

DC/DC CONVERTER

Step-Down (Buck) 24V/12V
40A (20A+20A)



DC/DC converters are electronic devices that adapt electrical power between different DC voltage levels.

In automotive applications, they ensure compatibility between high-voltage systems and low-voltage components, enabling efficient power distribution and stable operation of vehicle electronics.

The 0524122020 DC/DC Converter delivers 12V power from a 24V input with a dual 20A + 20A output.

With sealed connectors and an IP67 housing, this converter ensures reliable power for automotive, mobility, and off-highway applications.

Benefits:

Enhanced Reliability.

Stable voltage conversion ensures consistent performance.

Energy efficiency.

Reduces power consumption, lowering costs.

Versatility.

Suitable for various vehicle types.

Long-term durability.

Withstands harsh conditions.

Safety.

Advanced protection features for vehicle systems.

Compliance

Complies with RoHS Directive for restricted hazardous substances and ECE R10 standards for electromagnetic compatibility.

Technical Data

Nominal Input Voltage	28 Vdc
Input Range Voltage	18-32 Vdc
Crank Input Voltage	12 Vdc
Input Turn ON Voltage	<8 Vdc
Input Overvoltage Turn OFF	36 Vdc
Nominal Output Voltage	13,5 Vdc ± 0,5 Vc
Output Switching Frequency	200 KHz ± 10%
Nominal Current	20A + 20A
Peak Current	50A (0,5")
Stand-By Current (enable OFF)	< 1 mA
Storage Temperature	-40°C to 85°C
Working Temperature	-40°C to 75°C (with derating)
Efficiency	>95%
Encapsulation	IP67

Applications:

- Industrial vehicles: Forklifts, pallet stackers, automated guided vehicles (AGVs).
- Agricultural vehicles: Tractors, sprayers, lawn mowers.
- Transportation: Buses, trucks, delivery vans.
- Construction vehicles: Excavators, wheel loaders, bulldozers.
- Specialized vehicles: Police cars, fire trucks, ambulances, utility vehicles, and municipal service cars.
- Etc.

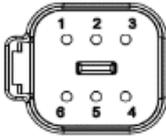


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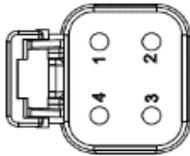
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Pin-Out



Connector 1: Type AMPHENOL AT15-6P

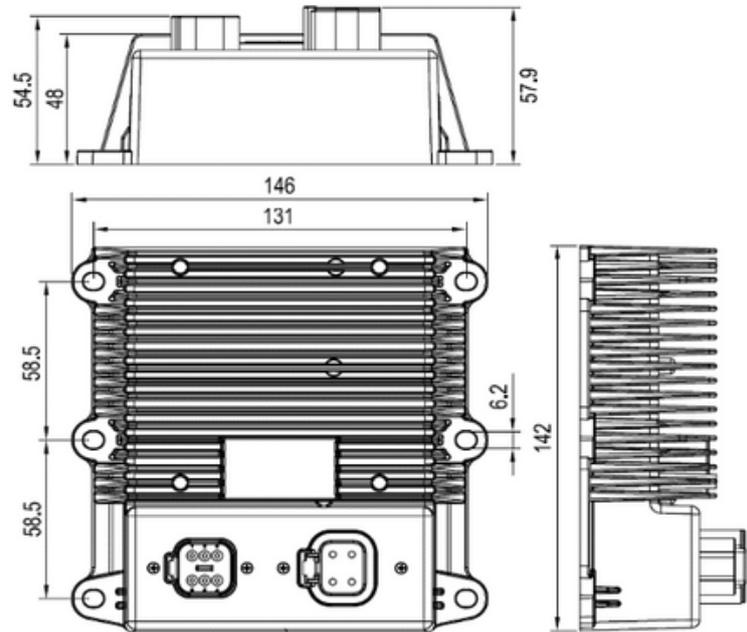
- PIN 1/6: +24V Input Voltage (DC/DC#1)
- PIN 2/6: +24V Input voltage (DC/DC#2)
- PIN 3/6: +24V Ignition Input (Switch) (DC/DC#1)
- PIN 4/6: +24V Ignition Input (Switch) (DC/DC#2)
- PIN 5/6: Input GND
- PIN 6/6: Input GND



Connector 2: Type AMPHENOL AT15-4P

- PIN 1/4: +12V Switched Output (DC/DC#1)
- PIN 2/4: +12V Switched Output (DC/DC#2)
- PIN 3/4: Output GND (DC/DC #1)
- PIN 4/4: Output GND (DC/DC #2)

Dimensions

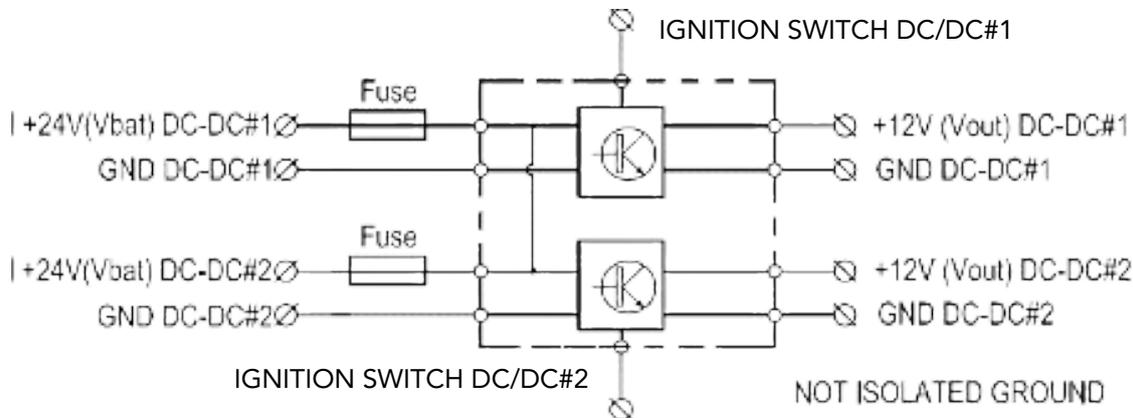


Order Information

DC/DC 24V/12V 20A+20A:

0524122020

Block Function Diagram



Technical Notice: Images and specifications are for reference only. Guilera reserves the right to modify product design and features without prior notice. The latest validated technical drawing is the only official document certifying product characteristics.

GUILERA S.A.

Founded in 1953, Guilera S.A. specializes in advanced electronic and electromechanical systems for the automotive, off-highway, and mobility sectors.

Our products include reliable DC-DC converters, electronic power control systems for traction, advanced flasher units, and solid-state electronics.

Guilera is committed to sustainability and social responsibility, integrating eco-friendly practices and pursuing CSR certifications. Serving OEMs and Tier 1 suppliers, we continuously innovate to shape the future of transportation and mobility.



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