

Rack Solution for the Electric Vehicle Battery Test System

ELECTRIC VEHICLE BATTERY TEST SYSTEM: CONFIGURATION CHECKLIST

This document is dedicated to describe a detailed example of a rack configuration for an Electric Vehicle Battery Test System. This concept intends to provide a general solution for the test system, and is a basis for application specific configurations. nVent SCHROFF capabilities and product platforms allow a huge range of modifications. The rack itself will typically be used to house different test modules, power entry module and power distribution unit.

General Requirements:

19" Racks in the following dimensions:

- Height 1900 mm (40U useable height), width 600 mm, depth 800 mm
- The racks will be mounted with ESD castors
- Frontside with 19" brackets
- Rear side with shorten door and air inlet panel
- Cable entry from top and/or rear side
- Max. static load approx. 435 kg
- ESD-compliant design

Configuration Checklist:

Item Number	Description
20630228	1x Frame version CP 42U/600W/800D based on a welded frame with very slender rolled steel profiles, with special holes located at all three axes on a 25 mm grid (height, width, depth), load-carrying capacity up to 1.600 kg static (This value represents only the frame without castors).
21630313	1x Deco Cabinet Frame 42U <ul style="list-style-type: none">▪ 19" plane is integrated into decorative frame▪ Aluminum, decorative frame for open cabinet
24630017	1x Gasket kit for IP 20, material halogen-free
23130224	2 x Adapter brackets for deco frame made of steel.
21630337	1 x Rear door made of steel, reduced height H 1400 mm, opening angle of 180°, 3 point locking and flush handle with key. Single door, left hinges.
21630303	1x Side panel kit 42U with quick-release fastener and lock, material steel 1,0 mm
21630598 / 23130165	1 x Raised top cover with 6 x fans (230 VAC) assembled.

Item Number	Description
20118900	1x Fan Speed Control Unit, EMC Compliant, with IEC Plug
21630803	1 x Base plate made of steel, single piece with opening on rear side (Option for cable entry).
24630103	1 x Cover plate made of steel, to close rear opening of base plate.
23130015	2 x 19" Panel/slide mounts EIA 38U, mounted in a distance to fit sliding rails.
23130082	4 x 3-row depth members, material steel, 1.5 mm, finish AlZn, assembled 2 x left and right side.
64230096	1x 19" Cable Ducting With Brush Strip, mounted on the rear side.
30702058	1x 19" Front panel 3U vented , material steel 1.5 mm, mounted on the rear side of the rack
24630001	GND/earthing: conductive connections (4 mm ²), all cabinet parts to one GND/earthing point according EN 50310 and EN 50174
24630020 / 27230069	1x set of 4 castors with ESD wheels (24630020 without ESD 900 kg), 27230069 with ESD 400 kg)
21101810	Mounting set M6, 100 pcs
Paint	The rack is painted with ESD conform powder coat. Color: to be chosen based on request



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