

Delta-Q ICL Series

900W, 1200W & 1500W Industrial Battery Chargers - Original Instructions

Important Safety and Operating Instruction Manual

Save these instructions. This manual contains important safety and operating instructions for the Delta-Q ICL Series Industrial Battery Charger. Please read this information in its entirety before using your Delta-Q Charger. For technical support, please contact the manufacturer of your vehicle or machine, or the distributor as their version of this charger may require unique operating instructions. For additional product documentation please see www.delta-q.com/resource

Instructions importantes concernant la sécurité

Conserver ces instructions. Ce manuel contient des instructions importantes concernant la sécurité et le fonctionnement.



WARNING

The charger is to be only used with lithium-ion battery packs with integrated battery management systems (BMS). The BMS must ensure that in all operating modes, the battery cells are protected from inappropriate levels of voltage, current, temperature, and state of charge. Use the charger only with an algorithm that is appropriate to the specific battery type and capacity or when the charger is controlled via CAN interface by the BMS. Other usage may cause personal injury and damage. Keep sparks, flames, and smoking materials away from batteries. Do not operate charger in a closed-in area or restrict ventilation. Never charge a frozen or non-rechargeable battery. Observe all equipment and battery manufacturers' precautions



DANGER

Risk of electric shock. Connect charger power cord to an AC outlet that has been properly installed and grounded in accordance with all local codes and ordinances. A grounded AC outlet is required to reduce the risk of electric shock—do not use ground adapters or modify the plug. Do not touch uninsulated portions of the output connector or uninsulated battery terminals. Disconnect the AC supply before making or breaking the connections to the battery. Do not open or disassemble the charger. Do not operate this charger if the AC supply cord or DC output cord is damaged or if the charger has received a sharp blow, been dropped, or is damaged in any way. Refer all repair work to the manufacturer, or qualified personnel. This charger is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge on electrical systems and battery charging, unless they have been given supervision or instruction concerning use of the charger by a person responsible for their safety. Children should be supervised to ensure they do not play with the charger.



ATTENTION

Le chargeur ne doit être utilisé qu'avec des batteries au lithium-ion équipées de systèmes de gestion des batteries intégrés (BMS). Le système de gestion des batteries doit assurer que dans tous les modes de fonctionnement, les cellules de la batterie sont protégées contre les niveaux inappropriés de tension, de courant, de température et d'état de charge. Utiliser le chargeur seulement avec un algorithme approprié au type et à la capacité spécifique de la batterie, ou lorsque le chargeur est commandé à travers l'interface CAN par un système de gestion des batteries. D'autres types de batteries pourraient éclater et causer des blessures ou dommages. Ne jamais fumer près de la batterie et éviter toute étincelle ou flamme nue à proximité des batteries. Fournissez une ventilation adéquate du chargement. Ne jamais charger une batterie gelée. Prendre connaissance des mesures de précaution spécifiées par les fabricants de l'équipement et de la batterie.



DANGER

Risque de décharge électrique. Ne pas toucher les parties non isolées du connecteur de sortie ou les bornes non isolées de la batterie. Toujours connecter le chargeur à une prise de courant mise à la terre. Déconnectez la source AC avant de faire ou défaire les connexions à la batterie en chargement. Ne pas utiliser le chargeur si le cordon d'alimentation AC est endommagé ou si le chargeur est abîmé suite à une chute ou autre incident. Ne pas ouvrir ni désassembler le chargeur – référer toute réparation aux personnes qualifiées. Cet appareil n'est pas destiné à un usage par des personnes (dont les enfants) avec des facultés motrices, sensorielles ou mentales réduites, ou ayant une expérience et des connaissances insuffisantes, à moins qu'elles sont sous la supervision ou reçoivent les instructions sur l'utilisation de l'appareil d'un répondant garant de leur sécurité. Les enfants devraient être surveillés afin qu'il ne jouent en aucun temps avec l'appareil.

Safe Operating Instructions

- ❖ The charger may contain charging profiles stored in its internal memory to charge batteries. These profiles are specific to each manufacturer and model of battery. Your equipment supplier or charger distributor is responsible for ensuring the active charge profile matches the battery pack charging requirements. Contact the equipment manufacturer with any questions about battery charging.
- ❖ The charger may become hot during charging. Use hand protection to safely handle the charger during charging.
- ❖ To maintain safe operations, the unit automatically reduces its output power if the temperature rises above set thresholds, or if the AC input voltage is too low. The charger will also reduce output power if it detects that the battery pack is damaged.
- ❖ If power is interrupted, and then returns, the charger will start and continue to operate without hazard to the user, or damage to the batteries.
- ❖ Unplug the charger from both AC and DC sources when cleaning, moving or conducting any maintenance or repair on the charger. No user serviceable parts inside. Do not remove the cover due to the risk of electrical shock.
- ❖ Do not expose charger to oil, dirt, mud or direct heavy water spray when cleaning the vehicle or machine.
- ❖ If the detachable AC input power cord set or DC output cord is damaged, do not use the charger until they are replaced with cord sets appropriate to your region and application.
- ❖ When mated with a Delta-Q sealed AC cord, the charger meets IP66 specifications, making it dust-tight and protected against powerful water jets. If a cord set with an unsealed connector is used, the plug and connector must be periodically inspected to ensure the contacts are clean and dry.
 - ❖ If this charger is provided with an AC cord set and the power plug does not match the power outlet, contact the equipment manufacturer, distributor or Delta-Q Technologies for the correct AC cord set terminating with a 3-prong plug suitable for your regions' grounded power outlet.
 - ❖ In North America (and other 120V AC regions), the AC cord must be a 3 conductor UL Listed/CSA approved detachable cord set at least 1.8m in length (≥ 6 feet), minimum 16AWG and rated SJT, 105C min.; terminated with min. 125V, 13A or greater connector.
 - ❖ In Japan, the AC cord must be a 3 conductor PSE approved detachable AC cord set, rated 105C, and terminated with 100V, 15A or greater connector.
 - ❖ In 220-240VAC regions the AC cord must be a 3-conductor safety-approved cord set, with 1.5mm² conductors (min.), rated appropriately for industrial use. The cord must be terminated on one end with a grounding type input plug appropriate for use in the country of destination and both plug and connector should be rated 250V, 10A or greater.
- ❖ Extension cords must be 3-wire cord no longer than 30m (100') at 10 AWG or 7.5m (25') at 16 AWG, per UL guidelines.

Identifying Charger Serial Number

The charger's serial number is printed on the front of the charger below the Delta-Q logo. This is the number to provide when requesting technical support.



Delta-Q Technologies Corp.
3755 Willingdon Ave.
Burnaby, B.C. V5G 3H3 CANADA
Phone: +1.604.327.8244

E-mail: support@delta-q.com
Web: www.delta-q.com
User Documentation: www.delta-q.com/resources