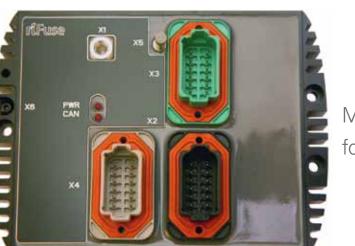


There will be moments when you wish it would be a lot easier to replace a fuse. Or rather not at all.



Meet riFuse – the intelligent PDU for the toughest requirements!



# Goodbye, fuse box! Welcome, riFuse!

**HISTORICALLY**, a conventional fuse box has been a key component in an electrical system.

**TODAY,** this is no longer the case as riFuse is widely available on the market. Developed by Rimaster specifically to meet the needs of manufacturers of heavy duty vehicles and special machinery, riFuse is being built to the toughest standards and provides an intelligent power control for complex electrical systems.

**SIMPLIFYING** any complex wiring, riFuse offers a power control fuse solution where the fuse/time current-curve is far more "intelligent" than a conventional fuse or circuit breaker. riFuse is a natural choice for the design department who needs a trouble-free power supply with a self-monitoring fuse-/relaybox as the heart of a heavy-duty electrical system, be it forest-machinery, construction equipment, farming machinery or in the mining industry.

**THE DESIGN** of riFuse rests on Rimaster's long experience in the development, design and manufacture of complex wiring and advanced electrical systems. In commercial service since spring 2014, riFuse has proven itself, always meeting and often exceeding expectations.

WITH THE CONTINUED development of riFuse, Rimaster will remain a leading supplier of electrical systems and intelligent power control modules for professional, heavy duty applications.



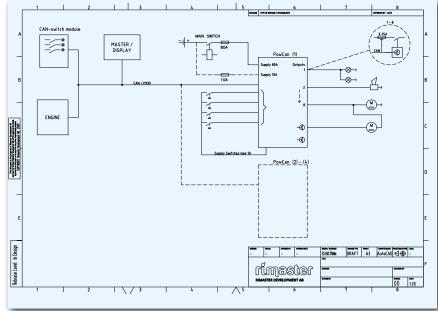
**Left:** AgRicab, Rimaster's new, generic cabin for i.e. farming machinery will use 1-2 riFuse modules depending on application requirements. **Above:** Some users prefer to put the riFuse module in a control box to minimize wiring, but as riFuse modules are completely weatherproof, they can be installed where it is most convenient.

**Below:** A schematic overview of riFuse's basic structure. With it's programmable structure, riFuse can meet various customer needs.

**TECHNICALLY**, riFuse is a generic input/output module (I/O-module), with a primary function as fuse- and relay replacement. riFuse can be installed both before and after the main battery switch, hence the selected connection can continue to be supplied even after the

battery master switch has been turned off. As the voltage is continously measured, a defined overvoltage allows the connection to be switched off.

**PARENT SYSTEM** determines whether the output should be "on" or "off" and which fuse curve each connection (port) is to use. If the port is "on", and the current exceeds preset values according to the selected curve, the connection is switched off. Actual current at port 1 >> 8 can be continuously monitored via CAN/J1939. When the total current output at ports 1 >> 8 exceeds 100 A, the unit is switched off. Ports 1 >> 4 can also be used in PWM mode to control e.g. motors. The four input connectors' status can be monitored via the CAN bus as can the number of alterations (switches) since the last reading (frequency).



## Welcome to Rimaster!

Rimaster is a leading supplier of cable harnesses, electrical cabinets, electronics and cabs for special vehicles and industrial systems.

We are a global group with origin and headquarters in Rimforsa, Sweden.

Rimaster has today approximately 650 employees in seven companies all over the world.

We can support you with sales, design, development and production in Sweden, Poland, China, Belgium and France.

Our vision is to be a partner that creates simplicity for our customers and set the standard in the global industry.

# -Welcome to our World of Simplicity!

The photo on the front page was kindly supplied by Huddig AB; www.huddig.com

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#### riFuse in 30 seconds:

- Power Control Unit, monitored via CAN
- Rugged aluminium casing with potted electronics (embedded components)

• Separate contactors, multiplied parallel terminals to simplify wiring connections

- Fuse size selected via CAN
- Minimized need to replace fuses, thus allowing hidden installation
- High port load capacity, rated 10A, momentarily up to 25A.

## Performance

Mode

**Digital Connections – Output** Current Monitored 8 whereof 4 can be configured in PWM-mode DC: 3 to 10A, briefly 25A PWM (4): 0,1 till 10A, 40 till 200 Hz Sinking (Decreasing) 2 DC: 10 A

#### **Digital Connections – Input**

No. of connections Mode Frequency Feed Input Conn.

DC: On > 4 V, Off < 1V 100 Hz Up to 1 A for simple feeding

# **Specifications**

Weight Dimensions (mm) Temperature Range Enclosure Protection Supply Voltage Power Consumption Communication Connectors

Ed.3 • December 2015

0,9 kg 137\*185\*40 (without connectors) -30°C to +60°C Equivalent to IP67 9-32 VDC 150 mA standby, max 80A CAN J1939 Deutsch DT 12, M8 + M4

For further information on riFuse, please contact Ulf Almén at +46 494 795 32 or ulf.almen@rimaster.com