

SCGU 1 kW

Starter-Generator Control Unit

Overview

The SGCU 1 kW is a compact, rugged control unit for generator systems up to 1,000 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⁾	53-10000342	
	53-10000341 (CAN) ⁽²⁾	
Peak output starting power (max. 10s)	11.7	kW
Peak start current (max. 2s) ⁽³⁾	390	A
Start current for 1 minute ⁽³⁾	290 A (at 25°C) 235 A (at 50°C) 170 A (at 75°C)	
Starting voltage input DC	10 - 30	V
AC Input Voltage	24 - 42	V AC, rms
Continuous output power ⁽³⁾	1	kW
Continuous current output 1 ⁽³⁾	40	A
Continuous current output 2 ⁽³⁾	10	A
Regulated voltage output 1	28 (+/- 0.5)	V
Regulated voltage output 2	14 (+/- 0.5)	V
Length	202	mm
Width	122	mm
Height	80	mm
Weight	1,500	g
Recommended conductor diameter (Phase/DC-DC)	8	mm ²
	8	AWG
Protection class ⁽⁴⁾	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) The CAN Hardware P/N can only be selected with the corresponding CAN Software P/N.
- (3) A minimum airflow of 3.5 m/s is required for each specified load point and corresponding temperature.
- (4) When using sealed connectors.



Control Interfaces

RS232	115,200 Baud / 8N1
Analog (optional)	0 – 5 V
Software P/N ⁽¹⁾ : 59-10000362	
PWM (optional)	High level: 1.5 - 28V
Software P/N ⁽¹⁾ : 59-10000363	Low level : 0 - 0.5 V
	10 – 400 Hz
CAN (optional) ⁽²⁾	CAN2.0
Software P/N ⁽¹⁾ : 59-10000364	

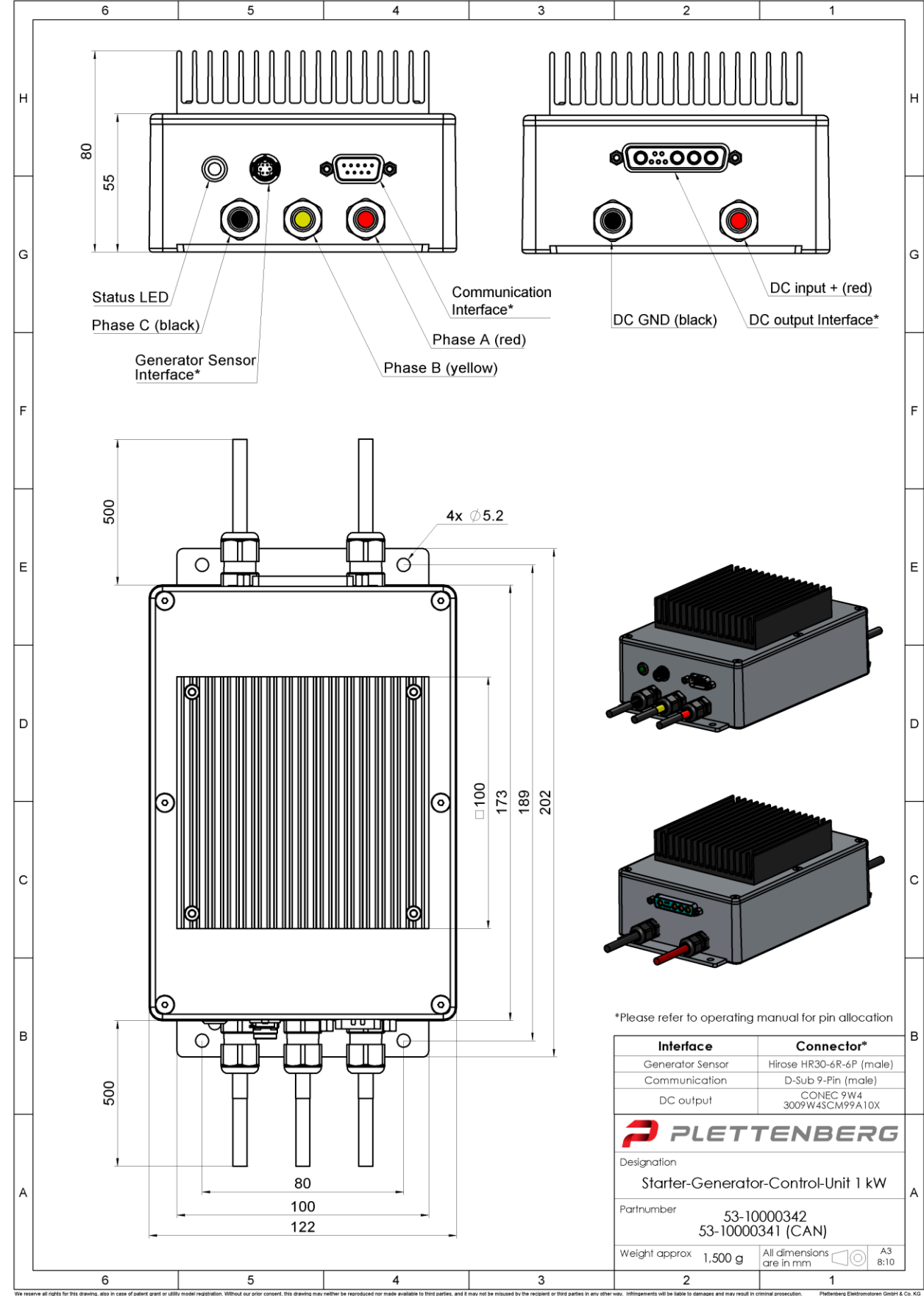
Connection Interfaces

Generator phases (A, B and C)	8 mm ² silicone stranded wire (500 mm)
DC Input	8 mm ² silicone stranded wire (500 mm)
DC/DC Output	CONEC 9W4 3009W4SCM99A10X
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





*Please refer to operating manual for pin allocation

Interface	Connector*
Generator Sensor	Hirose HR30-6R-6P (male)
Communication	D-Sub 9-Pin (male)
DC output	CONEC 9W4 3009W4SCM99A10X

 **PLETTENBERG**

Designation	Starter-Generator-Control-Unit 1 kW
Partnumber	53-10000342 53-10000341 (CAN)
Weight approx	1,500 g
All dimensions are in mm	

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