

# THESEUS

## Digital Generator Management DGM-02



**ARGOS  
HMI**

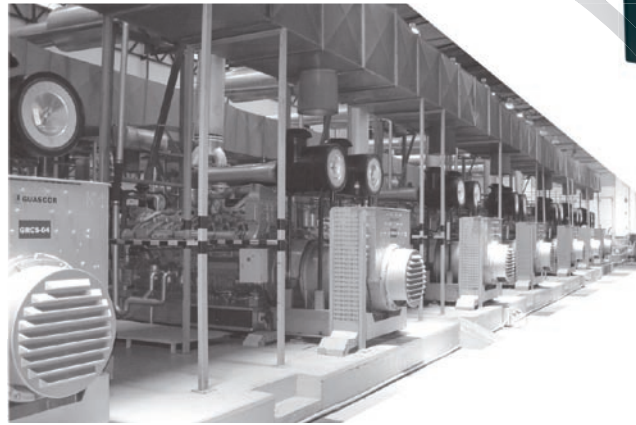


**PANOPTES  
HMI**

**THESEUS  
Generator Management  
Control**

**DGM-IF 01  
Analogue  
Load  
Sharing**

**DcDesk 2000  
Configuration  
Program**



- ✓ Suits all engine sizes
- ✓ For island and mains parallel operation
- ✓ Compatible with engines and governors from all manufacturers



## **THESEUS**

### **Generator management**

HEINZMANN's digital generator management control unit THESEUS DGM-02 is an all-rounder. Whether in island or mains parallel operation, single genset or group, there is an appropriate version for every application which, in conjunction with the HMI ARGOS or PANOPTES, provides a comfortable and user-friendly system. All THESEUS control units are marine classified.

THESEUS DGM-02 is available in four main variants: BASIC, MEDIUM, EXTENDED and GROUP. Each of these has a predetermined range of functions and communication interfaces suitable for user configuration via the powerful DcDesk 2000 communication software. All but the BASIC variant also allow custom-engineered solutions to meet specific needs.

Further optional enhancements such as Modbus, for interfacing to external PLC/SCADA packages as well as the PANOPTES touch-screen HMI, and integral Speed Governor, for interfacing with most standard positioner electronics, make THESEUS DGM-02 the complete generator management solution.

## **THESEUS Benefits**

### **THESEUS standard functions**

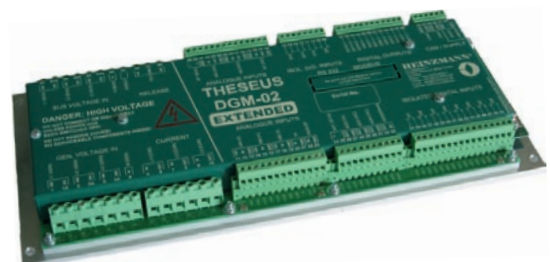
- ✓ **Synchronising**
- ✓ **kW load control**
- ✓ **kW load sharing**
- ✓ **PC based adjustment & monitoring**
- ✓ **Voltage-matching**
- ✓ **PF control**
- ✓ **kVAr load sharing**
- ✓ **Genset protection**
- ✓ **Automatic sequencing**
- ✓ **CAN communication**
- ✓ **Real time alarm/data log**

### **Options**

- ✓ **Modbus or SAE J1939**
- ✓ **Integrated speed governor**

### **Accessories**

- ✓ **Interface with existing analogue load sharing**
- ✓ **Different HMIs**



## THESEUS FUNCTIONALITY

With three generations of experience in the power generation market, HEINZMANN as an expert for digital generator management, offers the DGM-02 as flagship of a range of genset controls.

Apart from the standard functions for generator applications, DGM-02 provides a selection of additional features for complete genset control and management as well as different options of operator interfaces.



