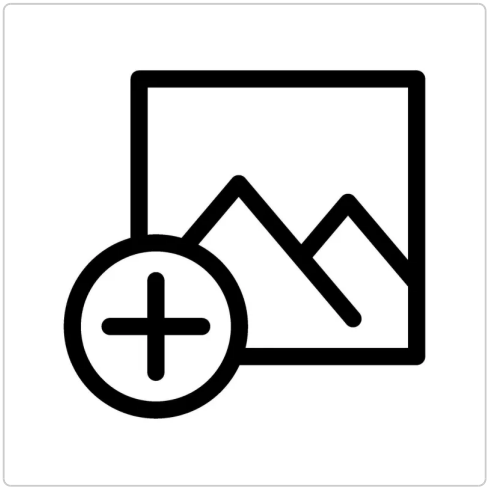
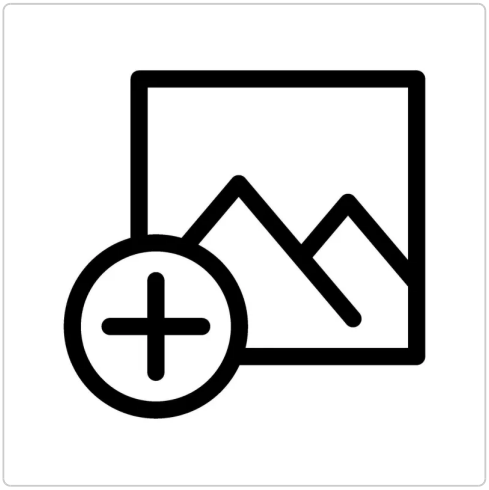
ZIVAN - NG1 - 48V 25A Lead Charger





Reference : ZIV-NG1-48V-25A

Brand : ZIVAN

Options :

No variants

3D Model : Available

EAN-13 : 3762552427021

The ZIVAN NG1 48V 25A is a high-frequency 48V 25A lead-acid battery charger in autonomous CB version, designed to charge flooded, gel and AGM lead-acid batteries on electric equipment and light- to medium-duty traction systems. This ZIVAN NG1 charger combines a 115/230 VAC input, a compact 300 x 160 x 80 mm format, forced-air cooling and a configurable charging logic, making it a robust solution for onboard or wall-mounted integration in a controlled technical environment.

This 48V stand-alone charger is intended for integrators, maintenance teams and engineering offices looking for a single-phase high-frequency charger capable of charging a 48 V lead-acid pack with a maximum charging current of 25 A. The version covered here is dedicated to lead-acid batteries, supporting flooded, gel and AGM chemistries, with charge curve selection adapted to the actual behavior of the installed battery.

48V lead charging

ZIVAN NG1 48V 25A charger for flooded, gel and AGM lead-acid batteries

The NG1 48V 25A has a clear place in an AC charging architecture for industrial electric vehicles, onboard machines, material handling equipment, light electric utility vehicles, lifts, platforms or special-purpose equipment operating at 48 V. Its short format and low 2.2 kg weight make integration easier in tight electrical compartments, provided that sufficient airflow is maintained around the housing. This compact design is a practical advantage when the charger must remain onboard rather than being moved to a fixed charging station.

Electrically, this 48V lead-acid battery charger operates from a 115/230 VAC, 50/60 Hz supply and delivers up to 25 A at 48 V. With efficiency above 85%, it is positioned as a single-phase high-frequency charger suited to applications where power density, charging stability and ease of integration matter more than heavier charging architectures. For integrators, this means the design should not focus only on nominal voltage and current, but also on upstream power quality, DC cable length and the actual thermal environment of the machine.

Autonomous CB mode

48V stand-alone charger for maintenance, retrofit and simple integration

The CB version is an autonomous version, meaning it does not natively depend on CAN-controlled charging logic. This point is critical for replacement, maintenance or standardization applications, because it allows the charger to be integrated into a simple, readable architecture that can be brought back into service quickly. The stand-alone control mode is particularly suitable for equipment where reliable charging is needed without stacking communication layers, while still keeping useful mains-present and end-of-charge status signals for indication or interlock functions.

For 48 V lead-acid batteries, charge curve selection remains a structuring parameter. The NG1 can be configured with CU1 or CU2 logic depending on the chosen charging strategy. In practice, this selection directly affects end-of-charge behavior, battery maintenance, thermal performance and overall operating behavior of the pack. With flooded, gel or AGM batteries, the charger should therefore never be selected solely on the basis of “48V 25A”: the exact chemistry, installed battery capacity, usual depth of discharge and available charging window all need to be considered together from the design stage.

