



利佳興業股份有限公司
RICH ELECTRIC CO.,LTD.

INVERTEK®

AUTO TRANSFER SWITCH (ATS)



USER MANUAL



MANUAL VER. 2, 1008

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Introduction

Appliances running on 230 volts are automatically switched between a Master AC source and Slave AC source. The total switching time is less than 10 ms. To give but two examples: if the Master IN fails, then the microwave oven's clock keeps running and any data in the computer is preserved.

The ATS can be used with any up to a capacity of 40A.

Operation

The ATS is situated between a Master AC source and Slave AC source. If the voltage level or the frequency of the Master Input varies, then the ATS switches to the Slave Input. Once the Master's supply has remained continuously stable for 30 seconds, the ATS switches back. In this way, the appliances are continuously protected against damage from voltage drops. The ATS is suitable for modern appliances such as video recorders, computers and microwave ovens, devices that cannot stand up (well) to a drop in voltage. The ATS automatic switch box can be used with any type of inverter; the best results, however, are obtained with an inverter from Rich Electric Invertek Series.

Application of Slave Input and Master Input

The source selection of Slave and Master depends on user's environment, equipment and usage and typically, mains/generators is used as priority source to be Master Input and DC/AC inverters as alternate source to be Slave Input. The usage of DC/AC inverters as priority Main Input and mains/generator as alternate Slave Input are also applicable.

Installation

- Install the ATS in a dry, well-ventilated area. The ATS may be mounted on the table, using the three holes in the rear of the casing to put in the Master input cable, Slave input cable, AC output cable and opening the entry on the upper casing to tighten the cables on the terminals with screws.
- The input cables from the generator, mains and the inverter, any AC source, and the output cables to the appliances should be connected to the terminals according to Figure 1.
- The Master Input socket needs to be protected against current levels higher than 20/40 amp.
- The Slave Input socket needs to be protected against current levels higher than 20/40 amp.

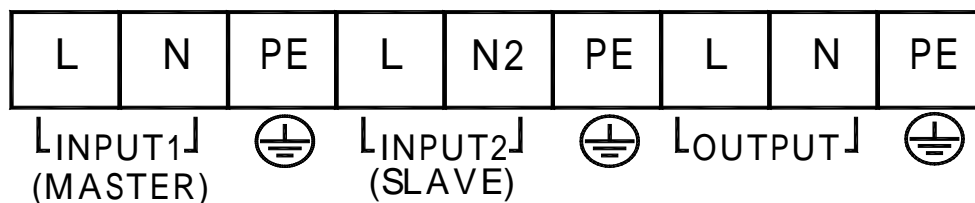
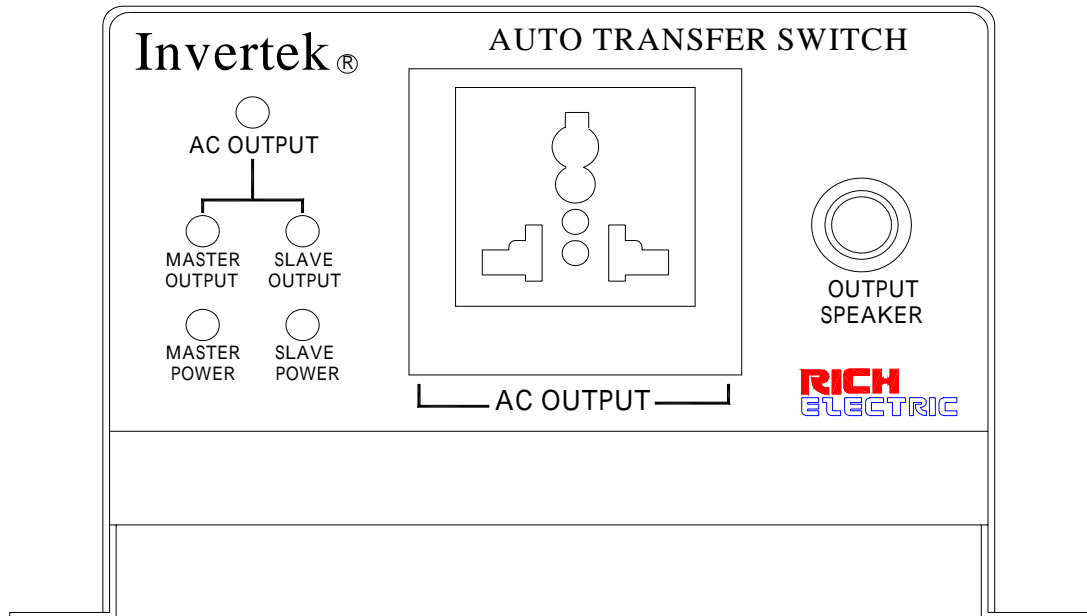
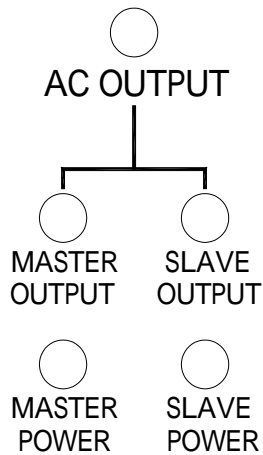


