GPU Lite 70

Energy that makes you fly

GPU Lite 70

IMPORTANT NOTE

All users must read this entire guide before initiating operations with the GPU Lite 70

January 2024
ENERCRAFT

Thank you and congratulations for the purchase of your new GPU Lite!

This GPU Lite unit provides 28.5 ± 0.5 VDC and is used as an external continuous energy source, mainly for aircraft maintenance and operational purposes.

GPU Lite 70

Following the right procedures, and being aware of the limitations and best practices for the GPU Lite units, will ensure their operating efficiency and will maximize operational capabilities and the final life of the equipment.

This User Manual contains the operating instructions and procedures for the GPU Lite 70, needed to safely and efficiently operate these units.

Remember that you can combine our GPU Lite units with our Dual Connector if more power is needed!

Enjoy the freedom of working without limitations!

1. INTRODUCTION

The GPU Lite 70 is a maintenance-free and sealed unit. No repairs by the User are authorized. Warranty will be voided if the unit is tampered in any way, or if unauthorized repairs are made. For technical support please contact:

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Cell – Eduardo (Spanish): +54 9 (385) 503 2170
South America

alberto.jurjo@enercraft.eu
Cell – Alberto (Spanish/English/Portuguese): +34 722 24 12 10
Worldwide

CAUTION

SHOCK HAZARD POTENTIAL

Improper use or failure to follow instructions contained in this User Manual can result in the unit damage and/or injury or death by electrical shock.

Any attempts to open or examine the inside of the GPU Lite 70 via any tool or any device (borescope, probe, etc...) can result in the unit failure and/or injury by electrical shock. These GPUs are maintenance free and should not be opened or disassembled for any reason.

Always protect the units from short circuit.

Shipping Hazards: none.

2. BASIC PRODUCT DESCRIPTION

The GPU Lite Family are devices developed by **ENERCRAFT** to allow energy supply for a long time, mainly for aircraft maintenance or operational purposes, working as a continuous energy source. The equipment must be plugged in (AC cable) to a properly grounded outlet, and connected to the aircraft through the external DC power connector.

All of the **ENERCRAFT** GPUs Lite are equipped with Switching Power Supplies, which feature higher efficiencies, lighter weight, longer hold up times, and the ability to handle wider input voltage ranges.

3. MAIN FEATURES

1 Incorporates the latest technology

ENERCRAFT innovative design
The most disruptive Ground Power Unit
Clean energy. Free of noise (ripple)
Accurate diagnosis
The most reliable components
Overvoltage, Overtemperature and Overload protections
Compact and portable

2 Full data display

Voltage
Output current

3 Protective Case

Reliable waterproofing (IP67 & IEC 60529)
NANUK®'s latching system (MIL-STD-810F)
Impact resistant (ATA Specification 300)
Robust (ASTM D4169 DC-18)

4 Portable equipment

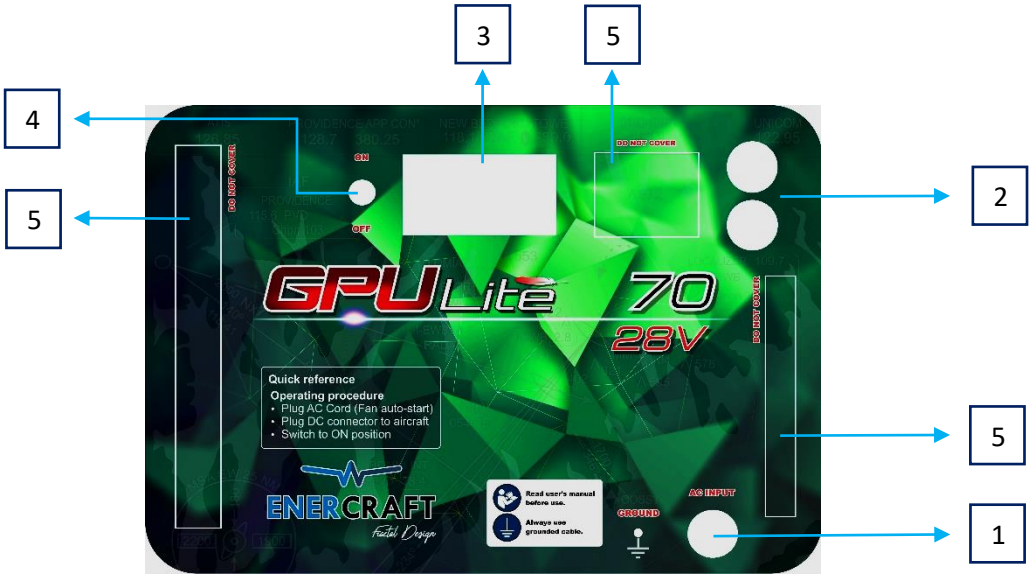
Lightweight unit
One-handed operation
Spring loaded handle
Reinforced metal padlock holes