48V 25A base

Product type	Single-phase high-frequency battery charger
Brand	ZIVAN
Model	NG1
Version	Autonomous CB
Control mode	Stand-alone
Nominal battery voltage	48 V
Maximum charging current	25 A
Compatible chemistries	Flooded lead-acid, gel lead-acid, AGM lead-acid
Input voltage	115 / 230 VAC
Input frequency	50 / 60 Hz
Efficiency	> 85 %
Cooling	Forced air
Auxiliary contacts	Yes
Alarm	Audible
Short-circuit protection	Yes
Reverse polarity protection	Yes
Charge curves	CU1 / CU2 depending on configuration
Mounting	Onboard or wall-mounted
Protection rating	IP20
Operating temperature	-20 to +50 °C
Housing	Metal base, self-extinguishing ABS cover
Dimensions	300 x 160 x 80 mm
Weight	2.2 kg
Validated replacement references	GGELQG-08100X, GGELQG-08100Q, F6EHMW-01040Q

Machine mounting

48V onboard charger with forced-air cooling and protected installation

The housing, consisting of a metal base and a self-extinguishing ABS cover, is specified for operation from -20 to +50 °C with forced-air cooling. This combination provides a wide operating range, but within the limits of an IP20 protection rating. The product must be installed in a protected, ventilated and mechanically stable area, away from water, splashes and dust-laden atmospheres. In practice, an IP20 48V onboard charger remains highly relevant when the installation is properly designed; if poorly ventilated or enclosed in a hot compartment, it loses part of its operating margin.

The NG1 48V 25A includes short-circuit protection, reverse-polarity protection, an audible alarm and auxiliary contacts useful for integration. These features simplify connection to machine signalling logic, an end-of-charge indicator or basic supervision. For engineering teams, this reduces the need for extra peripheral components to recover the

charger's essential status information. Nevertheless, upstream protection, conductor sizing, ventilation and the overall electrical safety strategy still need to be handled at system level.

Field applications

48V traction charger for industrial vehicles, material handling and special equipment

This 48V 25A lead-acid battery charger is intended for applications where a compact, autonomous and technically straightforward charger is required for 48 V traction or service batteries. It is suitable in particular for electric utility vehicles, material handling equipment, lifting platforms, cleaning machines, special-purpose vehicles, onboard equipment and industrial systems operating with flooded, gel or AGM lead-acid batteries.

The 300 x 160 x 80 mm format enables onboard or wall mounting in relatively tight technical spaces. The 115/230 VAC input facilitates deployment in environments where mains conditions may vary between sites, workshops or countries of operation. The stand-alone mode, with no need for a communication bus to function, simplifies wiring and reduces integration time in maintenance or retrofit applications.

Useful points of attention: this charger is not intended for direct exposure to water or fine dust in harsh environments; its IP20 rating requires protected mounting. CU1 or CU2 charge curve selection must match the actual battery installed. Finally, sizing must take into account the available charging time, the discharge profile of the vehicle or machine, and the thermal conditions inside the installation compartment.

Replaced refs

Replaces GGELQG-08100X, GGELQG-08100Q and F6EHMW-01040Q

From a maintenance standpoint, this ZIVAN NG1 48V charger is also a relevant replacement solution for several validated field references. It can replace GGELQG-08100X, GGELQG-08100Q and F6EHMW-01040Q, making it an interesting basis for fleet harmonization or simplified after-sales service operations.

This replacement capability should be used methodically: connector verification, validation of the selected lead-acid charge curve, consistency of parameter settings and confirmation of the machine's operating conditions. When used correctly, this point saves time during repair work or charger standardization on existing equipment.

Product questions

Battery compatibility, CU1 or CU2 curve and 48V onboard installation

Is this charger compatible with flooded, gel and AGM lead-acid batteries?
Yes. This version is dedicated to 48 V lead-acid batteries and covers flooded, gel and AGM technologies, provided that the selected charge curve is consistent with the battery being used.

What is the difference between CU1 and CU2?
CU1 and CU2 correspond to two different charging logics. The correct choice depends on the expected end-of-charge behavior and the actual battery technology installed on the machine.

Can the ZIVAN NG1 48V 25A be mounted onboard a vehicle or machine?
Yes, its compact format is well suited for that, provided that a protected and ventilated compartment is used,

compatible with an IP20 device with forced-air cooling.

Can this model replace an older ZIVAN charger?

Yes. Within the scope of the validated correspondences, it can replace GGELQG-08100X, GGELQG-08100Q and F6EHMW-01040Q, subject to connector and charging parameter checks.

Final choice

Reliable 48V lead-acid battery charger for integration, maintenance and standardization

The ZIVAN NG1 48V 25A is a technically relevant 48V lead-acid battery charger for integration, maintenance and replacement needs on 48 V systems using lead-acid batteries. Its autonomous logic, compatibility with flooded / gel / AGM lead-acid batteries, compact format and validated replacement references make it a serious basis for standardizing a charging function on an existing machine or a new project.

As with any onboard charger, final performance depends on the consistency between parameter settings, battery type, wiring, ventilation and actual operating conditions.

Product sheet written by **Camille F.** and reviewed by the EVEA Distribution technical team — Last updated on 2026-03-17.