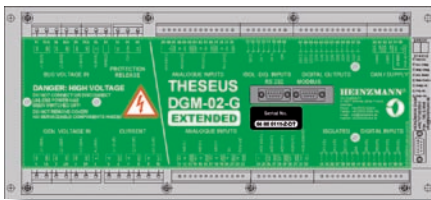
## THESEUS VERSIONS

The THESEUS variants offer high flexibility to the user and make the system suit all engine sizes.

THESEUS provides two types of digital management units:

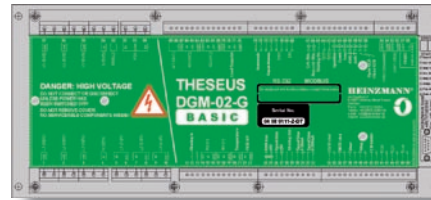
### Digital generator management

#### THESEUS extended



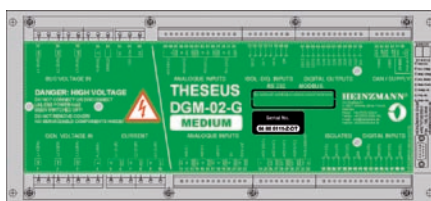
- High Voltage Genset
- Variable connections
- Variable functions
- High customisation

#### THESEUS basic



- Low Voltage Genset
- Economic solution
- No customisation

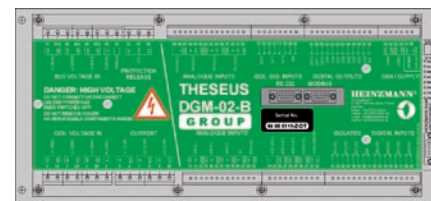
#### THESEUS medium



- Low Voltage Genset
- Variable connections
- Variable functions
- Some customisation

### Digital mains feeder or bus tie management

#### THESEUS group



- Low and High Voltage Applications
- Group to group control
- Gensets to mains
- Peak shaving
- kW load sharing
- Import/export control
- kVAr load sharing
- High customisation
- AMF
- Soft load transfer

# HEINZMANN GENERATOR MANAGEMENT SYSTEM COMPONENTS

- ✓ **THESEUS generator control unit**
- ✓ **Different options of HMIs (PANOPTES, ARGOS)**
- ✓ **Analogue load sharing option**
- ✓ **Local & remote adjustment and monitoring (DcDesk 2000, SATURN)**
- ✓ **Sensors**
- ✓ **Full range of compatible speed governors and actuators available**
- ✓ **Worldwide competent service**