4. SPECIFICATIONS AND PERFORMANCE

MAIN SPECIFICATIONS OF THE GPU Lite 70	
AC INPUT	Single Phase 90-264 Vac, Freq. 47/63 Hz
DC OUTPUT	28.5 ± 0.5 Volts 70 Amp Nominal, 80 Amp Maximum
TEMPERATURE RANGE	- 20° C ↔ 60° C
DIMENSIONS	401 mm x 307 mm x 173 mm
WEIGHT	9 kg (including cable and AN2551)
CABLE	1.5 mts Standard 3 PINS NATO AN2551 (35mm²)
PROTECTION	Electronic sensors & Fuses
COOLING	Cooling air system integrated into the equipment

5. PANEL OVERVIEW

1. AC connector
2. DC output
3. DISPLAY: Voltage and output current
4. Power switch
5. Air inlets



6. OPERATING PROCEDURE

6.1 Receiving your GPU Lite 70

This GPU Lite 70 is ready to be used once you receive it, but please check the overall status of the unit to make sure that it hasn't been tampered in any way during the Shipment and/or potential Customs inspections. If you detect anything, please contact us immediately.

6.2 Check cables status

Always check the cables to visually detect any possible cuts or damages.

6.3 Use of the GPU Lite 70

All of the **ENERCRAFT** GPU Lite units are very intuitive and easy to use. Please follow the simple steps below, to provide the required continuous power to your aircraft:

- Plug AC Cord to a properly grounded outlet, and the internal fan will start running.
- Plug DC connector to the aircraft.
- Switch to ON position.

Once you finish using the GPU Lite 70, please follow the three simple steps below:

- Switch to OFF position.
- Unplug DC connector from the aircraft.
- Unplug AC Cord.

ENERCRAFT INNOVATIVE ELECTRIFICATION TECHNOLOGY S.L.
Cambados, Pontevedra – GALICIA, SPAIN / VAT: ESB02707628

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More information: **www.enercraft.eu**

OPERATING & ASSEMBLY INSTRUCTION
powerCON® | Locking 3 pole Power Connector

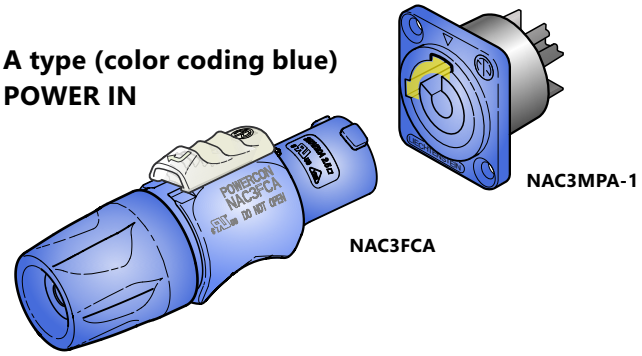
A. OPERATING INSTRUCTION

IMPORTANT SAFETY INSTRUCTION:
The powerCON® system is certified as connector without breaking capacity according IEC 61984 / VDE 0627.
In this standard the term connector (without breaking capacity) refers to components which in normal use are not to be engaged or disengaged when under load or live.

