



Generating set Auto Synchroniser and load sharer.

APPLICATIONS

■ Isochronous load sharing in island mode

UNIGEN will be used on generator sets that require synchronising, load sharing and paralleling features. UNIGEN can be used to parallel up to 8 gensets together. One UNIGEN is needed per generator set.

■ Mobile gensets

With its digital « Super Droop » function (wireless load share), unique on the market, UNIGEN makes the mobile gensets coupling simple where the communication between the UNIGENS is useless.

ADVANTAGES

■ SUPER DROOP (digital), at $\pm 0,25\text{Hz}$

No communication between UNIGENS is needed to achieve the coupling. The curve is almost isochronous at $\pm 0,25\text{Hz}$.

■ **Compatible with all speed governors:** UNIGEN is equipped with an analogue output ($\pm 10\text{V}$ adjustable) for speed control.

Barber Colman / Woodward	MTU MDEC	Cummins
GAC	Volvo	Deutz EMR
Heinzmann	Perkins	Scania

■ Compatibility with all AVR :

UNIGEN is equipped with an analogue output ($\pm 10\text{V}$ adjustable) and is in this way compatible with all AVR.

STAMFORD	MARELLI MOTORI
BASLER	MARATHON
AVK	LEROY SOMER
MECC ALTE SPA	

■ ALL the settings are adjusted with potentiometers

No computer needed!!

With a microprocessor of 16 bits, UNIGEN is, regarding numerical technology, very fast.

■ CANBUS "plug & Play"

The address of each Unigen doesn't need to be adjusted. All Unigens connected on the CANBUS will automatically detect the other one.



A51Z2

FUNCTIONS

■ Synch check relay 'SYNC OK'

UNIGEN controls the difference of voltage, frequency and phase between the generator to be paralleled and the bus bar. The sync check relay "SYNC OK" authorizes the closing of the generator breaker either in Automatic mode or Manual mode.

■ Automatic & Manual Synchronisation:

The automatic mode of UNIGEN modifies the voltage, the frequency and the phase in order to enable quick and precise coupling. Using the manual mode, the speed can be adjusted by an external 10kOhms potentiometer.

■ Power load sharer (kW & kVAR):

It manages load and unload ramps during the launch and the stop of the group. It can manage groups of various power and/or with electronic speed regulators from different marks.

■ Load dependant start

This fonction is activated to start/stop slave generator sets in accordance with the load demand.

■ Reverse kW protection

The relay 'REV kW' closes on reverse power.

■ Analogue kW output

Compatible with PLC and 0-5 V, 0-20 mA or 4-20 mA gauges.

CHARACTERISTICS

■ Weight – Dimensions:

1, 5 kg - 200x275x26 mm.

■ Voltage measurement and current input:

Part number	Nominal voltage & current
A51Z2	110 VAC to 500VAC
	1A to 5A

Frequency: 50 or 60 Hz.

■ Output relays :

Volt free contacts, 5 A at voltage of 250 VAC, maximum cutting voltage 440 VAC. Switched power on resistive load, 2000 VA.

ENVIRONMENT

■ Mounting: Can be fixed in all direction.

■ Operating temperature: -20°C to +70°C.

■ CE mark: UNIGEN is in conformity with European CE Mark requirements.

■ Power supply: 9 – 40Vdc.

■ Vibrations: 5 to 500Hz at 25G.

■ CEM: EN 50081-2 et EN 61000-6-2 with an electro-magnetic compatibility

