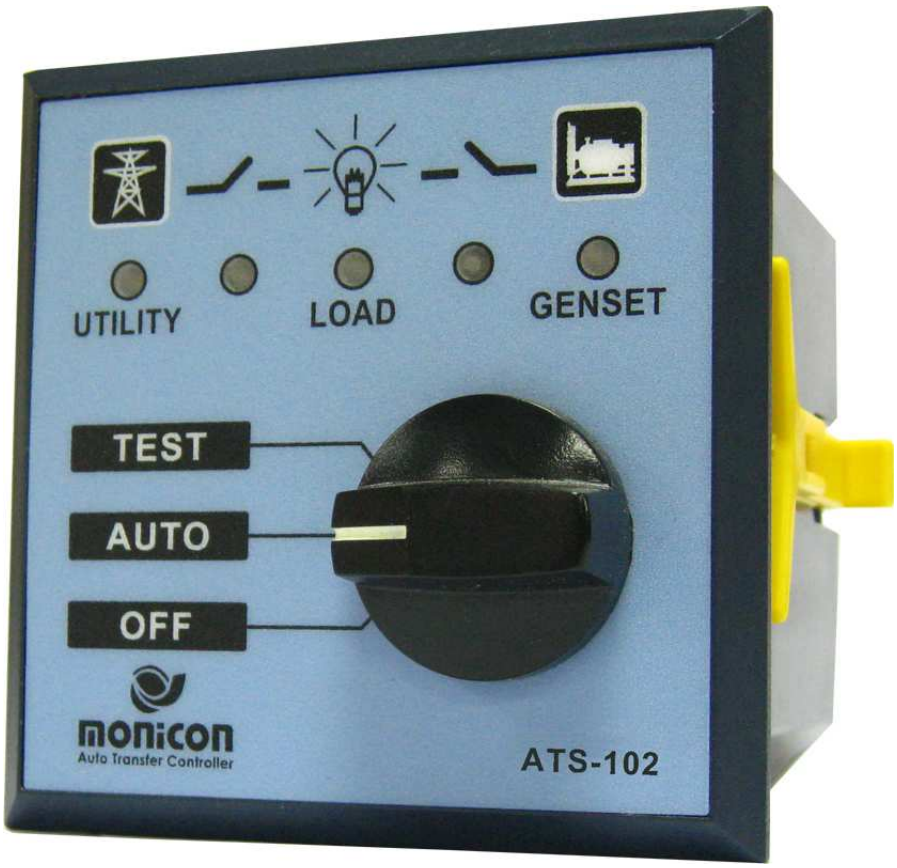
ATS-102 Controller
User Manual



Web Site：http://www.monicon.com.tw
E-mail：sales@monicon.com.tw

Introduction

ATS-102, an automatic transfer switch controller is a sophisticated module with high quality and elegance appearance; it brings the power transfer control into a new revolution. ATS-102 uses GTR-1X simple operation idea; both have high compatibility in mechanism and make the operation of standby power simple and easy to use. The advantages are: easy to setup and simple to operate; it is an idea of friendly programming controller.

Panel Description

Panel Lamp:


Lights on: Utility power is normal


Lights on: ATS contactor has switched to the Utility point


Lights on: Load has transferred successfully


Lights on: ATS contactor has switched to the Gen-set point


Lights on: Gen-set running normally

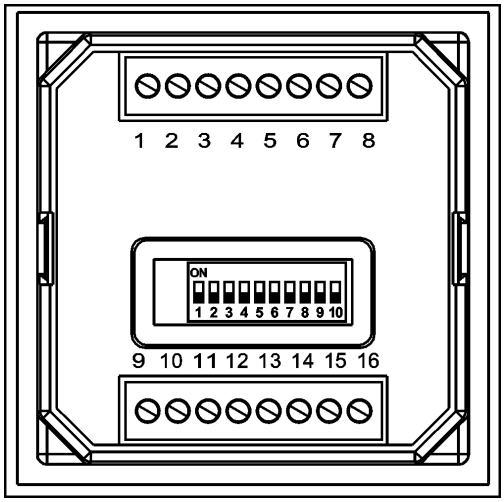
Mode Description:

TEST In test mode, controller simulate Utility irregular and switch the power of the Gen-set into the load.

AUTO In auto mode, controller detects the utility failure and transfers the load to Gen-set. After Utility returns to normal and stable condition, the controller transfers the load from Gen-Set back to Utility.