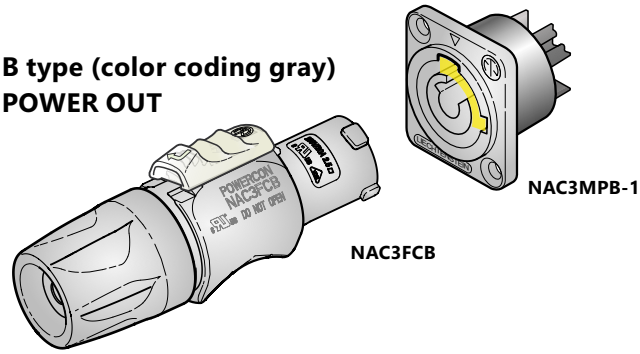
Connector Combination & Keyways:

With the two non-interchangeable types of connectors (A type and B type) it is impossible to produce a short circuit. Mating connectors (combination) are identified by mechanical keyways and by color.

A type (color coding blue)
POWER IN

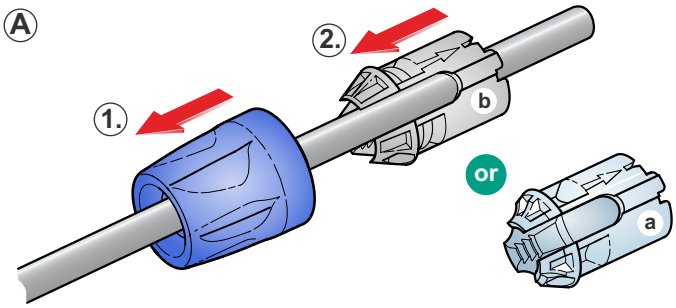


B type (color coding gray)
POWER OUT



B. ASSEMBLY INSTRUCTION

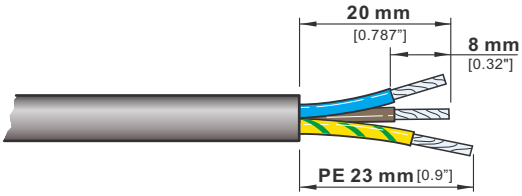
Ⓐ



Ⓐ **Place the bushing (1) and the chuck (2) over the cable.**

White chuck (a):	6.0 - 11.0 mm [0.236 - 0.433”]
Black chuck (b):	9.5 - 15.0 mm [0.374 - 0.59”]
VDE:	9.5 - 14.0 mm [0.374 - 0.551”]

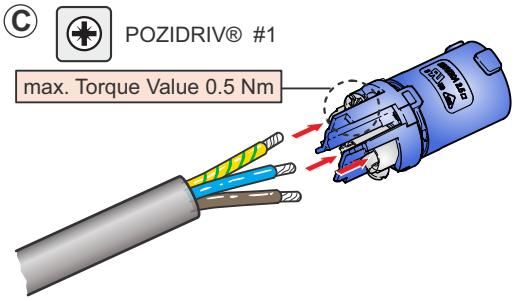
Ⓑ



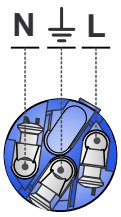
Ⓑ **Prepare the cable as shown.**

Cable O.D.:	6.0 - 15.0 mm [0.236 - 0.59”]
Wire size:	2.5 mm² (AWG 12)

