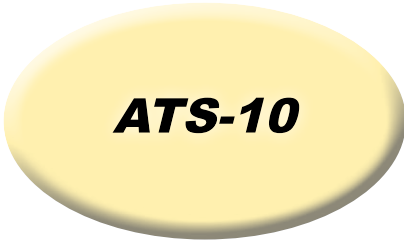


AUTOMATIC TRANSFER SWITCH

Protection - Control - Load Transfer



The ATS-10 provides integrated mains voltage monitoring and automatic load transfer. In the event of a mains voltage failure, the remote start relay output is energized and the unit automatically transfers the load from the mains to the generator. Microprocessor technology allows exact measurement, set point adjustment and timing functions via the front panel.

The unit detects the loss of any phase of the mains supply and is able to start the generator and transfer the load. When the mains supply is restored within the pre-set limits, the load is transferred back to the mains supply and the generator is shut down in a controlled manner.

The ATS-10 offers a test mode operation allowing the generator to run without the load. This mode is also called Emergency backup mode which keeps the generating set running and makes a quick transfer if a mains failure occurs.

In this mode, the remote start output will be energized but no load transfer will take place unless the MAINS fails. If a mains failure occurs, the load will transfer to the generating set. If the mains voltage returns within limits and the Mains Return Delay parameter has expired, the load will be transferred to the mains, but the generating set will be kept running. The remote start output will only de-energize when the Test mode is cancelled.

General Specifications:

Housing & Mounting	72 x 72 x 95 mm (including connectors)
Protection	NEMA4X (IP65 front, IP20 rear)
Operating / Storage Temp.	-25°C to +70°C / -40°C to +85°C
Battery Supply Voltage	8 to 32Vdc
Current consumption	240mA
Battery Voltage Measure.	8.0 to 32.0 Vdc Accuracy: 1% FS, Resolution : 0.1V
Mains Voltage Measurement	35 to 300 Vac L-N RMS @15.6 - 99.9Hz Accuracy: 1% FS, Resolution : 1Vac
Generator Voltage Measurement	35 to 300 Vac L-N RMS @15.6 - 99.9Hz Accuracy: 1% FS, Resolution : 1Vac Selectable single or three phase
Cranking Dropouts	Battery voltage can be 0Vdc for max. 100 ms during cranking (battery voltage should be at least nominal voltage before cranking)
Inputs	Load generator signal (NO) Engine running signal (NO)
Output Relays	Start SPDT 12 A @ 32Vdc Mains contactor 5A@250vac Generator contactor 5A@250vac
LED Display 4 digits, 7 segments	Mains voltage (phase to phase & phase to neutral) Alternator voltage Program parameters
Status Indicators	Program mode Test Mains voltage OK Mains contactor energized Generator running Generator contactor energized

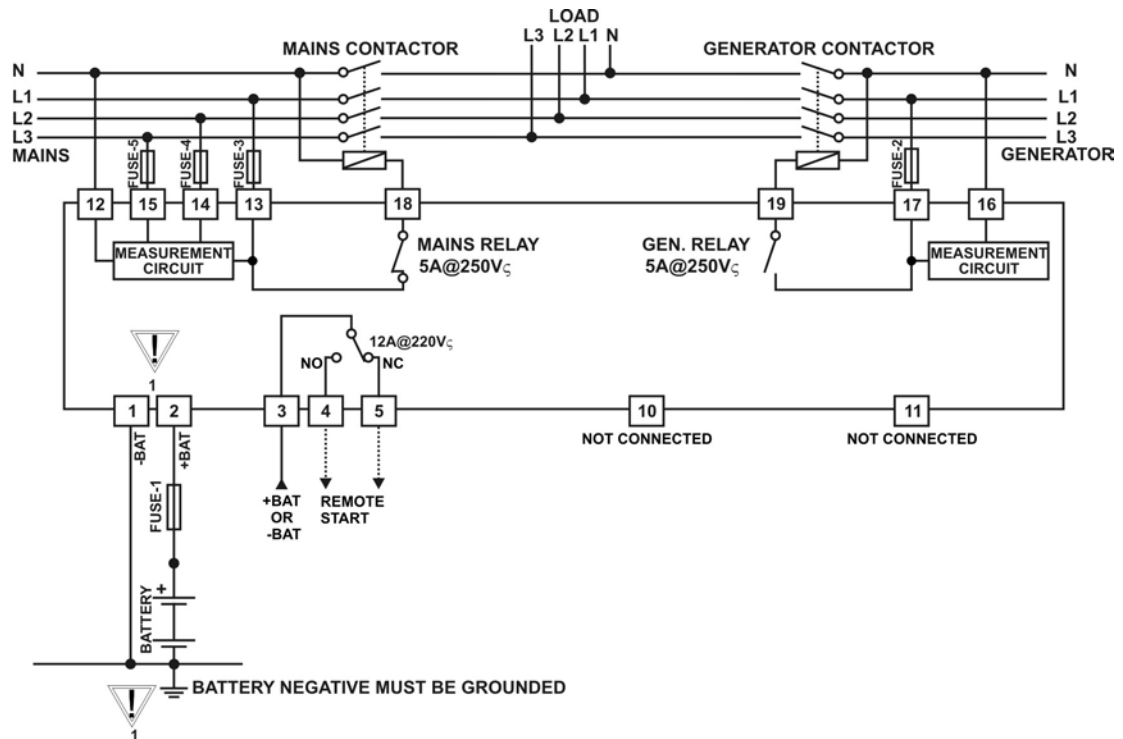
Features:	
Protection & Control	Push-button operation
Fully programmable	Auto & Test modes
LED status indication	Automatic engine start/stop/ load transfer
Controls:	
Automatic engine start	Load transfer to mains
Load transfer on mains failure	
Monitors:	
Mains voltage (phase - phase & phase - neutral)	
Program parameters	

Connection Diagrams

Actual wiring diagrams may differ. Always refer to the Owner's manual for wiring instructions pertaining to your model.

Three Phase Connection Schematic For Type - 1 (P00 = 0)

NB: If single phase sensing is required the single phase can be fed into all three phase inputs.



Three Phase Connection Schematic For Type - 2 (P00 = 1)

NB: If single phase sensing is required the single phase can be fed into all three phase inputs.