OFF In off mode, controller stops the detection of ATS and relative control of ATS time delay.

Back Panel



Terminal wiring Description

	No.	Description	Code
	1	Battery + Input	B+
	2	Battery - Input	B-
	3	Utility switch-in control signal output	Utility Close
	4	Utility switch-in control signal output	Utility Close
	5	Gen-set switch-in control signal output	Gen-set Close
	6	Gen-set switch-in control signal output	Gen-set Close
	7	ATS output signal detection input	B-
	8	ATS output signal detection input	Start ATS
	9	Gen-set switch-in control signal Input	Gen-set C.B.
	10	Gen-set switch-in control signal Input	Utility C.B.
	11	Utility AC Volt Input	Utility AC Detect
	12	Utility AC Volt Input	Utility AC Detect
	13	Load AC Volt Input	Load AC Detect
	14	Load AC Volt Input	Load AC Detect
	15	Gen-set AC Volt Input	Gen-set AC Detect
	16	Gen-set AC Volt Input	Gen-set AC Detect

Dip Switch Settings

DIP SW Function Table			
1	System Frequency Selector	OFF: 50 Hz	ON: 60 Hz
2	Spare	N/A	N/A
3	TDES (Time Delay Engine to Start)	OFF-OFF: 2 sec.	OFF-ON: 5 sec.
4		ON-OFF: 10 sec.	ON-ON: 15 sec.
5	TDEC (Time Delay Engine Cool-down)	OFF-OFF: 2 sec.	OFF-ON: 30 sec.
6		ON-OFF: 2 min.	ON-ON: 4 min.
7	TDNE (Time Delay Normal to Emergency)	OFF-OFF: 2 sec.	OFF-ON: 10 sec.
8		ON-OFF: 20 sec.	ON-ON: 30 sec.
9	TDEN (Time Delay Emergency to Normal)	OFF-OFF: 2 sec.	OFF-ON: 10 sec.
10		ON-OFF: 2 min.	ON-ON: 4 min.

- **Time Delay Normal to Emergency (TDNE):**
  Delay of time before switching the load from Utility to Gen-set. The time delay assures the stability of Gen-set power supply.

- **Time Delay Engine to Start (TDES):**
  Delay of time before starting the Gen-set after detecting the utility failure. The time delay avoids the frequent starting of Gen-set during instability of Utility.

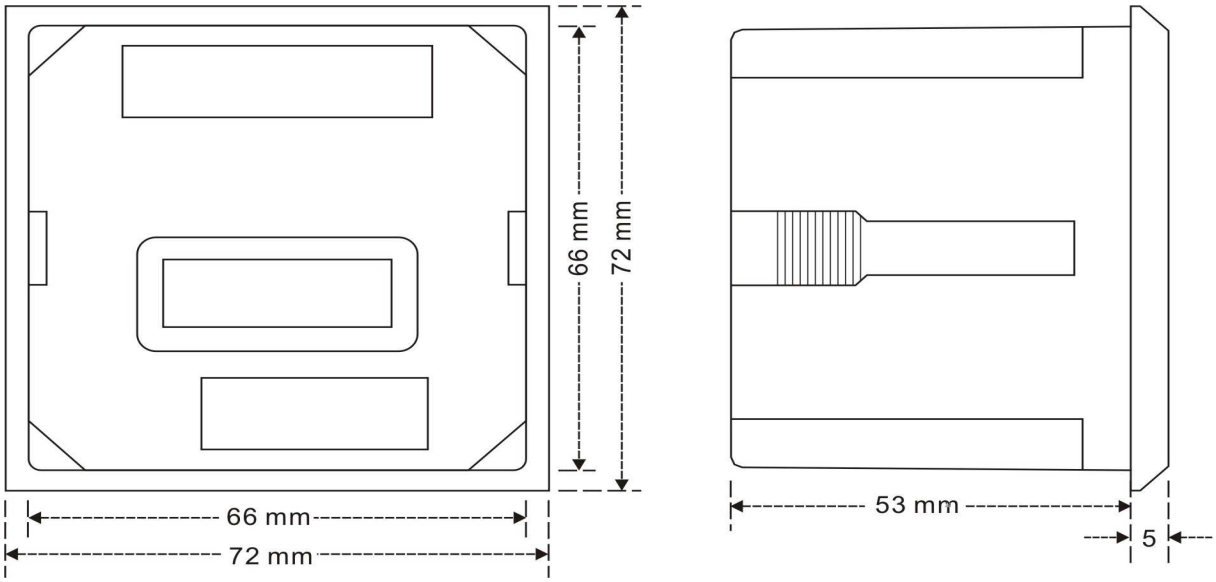
- **Time Delay Emergency to Normal (TDEN):**
  Delay of time before switching the load from Gen-set to Utility. The time delay assures the stability of Utility.