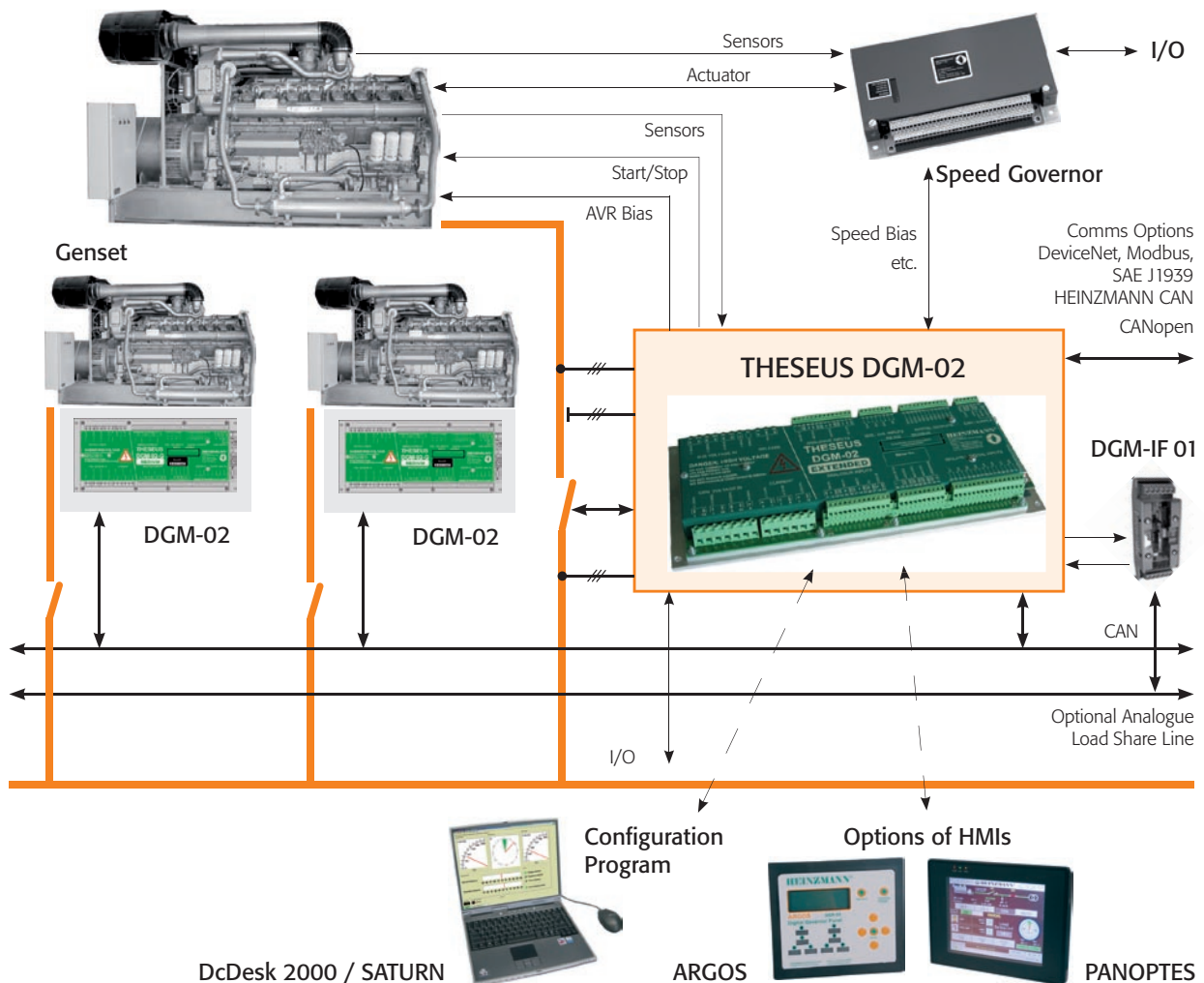
## Modular and flexible

You can of course use the THESEUS DGM-02 for its main functions only. Several of its components are add-on modules, which can be combined according to your specific needs.

This makes THESEUS DGM-02 fit perfectly for retrofits as well as for new installations, no matter what size of engine.

## Customer oriented

In conjunction with a wide range of HEINZMANN products, THESEUS DGM-02 is at the heart of many reliable complete Genset management solutions. With our highly esteemed DcDesk 2000 and customizable HMIs, the DGM-02 control unit is easy to set up and easy to operate.



## THESEUS reliability

The HEINZMANN THESEUS DGM-02 and its predecessor DGM-01 have been proven to provide accurate and reliable control to many customers.

From a simple utility backup in the range of a few 10kW to highly sophisticated installations of more than 10 MW per engine, land based, off-shore or marine, retrofit or new installation, combined with HEINZMANN speed governors or not, the THESEUS DGM-02 satisfies manifold requirements.

## Technical information

|                             |  |
|-----------------------------|--|
| <b>Voltage inputs</b><br>or | 3 Phase 240 ... 480 Vac (Phase/Phase) ± 10 %<br>3 Phase 100 ... 240 Vac (Phase/Phase) ± 10 % |
| <b>Current inputs</b><br>or | 3 Phase 0 ... 5 A<br>3 Phase 0 ... 1 A   |
| <b>Frequency</b>            | 45 ... 65 Hz   |
| <b>Power supply</b>         | 24 Vdc (9 ... 33 Vdc)  |
| <b>Ambient temperature</b>  | -40 ... + 70° C<br>(Storage: - 40 ... + 85° C)   |
| <b>Humidity</b>             | Up to 70 %   |
| <b>Dimensions (WxHxD)</b>   | 414.5 x 185.0 x 45.1 mm/<br>16.32 x 7.28 x 1.78"   |
| <b>Weight</b>               | Approx. 2,500 g / 5.5 lbs  |
| <b>Protection grade</b>     | IP 00  |

