

RTU Riga Technical University

→ COMPISO User Story

User:

RTU Riga Technical University
Institute of industrial electronics and electrical engineering
1 Kalku Street
Riga LV-1658 Latvia

Installed System:

COMPISO System Unit CSU200-1GAMP4
prepared for later extension by a second group of four amplifiers

Application:

Research on power electronics and electric drives, e.g.:

Example 1: test of a level one onboard charger in a Volkswagen e-Up car with COMPISO System Unit switched to single-phase mode. Unit allows for easy change of frequency and amplitude to detect operating limits and influences of varying values on the charging process.

Example 2: test of a new synchronous motor design featuring windings with an asymmetric phase shift. COMPISO System Unit operates in 3-phase mode, much like a "frequency converter", selecting a voltage/frequency ratio according to an allocation table, with the designed phase shift set independently for each motor phase. This makes motor prototype testing for optimized drive inverter design extremely efficient.

Benefits:

Easy voltage, amplitude and frequency changes for single-phase grid emulations.

Individual voltage and frequency setting with additional non-symmetric phase shift varying for efficiently testing special synchronous motor prototype designs.

SFP interface to connect external HIL real-time processors for more complex test models.