- **Time Delay Engine Cool-down (TDEC):**
  Delay of time before entering the cooling mode of the Gen-set.

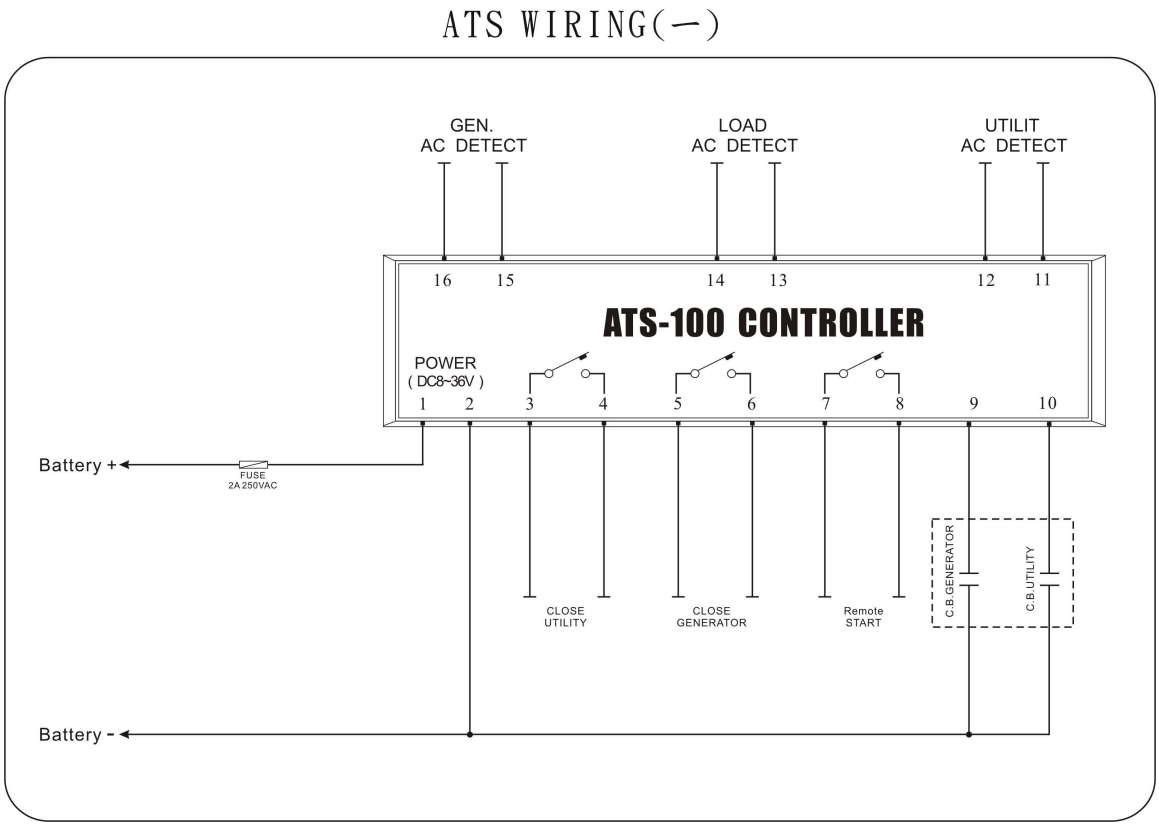
Specification

- **DC Power：**
  8~36 DCV
- **Power Consumption：**
  Max.5 W。
- **Input Voltage：**
  50～60 Hz, Input AC volt range: 160～280VAC
- **Relay Output：**
  Gen-set start output relay：7A
  Utility switch-in output relay：7A
  Gen-set switch-in output relay：7A
- **Working Temperature Range：**
  -30℃ ～ 70℃
- **Dimesion(W * H * D)：**
  72mm × 72 mm × 58 mm
- **Punch Size(W * H)：**
  68 mm × 68 mm
- **Weight：**
  177g

Dimension



Wiring - Inside



Wiring Diagram