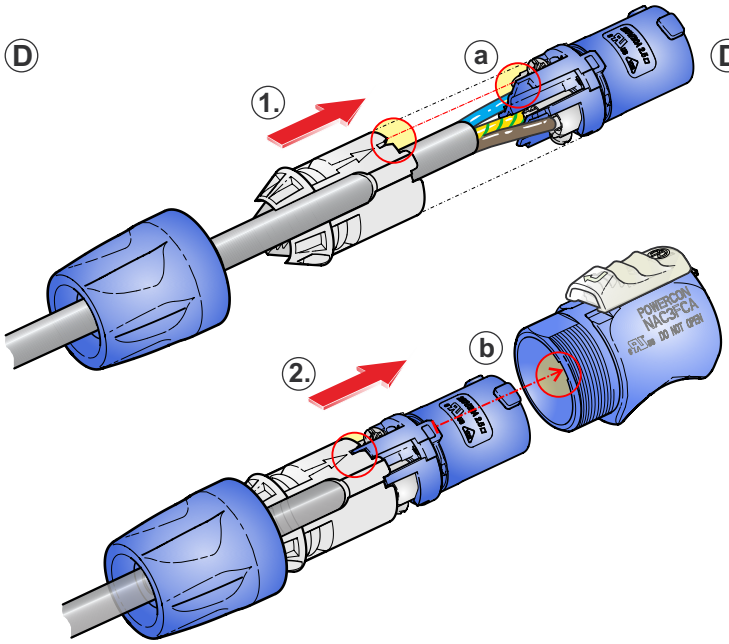
Ⓒ



WIRING

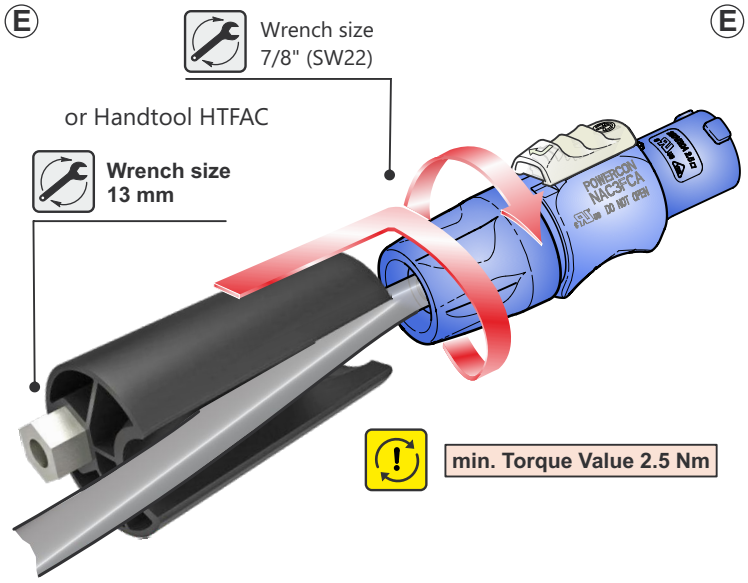


Ⓒ **Insert the wire into the terminals and fasten the clamping device with a POZIDRIV® #1, max. Torque 0.5 Nm (0.37 lb-ft).**



D Slide the insert and the chuck (1) into the housing (2).

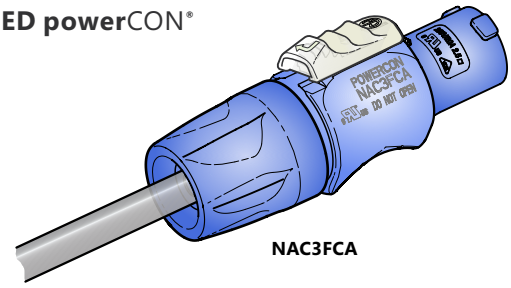
Important:
(a) Align the chuck by positioning the nose into the recess.
(b) Pay attention to the guiding keyway!



E Fasten bushing by means of a fork wrench 7/8" (SW 22) or with the Neutrik handtool HTFAC, min. Torque 2.5 Nm (1.8 lb-ft).

OPTION:
Use the Neutrik handtool Art. No. HTFAC to tighten the bushing.

FINISHED powerCON®



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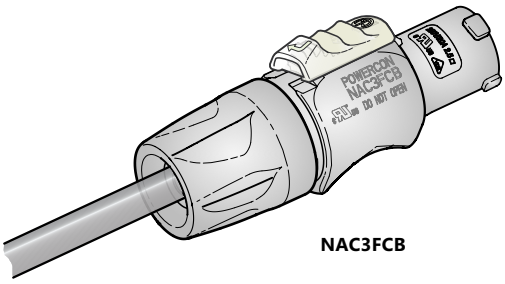

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Find more details of powerCON® on www.neutrik.com.

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