

GTR-310

Generator controller



Features

- Large color LCD screen, readings include battery voltage, water temperature, oil pressure, oil temperature, hour meter, engine RPM, AC voltage, AC current, frequency, etc.
- Operation keypads include manual mode, OFF, Auto mode, and information display.
- Protections include emergency stop, over speed, high water temperature, low oil pressure, AC high/low voltage, overload, start failure, and low battery.
- DIP switches can be set according to the system requirements.
- Built-in Modbus provides remote monitoring, parameter adjustment, etc.

System parameters

- Emergency stop : 1S.stop
- Over speed : 2S. stop
- Low frequency : 6S. stop
- High water temperature : 2S. stop
- Low oil pressure : 2S. stop
- AC high voltage : 2S. stop
- AC low voltage : 5S. stop
- AC overcurrent : 10S. stop
- Low battery : 5S. alarm
- Disengage starter motor : 20Hz
- Crank cycle : 3 Attempts
- Safety on timer : 10S

Introduction

GTR 310 is a new, multi-functional and cost-effective generator controller. The LCD information display includes operating status and various fault signals in color icons. The readings from the Genset include AC voltage, AC current, frequency, battery voltage, water temperature, oil pressure, oil temperature, and hour meter are displayed on the large LCD screen. The friendly design allows users to make simple and quick adjustments through the DIP switch, including system frequency, voltage, protections, current ratio, and battery voltage. The built-in Modbus communication can be used with the central monitoring system for remote monitoring. Please refer to Modbus table.

Specifications

- Working voltage
8~36 V (DC)
- Power consumption
Max. 6.5 W, 460 mA @ 12 V; 270mA @ 24 V
- Frequency measurement
range: 0~75Hz
- Minimum detection voltage: 5VAC
- Working temperature
-30~70°C
- Relay output
5A/30VDC
- Dimensions: W176*H113*D56.5mm
- Opening: W157*H96mm
- Weight: 345g

Dip settings

Foot Position	Features	OFF	ON
Pin 1	Voltage selection	220V	380V
Pin 2	Battery voltage	12V	24V
Pin 3	Stop timer	10S	20S
Pin 4	Preheat timer	0S	10S
Pin 5	Disengage starter motor by oil switch	Disabling	Enable
Pin 6	AC voltage protection	Disabling	Enable
Pin 7	AC current protection	Disabling	Enable

Dip position	Current ratio							
	100:5	150:5	200:5	400:5	500:5	600:5	800:5	1000:5
Pin 8	OFF	ON	OFF	ON	OFF	ON	OFF	ON
Pin 9	OFF	OFF	ON	ON	OFF	OFF	ON	ON
Pin 10	OFF	OFF	OFF	OFF	ON	ON	ON	ON

Current protection	Current protection			
	45%	55%	65%	75%
Pin 11	OFF	ON	OFF	ON
Pin 12	OFF	OFF	ON	ON



Modbus Table

Addr.	Contents	Word	Sign	Ratio	Access (R/W)	Unit	Note
30001	Run Hour High Word	1	unsigned	1	R	100Hr.	Low Byte:100Hr.
30002	Run Hour Low Word	1	unsigned	1	R	Min Hr.	Low Byte:Minute High Byte:Hr.
30003	Battery Volt	1	unsigned	1	R	V	
30004	Water Temp.	1	unsigned	1	R	°C	
30005	Oil Pressure	1	unsigned	1	R	PSI	
30006	Oil Temp.	1	unsigned	1	R	°C	
30007	AC Average Voltage	1	unsigned	1	R	V	
30008	AC Average Current	1	unsigned	1	R	A	
30009	AC Freq.	1	unsigned	1	R	Hz	
30010	Genset Indicator	1	unsigned	1	R	-	
30011	Input Status	1	unsigned	1	R	-	
30012	Output Status	1	unsigned	1	R	-	
30013	CT Ratio	1	unsigned	1	R	-	
30014	System Status	1	unsigned	1	R	-	

Wiring Diagram

