

MPS 5.0



HIMOINSA®
generating sets

Simple Parallel Module "Quick parallel" "connect and work"

Load synchronizer and distributor for generating sets.

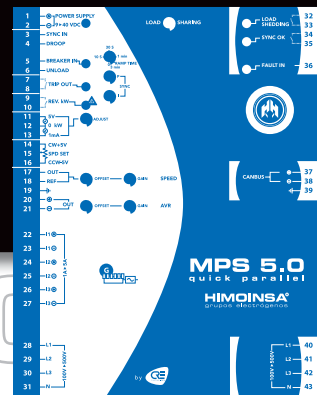


UP TO
16
GENSETS

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MPS 5.0

Simple Parallel Module
"Quick parallel"
"connect and work"



(Load synchronizer and distributor for generating sets).

Himoinsa offers with the module MPS 5.0 the optimum solution for parallel connection of generating sets.

Its great value for money as it cuts down the global cost of any installation in parallel because:

- It reduces the necessary time for installation.
- It reduces the costs of cabling.
- It simplifies the technical requirements for its start up, given its easy operation.

APPLICATIONS

- With the Module MSP 5.0 you can connect up to 16 different voltage generating sets in parallel (machines with electronic governor). You will only need one module MSP 5.0 per genset. And you will get distribution of the active and reactive load in parallel within the gensets in a group, network emergency and with other modules connected in parallel with the electricity supply network.
- It allows the connection of a new genset with other or others that are functioning with load.
- It also allows three-phase synchronisation.

FUNCTIONING MODES

Electronic Droop

- **Only power cables.** It allows the distribution of kW without any connection cabling between the gensets, just connecting the power cables. There will only be a droop of 0.5 Hz of the frequency at 100% load.
- **Without automatic load / unload transference.** There cannot be any automatic load / unload ramp, that is, the load transference is sequential.

CAN Bus

- **Power cables + communication between control units.** The module MPS 5.0 has an independent CANBus port that allows the distribution of kW and kVAR and the start and stop of the gensets depending on the load. The frequency and voltage remain constant.
- **With automatic load / unload Transference.** The CANbus automatically sets up once the module has been fed, therefore no PC is required for its setting up.

ADVANTAGES

- **Compatibility with all speed governors** The MSP 5.0 is equipped with one ± 10 Vdc analogue output, adjustable in offset and gain, compatible with most electronic speed governors and engines such as: Barber Colman, GAC, Woodward, Heinzmann, MTU MDEC, AMBAC, Volvo, Perkins, Deutz EMR, Scania, Caterpillar, etc.
- **Compatibility with all Voltage regulators.** The MSP 5.0 is equipped with one ± 10 Vdc analogue output adjustable in offset and gain, compatible with most electronic voltage regulators such as: Leroy Sommer, Stamford, Marelli, Mecc Alte, AVK, Basler, etc.
- **Adjustments by potentiometers:** any adjustment can be carried out by means of potentiometers. No PC is necessary to adjust and set up the module MPS 5.0.

FUNCTIONS

- **'SYNC OK' Signal:** The Module MPS 5.0 controls the difference in voltage, frequency and phase between the gensets. The connection authorisation relay 'SYNC OK' allows the closing of the switch when the gensets are synchronised either in the parallel synchronism mode or in the Automatic parallel synchronism.
- **Automatic synchronisation:** the module MSP 5.0 automatically corrects the frequency and phase in order to allow a quick and safe connection.
- **Manual Synchronisation:** it is carried out with an 10 KOHms external potentiometer.
- **"SYNC IN" Signal,** automatic synchronisation request. If this signal is active, the module automatically synchronises with other gensets. This function can also be disabled.
- **"Load shedding" Signal:** it allows the start and stop of the generating sets in load shedding function. The sequence is made from the "main operating genset" with 70/25% thresholds.
- **"Gen Unload" Signal:** it forces the unload of one of the generating sets on another or other running gensets, as long as it can take the unload required. Before ordering the unload it is advisable to verify the load limits of each running genset in order to avoid the failure of the genset in load.
- **Active power control (kW):** The module MPS 5.0 matches the gensets load depending on the power of each of them.
- **Inverse Power Protection:** the "REV kW" relay closes when the genset has an inverse power of 5% in active power, guaranteeing the protection of the engine.
- **Output for Analogue kW meter.** Compatible with measuring instruments ranging from 0-5 V or 0-1 mA.

TECHNICAL CHARACTERISTICS

- **Weight:** 1,5 kg
- **Dimensions:** 200 x 275 x 26 mm.
- **Measures of Voltage and intensity:**

swith	Frequency: 50 ó 60 Hz.
pos. 1	110 V _{AC} / 5 A _{AC}
pos. 2	240 V _{AC} / 5 A _{AC}
pos. 3	440 V _{AC} / 5 A _{AC}

- **Relay output:** free contacts of potential, 5A under 250 VAC nominal voltage and maximum voltage cutoff of 440VAC. Cutoff Power (resistive load): 2000 VA.

WORKING ENVIRONMENT

- **Assembly:** It can be assembled in any position.
- **Temperature:** -20 a +70 °C.
- **EC Labelled.**
- **Power supply:** 9 a 40 VDC.
- **Vibrations:** 5 a 500Hz a 25 g.
- **CEM:** EN 50081-2 y EN 61000-6-2



HIMOINSA[®]
generating sets

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