

- Cost effective solution
- Man/Auto synchronisation
- Load sharing (kW/kVAR)
- 50/60Hz compatibility
- Fast commissioning

UNIGEN FAMILY

Man/Auto synchroniser & load sharing unit

PART NUMBERS
 UNIGEN: A51Z2
 UNIGEN PLUS: A51Z1
 UNIGEN ILS : A51Z3

SOFTWARE
 Embedded website
 CRE Config

UNIGEN is used on generator sets that require synchronising, load sharing, load unload management as well as paralleling features. **UNIGEN PLUS** and **UNIGEN** can be used to parallel up to 8 generator together using CAN bus communication. **UNIGEN PLUS** and **UNIGEN ILS** can be used without limit through the parallel lines (0-3V). One unit is needed per generating set Moreover, **UNIGEN PLUS** can also be used to parallel a single generator with the mains.



Unique on the market: No communication between UNIGEN units is needed to achieve the paralleling. The curve is almost isochronous at +/-0,25Hz. "Super Droop" exclusive algorithm provides capability between all units without needing any communication cable (No CAN bus, no analog load sharing lines).

Perfect for mobile or remote genset applications: Paralleling gensets has never been so simple thanks to this wireless load sharing technique, making UNIGEN ideally suited for mobile genset paralleling applications.

NO COMPUTER NEEDED: All settings are adjustable by potentiometers. Yet UNIGEN is powered by an efficient 16 bits microcontroller dedicated to embedded process management.

CAN BUS "PLUG AND PLAY": Connect up to 8 modules together through CAN bus and that's it! UNIGEN units will automatically detect each other and be ready for fully isochronous load sharing.

BARBER COLMAN REPLACEMENT: Offered at a very competitive price, UNIGEN replaces DYN2-90300, UNIGEN PLUS replaces Pow-R-Con and UNIGEN ILS replaces DYN2-80100/80108/80109 units without any change to the installation. In this case, load sharing is done using the analog load sharing lines (up to 32 units). (Refer to Unigen Family Comparative Table).

Synch check relay: UNIGEN and UNIGEN PLUS monitor voltage, frequency, phase difference and phase sequence between the generator to be paralleled and the bus bar. The synch check relay secures the closing of the generator breaker both in Automatic & Manual mode.

Automatic and manual synchronisation: The automatic mode of UNIGEN and UNIGEN PLUS modifies the voltage, the frequency, and the phase to achieve quick and precise coupling. In manual mode, the speed can also be adjusted by an external 10 kΩ potentiometer.



| | Load sharing | 1 genset with Mains paralleling | 8 limit bus CAN | Super Droop | Analog droop | Parallel lines compatibility | CAN bus plug and play | Universal analog speed out | Voltage out | Trip out | Load/Unload ramps | Reverse kW | kW monitor out | Power factor | Modbus (Read & write function) | Command mode | Forward Power relay | DYN2-80108/9 replacement | DYN2-80100 replacement | DYN2 9402x replacement | Pow-R-Con replacement | DYN2 90300 replacement |
|--------------------|--------------|---------------------------------|-----------------|-------------|--------------|------------------------------|-----------------------|----------------------------|-------------|----------|-------------------|------------|----------------|--------------|--------------------------------|--------------|---------------------|--------------------------|------------------------|------------------------|-----------------------|------------------------|
| UNIGEN | • | | • | • | | | • | • | • | • | • | • | • | | | | | | | | | • |
| UNIGEN PLUS | • | • | • | • | | | • | • | • | • | • | • | • | • | • | • | | | | | • | • |
| UNIGEN ILS | • | According to the power plant | • | | • | • | | • | | | | | • | | | | • | • | | | | |