



PRODUCT SPECIFICATION

Product Line: **EVSE**

Product #: **3722** Version #: **A4XXX**

Galaxy Overhead Mounted J1772 EVSE with Automatic Cable Management

The Model 3722 electric vehicle charger provides 208 - 240V AC up to 40A. Designed as per the SAE J1772 requirements to meet or exceed all safety codes specified by UL and NEC, the unit is engineered for mounting overhead in public or private parking garages, while meeting or exceeding NEMA 3R specifications.

The charger is equipped with a state of the art cable management system, which fully retracts and protects both the cable and the connector from harsh weather and vandals. The cable management system is ADA compliant and eliminates tripping hazards.

Modular in design, the charger can be configured for simple On-Off control, or for more demanding requirements of credit/debit and ID card processing through the addition of an optional Payment Module. Serial or Zigbee connections are available for facilitating communication between the 3722 and Payment Module. A single serial Payment Module can support from one to eight 3722s, depending upon its configuration. ZigBee networks, allowing wireless connections, are secured by 128-bit symmetric encryption keys, so security is assured. A single ZigBee Payment Module can support up to 32 remote 3722s.



Description: The Model 3722 is a 9.6 kW ceiling-mounted EVSE charger with cable retraction, capable of providing up to 40A at 208-240VAC, single phase at 50/60 Hz. It is also available at 7.2 kW, capable of providing up to 30A at 208-240VAC, single phase at 50/60 Hz. This ceiling-mounted unit complies with the SAE J1772 specifications for supplying electrical power to a J1772-compatible Electric Vehicle (EV). When the 3722 has been activated for a charge cycle, the cable is lowered to an ADA height and the user simply pushes the button on the J1772 connector to extend the cable to a maximum of 20 feet for attachment to the electric vehicle.

Data Router: The Data Router in the charger can be configured for either free use or use in conjunction with an optional Payment Module. The charger can also be equipped with a Data Router with a *Handbook 44*-compliant display module to display Kilowatts (kW) used and the associated cost. The *Handbook 44*-compliant Data Router displays the data collected by an EUMD Module (End-User Measurement Device), which is an internal revenue-grade meter that measures power dispersed to the vehicle during a session with 1% or better accuracy.

Cable Management: The J1772 power cable and connector are stored high above parked vehicles when not in use, and locked in place for protection from vandals. When a valid charge activation is received, the connector automatically lowers to the ADA-compliant level of 48 inches. At that point, pushing the proximity button on the connector allows free cable extension up to 20 feet for attachment to the electric vehicle. If the connector isn't attached to the vehicle within one minute, longer if a Payment Module is used, the cable automatically retracts to the stored position. When the charge cycle completes and/or the connector is removed from the vehicle, the cable automatically retracts to the stored position.

Power Management: The charger provides up to 9.6 kW (208/240 VAC @ 40A) to the electric vehicle when activated. It is also available at 7.2 kW (208/240 VAC @ 30A). Power is continually monitored and the charger disconnects power to the vehicle if the voltage deviates from the acceptable range, or if the load current exceeds the maximum level. Three re-closures are attempted to prevent nuisance service breaker trips. The charger can also receive *Load Shed* commands via host communication networks, signaling it to reduce power by either percent of total or to designated current levels, including simulated Level 1 (7A).

The 3722 also includes a *Random Start* feature. In the event of a deep voltage sag or momentary power outage, it delays its restart for a random time period of between two to five minutes after the power has been restored. Once the charger restarts, it *ramps up* to the required maximum power at a rate of 1A/second. This prevents power surges when restoring power to multiple chargers.

Safety: The charger is equipped with a **Ground Fault Circuit Interrupter (GFCI)**. The GFCI circuit is tested at the beginning of each charge cycle. If a ground fault occurs during the charge cycle, power is removed from the vehicle, and three re-closures are attempted to see if the ground fault clears. If not, the user sees a message indicating charging is not taking place. A message of the event is also sent to the host network. When the cable is removed, it automatically retracts.

The charger is also equipped with a **Plug Out Detection** circuit that identifies when the connector is removed from the vehicle. This allows the charger to immediately remove power from the electric vehicle and start the cable retraction procedure. A message of the event is sent to the host network.

The 3722 also includes a power disconnect switch for quickly removing input power to the charger for any maintenance work or cycle testing.

