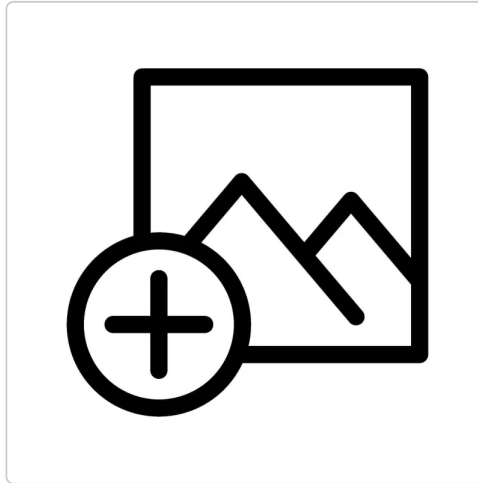
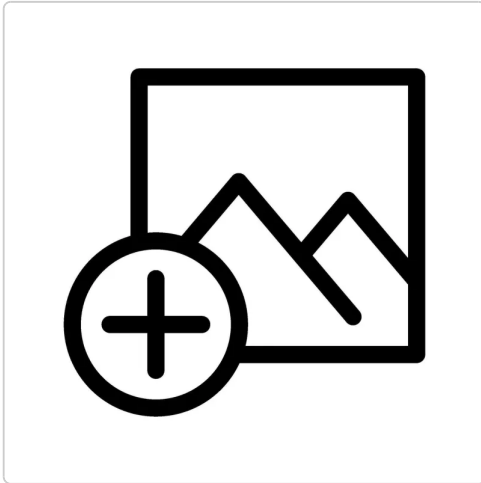


ZAPI – BLE-0 PW – 36/48V AC Inverter



Reference : ZAP-BLE0PW-36V-48V-320A

Brand : ZAPI

Options :

No variants

3D Model : Available

EAN-13 : 6501204139316

The ZAPI BLE-0 PW 36V/48V 320Arms inverter is a compact AC motor controller designed for low-voltage traction systems that require precise control, robust integration and industrial communication. It targets light to intermediate electric architectures, especially retrofit projects where compact size, motor compatibility and control quality are key criteria.

This speed inverter supports several motor technologies, including ACIM, BLDC, PMAC and PMSM, with CANopen interface, TE Ampseal connector and sensor feedback management via incremental A/B encoder, Hall U/V/W or Sin/Cos. Its 150 x 200 x 79 mm format, IP65 rating and operating range from -40 °C to +40 °C make it a suitable basis for embedded or mobile 36V to 48V applications.

36V/48V traction

ZAPI BLE-0 PW 36V 48V inverter

The BLE-0 PW positions itself as a 36V/48V traction inverter for low-voltage AC motor control, with a 320 Arms capability over 2 minutes and 4.5 kW continuous output power. It offers an effective balance between compactness, protection level and functional richness. For engineering offices and integrators, its value lies both in motor control and in its ability to fit into a complete architecture with supervision, vehicle logic, traction safety and diagnostics.

Motor compatibility

ACIM BLDC PMAC PMSM motor controller

Its compatibility with several motor families is a concrete advantage when one platform must support different electromechanical variants. This flexibility helps standardize a 36V/48V project, provided that parameter settings, sensor feedback and the match between control law, selected motor and expected dynamic behavior are handled correctly. It is therefore not just a power inverter, but a control component that requires genuine system consistency.

Key data

Parameter	Value
Brand	ZAPI
Model	BLE-0 PW
Reference	225-023
Type	Speed inverter / low-voltage AC motor controller
System voltage	36V / 48V
Current	320 Arms for 2 minutes
Continuous output power	4.5 kW
Protection rating	IP65
Temperature range	-40 °C to +40 °C
Digital inputs	9
Analog inputs	2
Dedicated analog input	Motor temperature
Motor sensor feedback	Incremental A/B, Hall U/V/W, Sin/Cos
Communication interface	CANopen
Connector	TE Ampseal
Dimensions	150 x 200 x 79 mm
Motor compatibility	ACIM, BLDC, PMAC, PMSM

Embedded interfaces

CANopen and control inputs

The product includes 9 digital inputs, 2 analog inputs and 1 analog input dedicated to motor temperature. This configuration makes it possible to manage commands, certain sensors, system states and safeties without immediately resorting to additional interfaces. In integration, this simplifies the wiring architecture, but requires the functional split between inverter, supervision and safety components to be defined upstream in order to maintain a clear and usable fault logic.

CAN communication

CANopen for vehicle supervision

The CANopen interface increases its relevance in projects where the inverter must communicate with other electronic devices. It facilitates integration into a controlled architecture, with information feedback, functional coordination and cleaner setup or supervision possibilities than purely local control. This benefit is especially useful in retrofit, mobile machine or light vehicle applications, provided that the bus topology, message management and parameter strategy are properly mastered.

Compact mounting

IP65 inverter for mobile installation

Mechanically, the BLE-0 PW is suitable for constrained installations thanks to its 150 x 200 x 79 mm dimensions. Its IP65 rating and ambient range from -40 °C to +40 °C make installation in exposed environments possible, provided that mounting, thermal dissipation, harness routing and connector sealing are handled at system level. The protection rating improves overall robustness, but does not replace real validation of the operating conditions.

Targeted uses

Retrofit scooter, kart and light machine

This ZAPI inverter is suitable for low-voltage electric traction projects where compactness, control flexibility and compatibility with several motor technologies are decisive. It naturally fits applications such as light retrofit, electric two-wheelers, technical rolling platforms, small industrial vehicles or special assemblies requiring traction electronics more advanced than a basic controller.

BLE-0 harness and commissioning

Its value for professional users is not limited to current rating or continuous power. The BLE-0 PW provides an integration base for a complete project, with input management, CANopen communication, motor temperature reading and adaptation to several propulsion architectures. It is relevant to consider it together with its harness, programming logic and commissioning accessories in order to reduce wiring time and secure the first validation phases.

Traction questions

Is this inverter suitable for a scooter or light retrofit project?

Yes, its 36V/48V range, compact format and control capabilities make it a relevant basis for this type of architecture, subject to validation with the motor, battery and selected parameter settings.

Can it work with several motor technologies?

Yes, it is compatible with ACIM, BLDC, PMAC and PMSM, which makes it easier to evaluate several motor solutions within the same project.

Is CANopen useful on this kind of inverter?

Yes, as soon as a project includes supervision, vehicle logic or data exchange with other electronic components, CANopen provides a real integration benefit.

Traction chain

The ZAPI BLE-0 PW 36V/48V 320Arms is intended for low-voltage traction integrations where compactness, robustness and interface richness must remain compatible with a clean and controlled architecture. Its actual performance will depend on the quality of the motor pairing, wiring, parameter settings, cooling and installation conditions validated before commissioning.

Searches frequently associated with this product: 36V 48V AC motor controller, 36V 48V traction inverter, CANopen controller for AC motor, ZAPI inverter for scooter retrofit. [See the corresponding category](#)

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