MNS

Auto transfert switch unit

- Simple and effective unit
- 3 phase mains voltage monitoring
- Adjustable voltage with potentiometer
- Remote start output

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

The genset should be controlled by a Remote Start control unit.

A SIMPLE PRODUCT FOR BASIC APPLICATIONS

The functions have been reduced to the minimum. The front panel mimic 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.

SPECIAL TEST MODE FUNCTION

The MNS provides a TEST mode pushbutton allowing the genset to be tested without a mains failure. The Test mode is also called the Emergency Backup mode which keeps the genset running and makes a quick transfer in the event of a mains failure.

HIGH COMPATIBILITY AND FLEXIBILITY

Because of the simplicity of its connections, the MNS 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 require no extra costs or expensive hardware.
All CRE Technology products aim to provide the same satisfaction levels. The MNS has passed EMC and low voltage tests, and each unit is 100% tested before delivery.

AFTER SALES SERVICE

Like all CRE Technology products, the unit also benefits from our technical support. All CRE products are delivered with one year warranty.

INPUTS

- DC SUPPLY: 12 or 24 volts DC, (+) and (-) terminals.
- R-S-T: mains phase voltages.
- MN: mains neutral terminal.
- G: Generator phase voltage.
- GN: Generator neutral terminal.

OUTPUTS

MAINS CONTACTOR:

Normally closed relay output connecting the phase-R voltage to the terminal. (10amps@250V-AC)

GENERATOR CONTACTOR:

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

REMOTE START:

Normally open engine start request relay output. Connects the battery positive to the terminal.
(10amps@28V-DC)

CHARACTERISCTICS

Current, voltage and frequency

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

Sequence timer

- Wait Before Remote Start: 3 sec.
- Engine Heating Period: 5 sec.
- Generator Contactor Delay: 0.75 sec.
- Mains Return Delay: 30 sec.
- Mains Contactor Delay: 0.75 sec.

Environment

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

Dimensions and weight

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

Homologation

- EMC
- Low voltage

PART NUMBER
A60W1

ASSOCIATED PRODUCT
Complementary: MDA PLUS