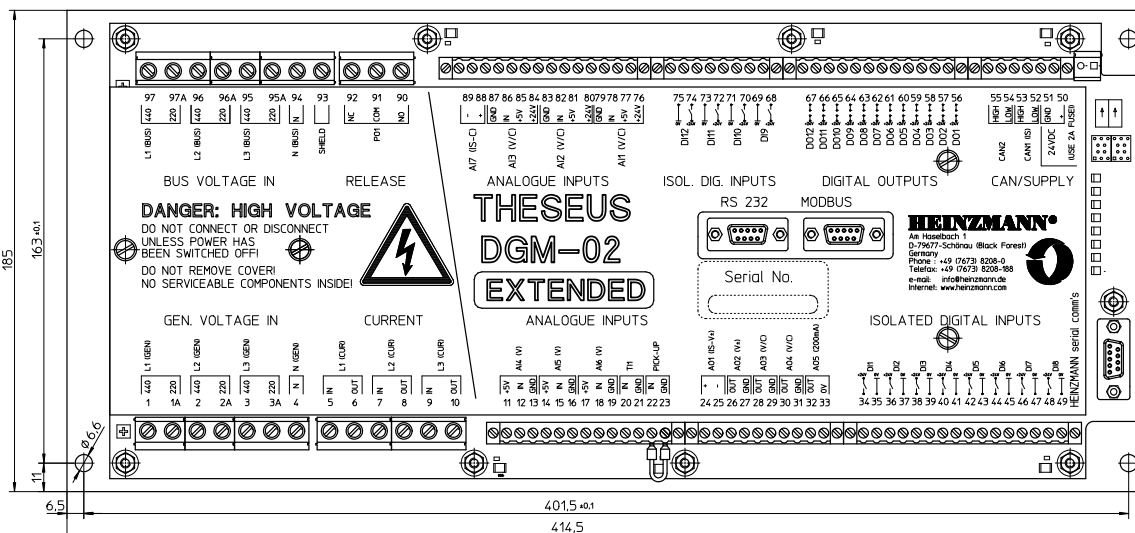
For further information please refer to the THESEUS Manual

## Selection of installed systems

- **Gold mines in Africa:** island generation up to 40MW partly with DARDANOS EFI
- **Local supply in the Caribbean:** island generation with DARDANOS EFI
- **Floating tanks in Spain and the United Kingdom:** off-Shore supply for floating units and platforms
- **Dredger:** marine power generation with pitch dependent load limit
- **Yachts in the United States:** marine power generation with shore synchronization
- **Military installation in the United Kingdom:** Military generation with redundant CAN for load sharing
- **Data centers in Sweden and the United Kingdom:** standard mains backup and mains backup with sophisticated feeder connection (4 x GROUP)
- **Sewage works in Germany:** mains backup and export with Dual Fuel and re-synchronization
- **Oil drilling applications worldwide:** land-based, off-shore and marine power for oil drilling and processing



## Dimensions (same for all versions)



**Marine  
Classified**



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## **Selection of HEINZMANN products**

### **Wide range of digital and analogue control units**



### **Different sizes of electrical actuators for 1 Nm up to 500 Nm**



### **Electronic Fuel Injection control system (EFI) - control units from 4-cyl. up to 20-cyl. engines**



### **Range of analogue and digital generator management units**



### **Gas engine management**



### **Common Rail systems**



### **Sensors & solenoids**



### **Digital control systems for gas turbines**



### **Hydraulic governors & actuators**



### **Electric components of hybrid drive systems**



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