle ; OFF : Pre-heat】

### 3. Dimension

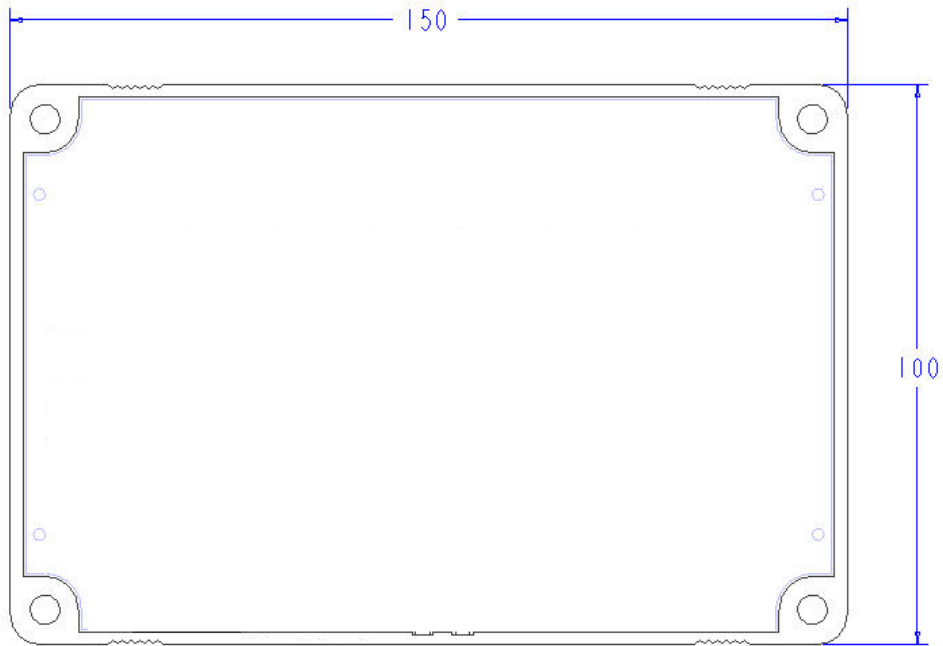


Figure 1

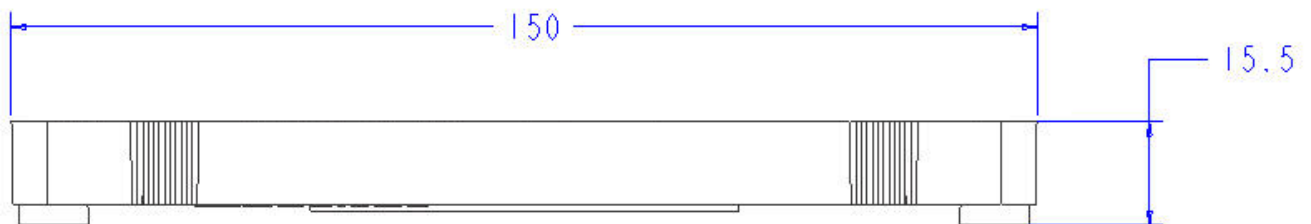


Figure 2

### 4. Specifications

**DC supply :**

8~36 VDC

**Power Consumption :**

Max.5 W

**Measuring Frequency :**

0~75 Hz (min AC Volt. 5V ; max AC Volt. 300V)

**Relay Output :**

Fuel output : 5A

Idle / Pre-heat output : 5A

Alarm Output : 5A

Stop output : 5A

**Ambient Temperature Range :**

-30 °C ~ 70 °C

**Dimension (W \* H \* D) :**

150mm × 100mm × 58mm

## **5. Protections and parameters :**

Auxiliary shutdown protection: 1 Sec., Normal Close

Low battery warning: 5 Sec., 10.5 / 21 VDC

Over speed protection: 2 Sec., 55/66 Hz

High water temp. protection: 2 Sec., Normal Open

Low oil pressure protection: 2 Sec., Normal Open / Normal Close

Over crank: 3 attempts

Cranking speed up limited: 0.5 Sec., 16Hz

Safety on timer: 5 Sec (\*)

(\*) All alarms are ignored until safety on timer expired, except the emergency stop and over speed.

# 5. Wiring Diagram