Label Description: **Galaxy Overhead**

Product Code: **3722-A4xxx**

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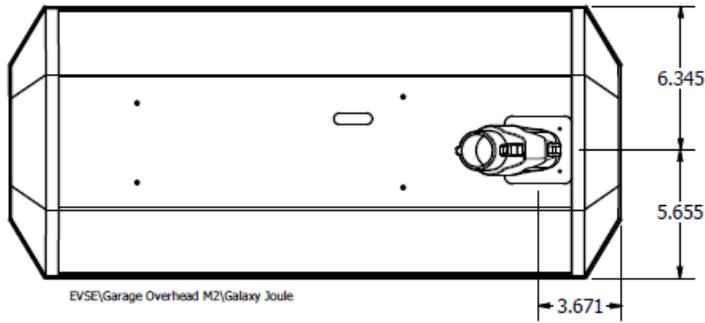
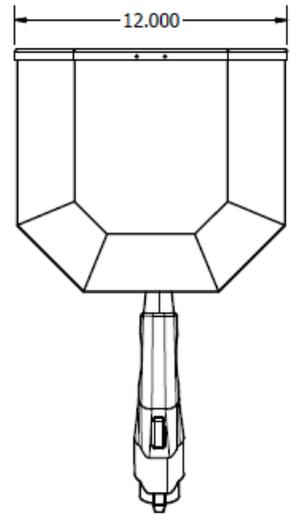
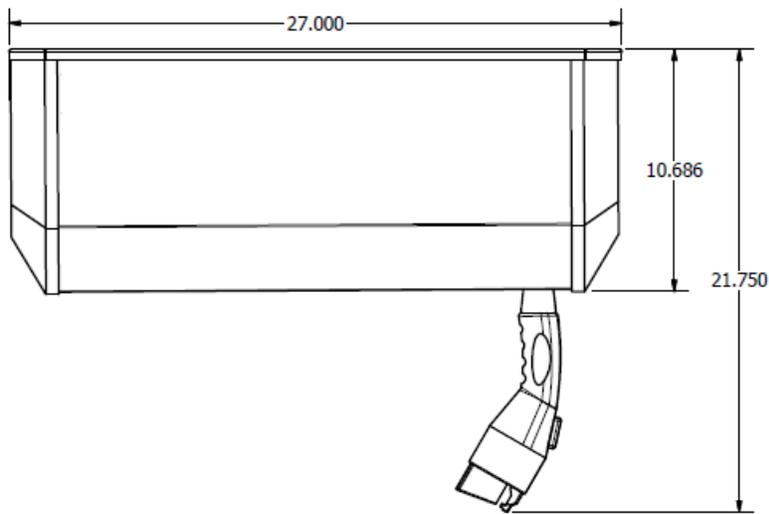
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3722-A4xxx Mechanical Drawing:



Specifications

Electrical Input:

Power Input:	9.6 kW (or 7.2 kW)
Voltage Input:	208-240 VAC
Current Input:	40A (or 30A)
Breaker	2-pole 50A (or 40A) breaker Non GFCI on a dedicated circuit
Stand By Power	Less than 6W typical (without communication operating)

Electrical Output:

Power Output:	9.6 kW (or 7.2 kW)
Voltage Output:	208-240 VAC
Current Output:	40A (or 30A)
Charging Connector:	SAE J1772 EV Connector on a 20' retractable cord

Safety:

Compliance:	IEC/UL/CSA C22.2 NO. 61010-1, UL2594, UL2231-1&2, NEC Article 625, SAE J1772
EMC Compliance:	FCC Part 15 Class A, Canadian ICES-003
Over Current Protection	42A for 1 minute with auto-reset when disconnected
Surge Protection	6KV @ 3000A
Ground Fault	Internal 20 MA CCID with auto re-closure (three attempts)

Functional Interfaces:

Local Area Network:	ZigBee mesh protocol@ 2.4Ghz ISM (Serial hard-wired also available) FCC ID: MCQ-PROS2B, IC: 1846A-PRO S2B
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Environmental:

Operating Temperature	-22° to 122° F (-30° C to 50° C) ambient
Operating Humidity	Up to 95% non-condensing
NEMA Rating	NEMA 3R

General:

Weight	35 lbs
Size	27" x 12" x 10.7"