Figure 1 Connection Terminal

Front Panel



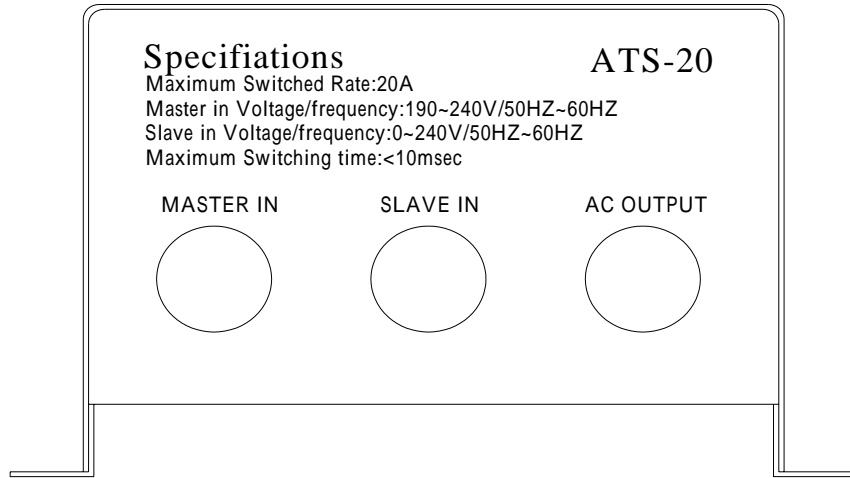
LED Indicators



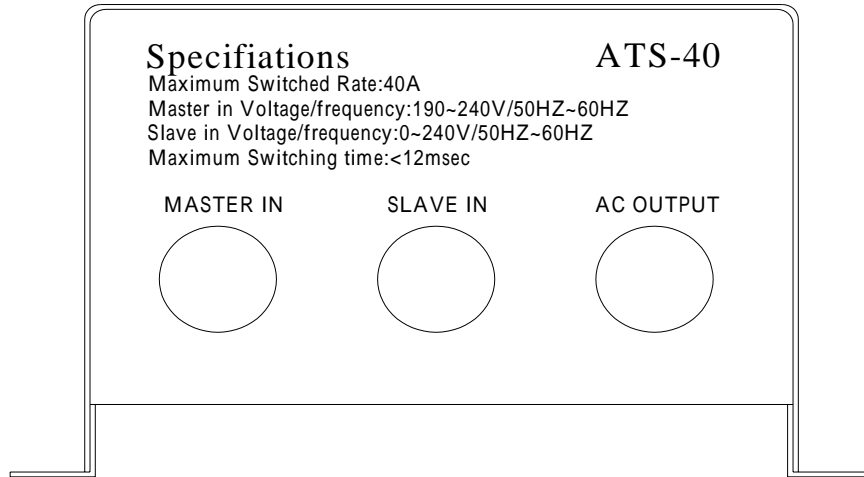
MASTER POWER	The Master power within the specified voltage and frequency has been input.
SLAVE POWER	The Slave Input power within the specified voltage and frequency has been input.
MASTER OUTPUT	The appliances are running on the Master source as a priority.
SLAVE OUTPUT	The appliances are running on the Slave source when the Master source fails.
AC OUTPUT	The AC output has been successfully supplied from either MASTER POWER or SLAVE POWER.

Rear Panel

ATS-20



ATS-40

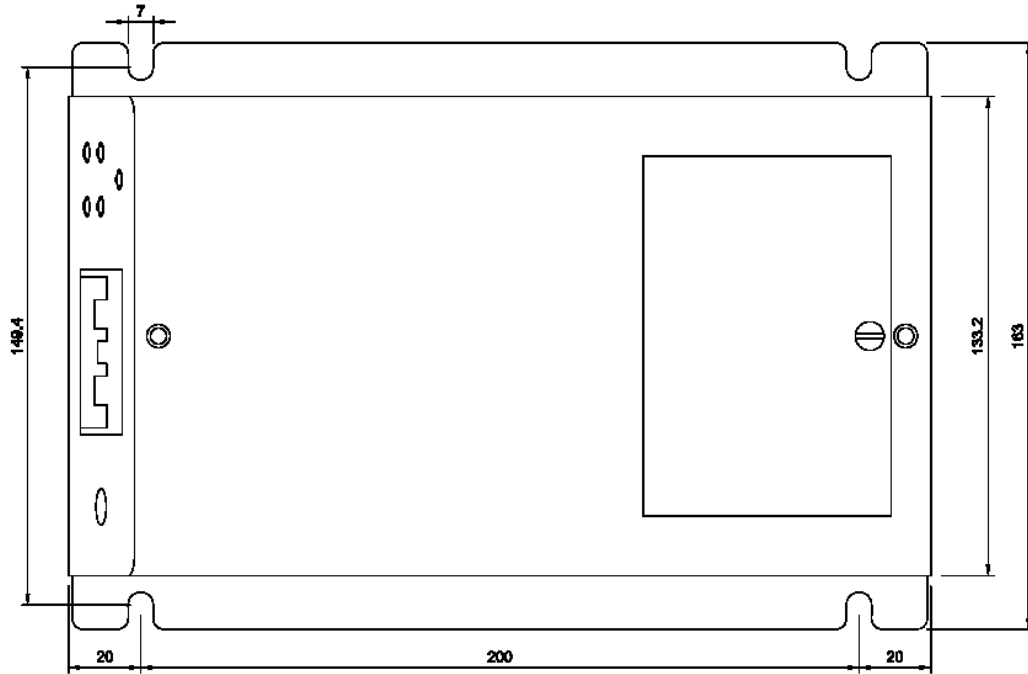


Specifications

Model No.	ATS-20	ATS-40
Maximum switched capacity	20A	40A
Master Input		
Voltage	190-240 volts	190-240 volts
Frequency	50Hz/60Hz (selectable)	50Hz/60Hz (selectable)
Slave Input		
Voltage	0-240 volts	0-240 volts
Frequency	Not monitored	Not monitored
Thresholds for output of Master		
For switching to Slave	180 volts	180 volts
For switching to Master	188 volts	188 volts
Continuous stability interval	30 sec	30 sec
Dimensions (H x W x D)	95 x 163 x 240 mm	95 x 163 x 255 mm

Installation Holes

ATS-20



ATS-40

