

SCGU 500 W

Starter-Generator Control Unit

Overview

The SGCU 500 W is a compact, rugged control unit for generator systems up to 500 W nominal output power. Optimized for Plettenberg generators to provide an efficient, ready-to-integrate system solution. Offers excellent power-to-weight ratio and high durability. Developed and manufactured in Germany to the highest quality standards.

Features

- Super robust design for use in harsh environments
- Standard protection class IP54 (incl. sealed connectors)
- Significant weight saving, as a separate starter can be mitigated
- Very high system efficiency
- Market leading power-to-weight ratio



Specifications

Hardware P/N ⁽¹⁾	53-10000343	
Peak output starting power (max. 10s)	3.6	kW
Peak start current (max. 5s) ⁽²⁾	120	A
Start current for 1 minute ⁽²⁾	80 A (at 25°C) 65 A (at 50°C) 46 A (at 75°C)	
Starting voltage input DC	10 - 30	V
AC Input Voltage	24 - 42	V AC, rms
Continuous output power ⁽²⁾	500	W
Continuous current output ⁽²⁾	24	A
Regulated voltage output	28 (+/- 0.5)	V
Length	134	mm
Width	82.4	mm
Height	56	mm
Weight	710	g
Recommended conductor diameter (Phase/DC-DC)	2.5	mm ²
	14	AWG
Protection class ⁽³⁾	IP54	
Cooling	Air cooled	
Recommended air flow	3.5 m/s	
Ambient temperature range	-20 to +100 °C	
Position sensor input	Hall effect sensor with UVW-commutation signals	

Notes:

- (1) Please always provide the hardware and software part numbers (P/N) while ordering. This is required to uniquely identify the product.
- (2) A minimum airflow of 3.5 m/s is required for each specified load point and corresponding temperature.
- (3) When using sealed connectors.

Control Interfaces

RS232	115,200 Baud / 8N1
Analog (optional) Software P/N ⁽¹⁾ : 59-10000362	0 – 5 V
PWM (optional) Software P/N ⁽¹⁾ : 59-10000363	High level: 1.5 - 28V Low level : 0 - 0.5 V 10 – 400 Hz
CAN (optional) Software P/N ⁽¹⁾ : 59-10000361	CAN2.0

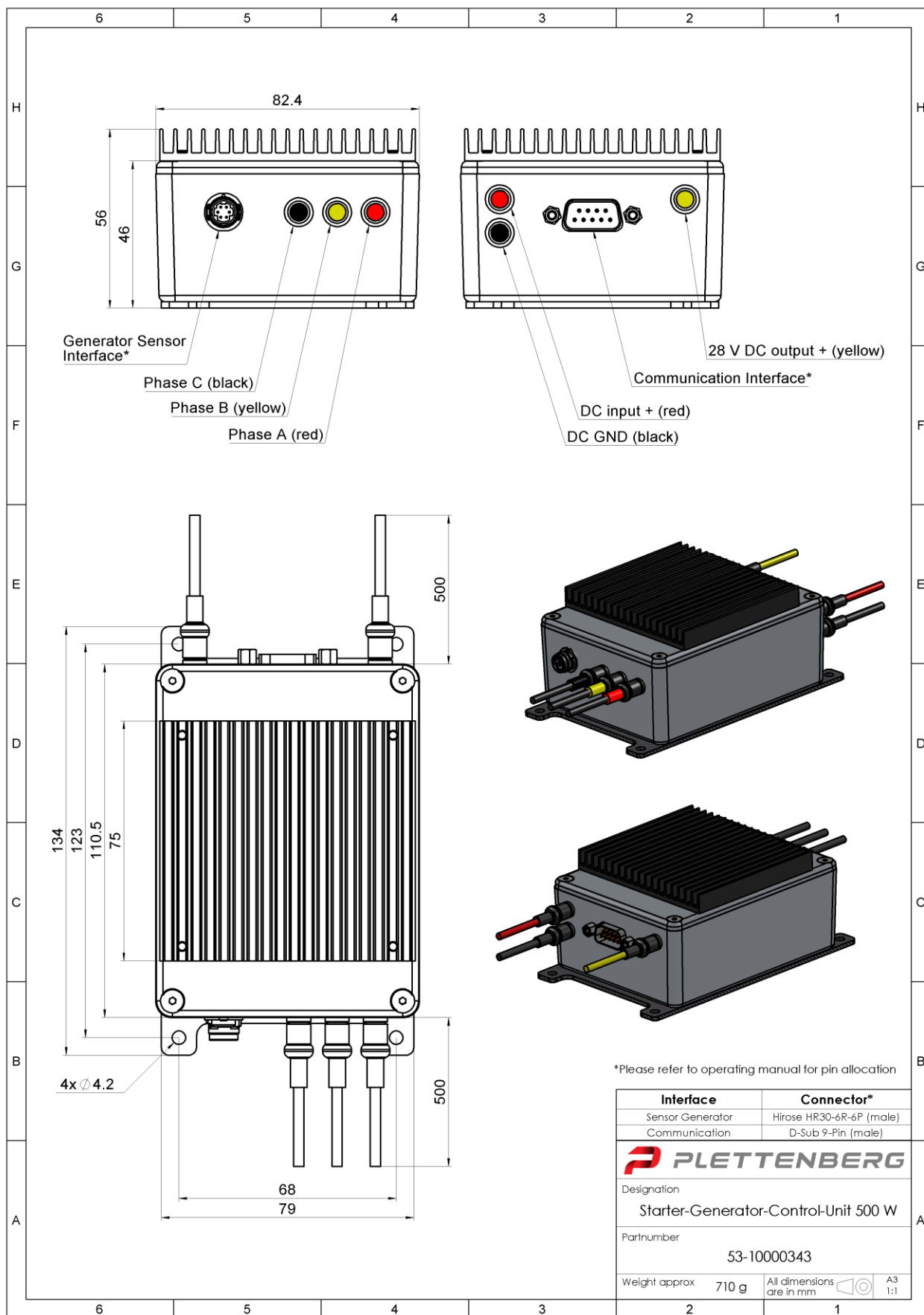
Connection Interfaces

Generator phases (A, B and C)	2.5 mm ² silicone stranded wire (500 mm)
DC Input	2.5 mm ² silicone stranded wire (500 mm)
28 V Output	2.5 mm ² silicone stranded wire (500 mm)
RS 232 / analog / digital / CAN	Amphenol ICC D-Subminiature - DE09P064TXLF
Motor sensor	Hirose 6-pol connector HR30-6R-6P (71)

Options & Customization

- Tailored software features upon request
- MTBF/S report
- Customizable output voltages according to requirements





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