



Introduction

Power

Monophase, 50 Hz, PF 1

Voltage (V)	STANDBY RATING (ESP)		PRIME RATING (PRP)		STANDBY CURRENT (A)
	kW	kVA	kW	kVA	

STANDBY RATING (ESP) Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. ESP is in accordance with ISO 8528-1. Overload is not allowed.

PRIME RATING (PRP) Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528-1. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation.

General Characteristics

Model Name	ACG 1540
Frequency (Hz)	50
Engine Make and Model	CUMMINS QSK60G22
Alternator Make and Model	Mecc Alte ECO46 1,5L/4A
Control Panel Model	AGC-4 Mk II

Engine Specifications

General Data

Manufacturer	CUMMINS
Engine Model	QSK60G22
Number of Cylinders / Type	16 cylinders - V type
Bore mm (in)	159 (6,25)
Stroke mm (in)	190 (7,48)
Displacement l (cu. In)	60 (3672)
Aspiration	Turbo Charged and Intercooled (Water to Air)

Lubrication System



Fuel System

Electrical System

Cooling System

Exhaust System

Fuel Consumption

Alternator Characteristics

Manufacturer	Mecc Alte
Alternator Model	ECO46 1,5L/4A
Frequency (Hz)	50
Power (kVA)	2050
Voltage (V)	400
Phase	3
A.V.R.	DER1
Voltage Regulation	±0.5
Insulation Class	H
Protection Class	IP23
Rated Power Factor	1
Weight Complete Generator (kg)	4260
Temperature Rise Class	F
Cooling Air (m ³ /min)	135

Open Generator Set Dimensions

Length mm (ft)	5180 (17)
Width mm	2099 (6,9)
Height mm (ft)	2972 (9,5)

Control Panel

Manufacturer	DEIF
Control Module Model	AGC-4 Mk II



Communication Ports

CANBUS



- Terminal 1-28, power supply
- Terminal 29-36, communication
- Terminal 37-64, in-/outputs/load sharing
- Terminal 65-72, governor, AVR, in-/outputs
- Terminal 73-89, AC measuring
- Terminal 90-97, in-/outputs
- Terminal 98-125, engine I/F
- Terminal 126-133, engine communication, in-/outputs
- LED I/F and Ethernet

Standard Devices

- Additional CAN bus based I/O (9 x CIO modules)
- Redundant controller
- Redundant CAN bus for Power mamangement
- N+X configuration
- Close Before Excitation / Run-up synchronization from 6 seconds
- DEIF digital AVR DVC550 support
- Multi purpose PIDs

Control Unit

The AGC-4 Mk II is a configurable controller that can be used in applications ranging from a single controller for one genset, to complete power management systems. The controller contains the 3-phase measuring circuits and all the functions required to protect and control a genset. The controllers can also be used to protect and control mains connections, tie breakers, and bus tie breakers.

Construction and Finish

Controller: IP20. DU-2 display and AOP: IP40 (IP54 with gasket: Option L).
UL/cUL Listed: Type Complete Device, Open Type. To EN/IEC 60529

Installation

The controller is designed for mounting inside the panel. The DU-2 display can be installed on the panel door and connected to the controller with a display cable.

Standard Specifications

- Automatic Mains Failure sequence
- Multi-master Power Management
- Power Management Core (32dg)
- Power Management Extended (>32dg)
- RMB Transformer maintenance with up to 32 gensets
- PLC logic
- Engine CAN bus
- DIN rail mount
- Flexible Hardware



Options

- Terminal 1-28, power supply
- 8 to 36 V DC supply, 11 W; 1 x status output relay; 5 x relay outputs; 2 x pulse outputs (kWh, kvarh or configurable open collector outputs); 5 x digital inputs
- Terminal 29-36, communication
- Modbus RTU (RS-485)
- Profibus DP

Control Panel Compliance List

- EN/IEC 61010-1, installation category (over-voltage category) III, 600 V, pollution degree 2
- EN/IEC 60255-27 over-voltage category III, 600 V, pollution degree 2
- UL/ULC 6200:2019 1.ed, over-voltage category III, 600 V, pollution degree 2
- Gridcode compliant with: VDE AR-N 4110/4105 (Medium voltage, Germany, VDE AR-N 4105 (low voltage, Germany, EN 50549-1:2019 (Europe), ENA EREC G99 (United Kingdom)
- TÜV and UL approved
- Tier4 final/stageV

Static Battery Charger

Battery charger is manufactured with switching-mode and SMD technology and it has high efficiency.

Battery charger models' output V-I characteristic is very close to square

2405 has fully output short circuit protection and it can be used as a current source.

2405 charger has high efficiency, long life, low failure rate, lightweight and low heat radiated in accordance with linear alternatives.

The charger is fitted with a protection diode across the output. Charge fail output is available.

Connect charge fail relay coil between the positive output and CF output.

Input: 196-264V.

Output: 27,6V 5A or 13,8V 5A.