WOODWARD

easYgen-3000 Series
Genset Control

Brief Operation Information for easYgen-3100

Software Version: 1.15xx
Part Numbers: 8440-1922 / 8440-1923 / 8440-1924 / 8440-1925
8440-1930 / 8440-1931 / 8440-1932 / 8440-1933

EASY GEN
3000

Manual 37474A

WARNING

Read this entire manual and all other publications pertaining to the work to be performed before installing, operating, or servicing this equipment. Practice all plant and safety instructions and precautions. Failure to follow instructions can cause personal injury and/or property damage.

The engine, turbine, or other type of prime mover should be equipped with an overspeed (overtemperature, or overpressure, where applicable) shutdown device(s), that operates totally independently of the prime mover control device(s) to protect against runaway or damage to the engine, turbine, or other type of prime mover with possible personal injury or loss of life should the mechanical-hydraulic governor(s) or electric control(s), the actuator(s), fuel control(s), the driving mechanism(s), the linkage(s), or the controlled device(s) fail.

Any unauthorized modifications to or use of this equipment outside its specified mechanical, electrical, or other operating limits may cause personal injury and/or property damage, including damage to the equipment. Any such unauthorized modifications: (i) constitute "misuse" and/or "negligence" within the meaning of the product warranty thereby excluding warranty coverage for any resulting damage, and (ii) invalidate product certifications or listings.

CAUTION

To prevent damage to a control system that uses an alternator or battery-charging device, make sure the charging device is turned off before disconnecting the battery from the system.

Electronic controls contain static-sensitive parts. Observe the following precautions to prevent damage to these parts.

- **Discharge body static before handling the control (with power to the control turned off, contact a grounded surface and maintain contact while handling the control).**
- **Avoid all plastic, vinyl, and Styrofoam (except antistatic versions) around printed circuit boards.**
- **Do not touch the components or conductors on a printed circuit board with your hands or with conductive devices.**

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Important definitions

WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situationn that, if not avoided, could result in damage to equipment.

NOTE

Provides other helpful information that does not fall under the warning or caution categories.

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Revision History

Rev.	Date	Editor	Changes
NEW	10-05-05	TE	Release based on 37419B
A	12-01-10	TE	Minor changes

Content

Chapter 1.
General Information

Document Overview

Type		English	German
easYgen-3000 Series			
easYgen-3000 Series - Installation		37468	DE37468
easYgen-3000 Series - Configuration		37469	DE37469
easYgen-3000 Series - Operation		37470	DE37470
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easYgen-3000 Series - Interfaces		37472	-
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easYgen-3200 - Brief Operation Information		37399	GR37399
easYgen-3100 - Brief Operation Information	this manual ⇨	37474	-
RP-3000 Remote Panel		37413	-

Table 1-1: Manual - Overview

Intended Use The unit must only be operated as described in this manual. The prerequisite for a proper and safe operation of the product is correct transportation, storage, and installation as well as careful operation and maintenance.

What are the differences between the easYgen-3000 Series Package P1 & Package P2?

easYgen-3000 Series	Package P1	Package P2
Freely configurable PID controllers	-	3
External discrete inputs / outputs via CANopen (maximum)	16 / 16	32 / 32
External analog inputs / outputs via CANopen (maximum)	-	16 / 4

NOTE

This manual has been developed for a unit equipped with all available options. Inputs/outputs, functions, configuration screens, and other details described which do not exist on your unit may be ignored.

The present manual has been prepared to enable the installation and commissioning of the unit. Because of the large variety of parameter settings, it is not possible to cover every combination. The manual is therefore only a guide. In case of incorrect entries or a total loss of functions, the default settings may be taken from the Parameter List 37473 or from ToolKit and the respective *.SID file.

Introduction

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The easYgen-3100 is a model of the easYgen-3000 Series without display and buttons. It corresponds with the easYgen-3200 except the following differences:

- No display
- No push button softkeys
- Metal housing instead of plastic housing
- Ground connection on the housing
- No MANUAL operating mode possible (no softkeys for manual operation)
- Event history entries cannot be deleted individually

The easYgen-3100 is designed for switch cabinet back mounting It may be controlled via a Woodward remote control panel (RP-3000) or a control device (PLC). It may be configured using ToolKit, Modbus or CAN bus. We recommend to use ToolKit for commissioning the easYgen-3100. ToolKit may also be used for visualizing measured values, alarm messages and events.

NOTE
Refer to the Configuration Manual 37469 for a description of how to configure the unit via ToolKit.

NOTE
Refer to the Interface Manual 37472 for a description of how to configure the unit via Modbus or CAN bus.

There are some important configurations which are required for the easYgen-3100 to operate. These configurations are described in detail in the next chapter.

Chapter 2.
Important Configurations

Configuring AUTOMATIC Operating Mode

The easYgen-3100 provides no MANUAL operating mode because it has no buttons for controlling the genset manually. The unit is in STOP operating mode by default, i.e. in the state in which it is delivered or after resetting the default values. Therefore, the *LogicsManager* function 00.16 "Operat. mode AUTO" (parameter ID 12510) must either be fixed to AUTOMATIC operating mode or configured for a discrete input to select the operating mode together with the *LogicsManager* function 00.18 "Operat. mode STOP" (parameter ID 12530).

NOTE

If the AUTOMATIC operating mode is configured to always active, the easYgen will always perform a start as soon as a start command (via *LogicsManager*, discrete input, or emergency operation) is issued and all stopping alarms are acknowledged.

Refer to the *LogicsManager* section of the Configuration Manual 37469 or the Performing Remote Start/Stop and Acknowledgement section of the Application Manual 37471 for detailed information about the configuration of the *LogicsManager*. The configuration of the *LogicsManager* functions via CAN bus or Modbus is described in the respective sections of the Interface Manual 37472.

Configuring the Unit for Remote Start

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The easYgen-3100 must be configured to be able to start/stop the genset remotely as well as to acknowledge possible alarms remotely.

The *LogicsManager* function 00.09 "Start req. in AUTO" (parameter ID 12120) must be configured that the genset can be started. This may either be performed via a discrete input (standard setting) or the "Remote request" command, which may be enabled via an interface. Refer to the Performing Remote Start/Stop and Acknowledgement section of the Application Manual 37471 and the Interface Manual 37472 for detailed information about the configuration of the unit for remote start.

Configuring the Unit for External Acknowledge

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The *LogicsManager* function 00.15 "Ext. acknowledge" (parameter ID 12490) must be configured in a way that alarms may be acknowledged externally. This may either be performed via a discrete input (standard setting) or the "Remote acknowledge" command, which may be enabled via an interface. Refer to the Performing Remote Start/Stop and Acknowledgement section of the Application Manual 37471 and the Interface Manual 37472 for detailed information about the configuration of the unit for external acknowledge.

NOTE
All alarm messages may also be visualized and acknowledged via ToolKit. The "Clear all" button allows to acknowledge all alarm messages, which are not active anymore.

NOTE
Refer to the Remotely Acknowledging Single Alarm Messages section of the Interface Manual 37472 for detailed information about acknowledging individual alarm messages via Modbus.

Restoring the Factory Settings

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The default values may either be reset via ToolKit or the interface (parameter ID 1701). Refer to the Remotely Resetting the Default Values section of the Interface Manual 37472 for detailed information.

Resetting the Event History

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The event history may either be cleared via ToolKit or the interface (parameter ID 1706). Refer to the Remotely Clearing the Event History section of the Interface Manual 37472 for detailed information.

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