



# MNS

Basic units range

CRE TECHNOLOGY offers 3 basic microprocessor modules 72 x 72 for generator control. These modules display all information on leds and 10A relay outputs.

MNS is a basic microprocessor controlled unit designed to monitor 3-phase mains voltages, send remote start commands to the genset, and manage changeover of both the generator and the mains contactors.



## PART NUMBERS

A60W1

## KEY FEATURES

### ▶ A SIMPLE PRODUCT FOR BASIC APPLICATIONS

- The functions have been reduced to the minimum. The front panel diagram provides information about the mains and generator power availability as well as contactor positions. The MNS continuously monitors the AC mains phase voltages. If at least one of the phase voltages goes outside set limits, it triggers a transfer cycle.

### ▶ COMPATIBILITY

- The unit may be used with most commercially available or custom built engine control systems. The lower limit of the mains and genset voltages may be manually adjusted via the potentiometer found on the left hand side of the unit. The upper voltage limit is factory set. The unit uses two part connectors for easy replacement

### ▶ RELIABLE AND EASY TO USE

- The MNS is dedicated to basic applications which allow no extra costs or expensive hardware. All CRE Technology products aim to provide the same level of satisfaction. The MNS has passed EMC and low voltage tests, and each unit is 100% tested before delivery.

### ▶ OPTIONS

- MNS special test mode function:** it provides a TEST pushbutton allowing the genset to be tested without a mains failure. The Test mode can serve as Emergency Backup mode to keep the generator running and trigger a quick transfer in the event of a mains failure.

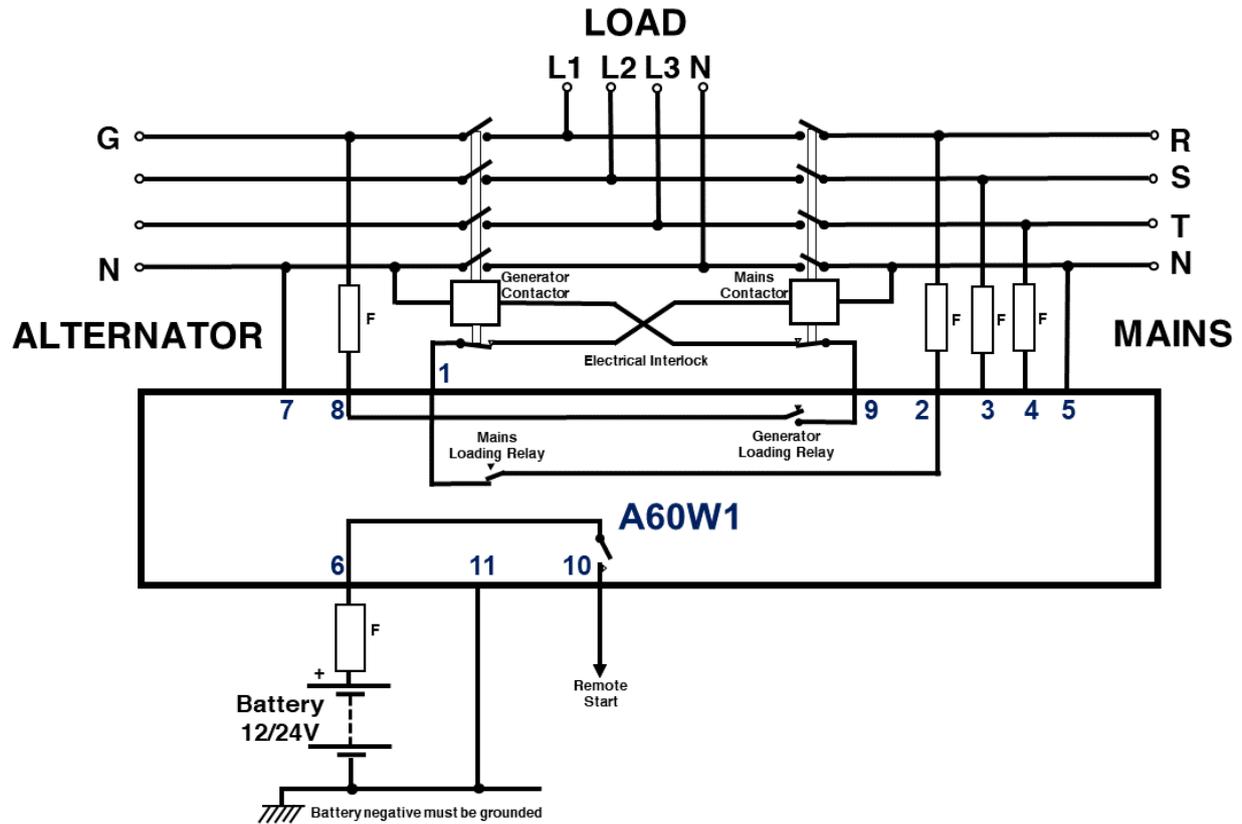
## APPLICATIONS

Basic units are easy to use and made for small genset refit or manual backup system, there is no PC requires for settings.





## WIRING DIAGRAM



## CERTIFICATIONS

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EMC

Low Voltage





## SPECIFICATIONS

### CURRENT, VOLTAGE AND FREQUENCY

Alternator Voltage	15-300 VAC (Ph-N) / Mains Voltage: 300 VAC max (Ph-N)
DC supply range	9 to 33 VDC
Current consumption	80mA max. (Outputs open)
Low Voltage Limit	Adjustable from 70 to 270VAC
High voltage Limit	320 VAC Ph-N (fixed)

### INPUTS, OUTPUTS

DC supply	12 or 24 VDC, (+) and (-) terminals
R-S-T	Mains phase voltages
MN	Mains neutral terminal
G	Generator phase voltage / GN: Generator neutral terminal
Output	Normally closed relay output connecting the phase-R voltage to the terminal. (10A@250VAC)

### GENERATOR CONTACTOR

Normally open relay output connecting the phase-G voltage to the terminal. (10A@250VAC)

### REMOTE START

Normally open engine start request relay output. Connects the battery positive to the terminal. (10A@28VDC)

### ENVIRONMENT

Operating temperature	-20°C (-4°F) to 70 °C (158°F)
Storage temperature	-30°C (-22°F) to 80 °C (176°F)
Maximum humidity	95% non-condensing

### SIZE AND WEIGHT

Dimensions	72x72x38mm (WxHxD)
Panel cut-out dimensions	68x68 mm
Weight	140g (approx.)

## RELATED PRODUCT

### CONTROLLERS

A56-AMF	AMF COMPACT
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