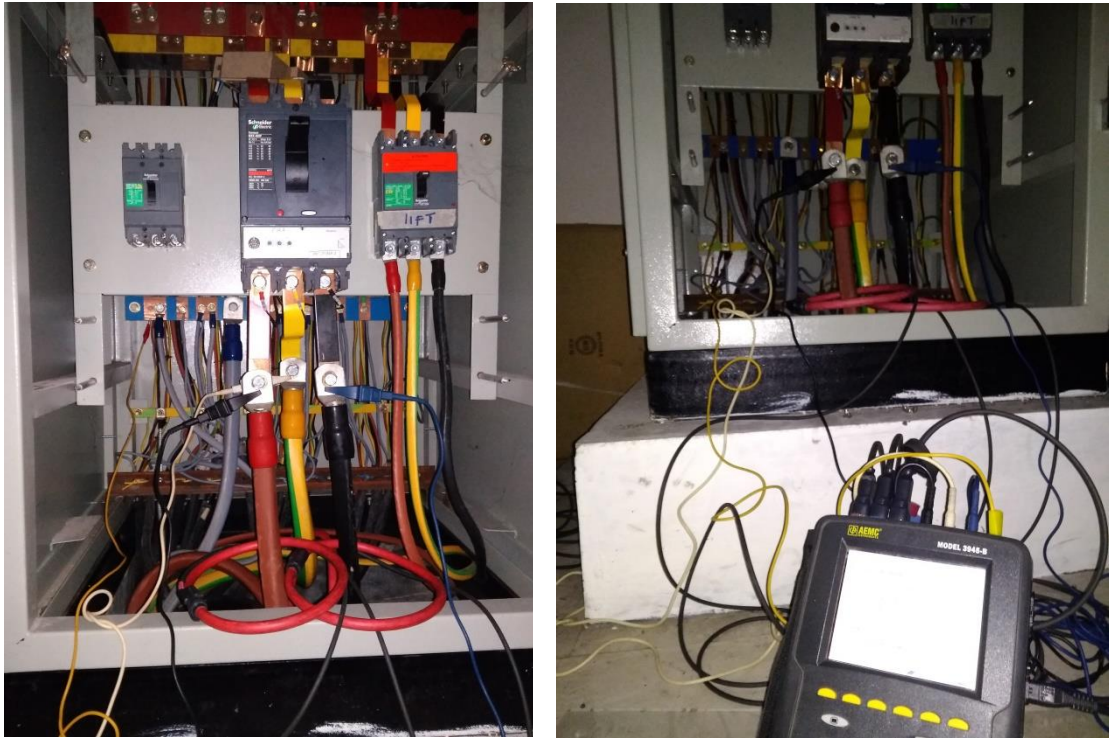


## LAMPIRAN

1. Foto panel LVMDP gegun E6 UMY dan alat ukur yang terpasang di panel.



2. Spesifikasi alat Metrel 2892

MI 2892 Power Master adalah alat analisis kualitas daya tiga fasa genggam dengan tampilan warna grafis yang besar dan mudah dibaca yang memungkinkan pengguna untuk mendeteksi anomali harmonik, fasa, dan bentuk gelombang dalam instalasi hanya dengan menghubungkan perangkat. Instrumen ini dirancang untuk perekaman jangka panjang serta untuk mengatasi masalah kualitas daya dalam sistem distribusi daya tiga fase dan satu fase. Tombol Pengaturan Cepat yang praktis membuat instrumen lebih ramah pengguna dan memungkinkan tinjauan data yang lebih cepat untuk pemecahan masalah. Paket SW PC tingkat lanjut, PowerView3 memungkinkan analisis terperinci data yang direkam, pembacaan langsung dari kartu memori microSD, analisis catatan jangka panjang dan pembuatan otomatis laporan pengujian profesional.

#### Measuring functions:

- Voltage: TRMS, peak, crest factor (4-channel);
- Current: TRMS, peak, crest factor (4-channel);
- Power (active, reactive, apparent);
- Power measurements fully compliant with IEEE 1459 (active, non active, fundamental, harmonic, load unbalance) and classic (vector or arithmetic) method;
- VFD (Variable Frequency Drives);
- Unbalance, flicker measurement;
- Harmonic and interharmonic analysis up to 50th harmonics, THD measurement;
- Energy (active, reactive, generated, consumed);
- Capturing and recording of power supply events (shutdowns, interruptions, swells, dips);
- Inrush currents monitoring and recording;
- Waveform/inrush displaying, snapshot and recording;
- Transients recording;
- Power quality analysis according to EN 50160, IEEE 519;
- Recording up to 7 adjustable alarms;
- Temperature measurement;
- Power factor  $\cos \phi$ .

#### Key features:

- 4-voltage channels with wide measurement range: 0 ... 1000 Vrms (CAT III / 1000 V);
- 4-current channels with support for automatic clamp recognition and “on instrument“ range selection;
- Automatic Smart Clamp detection and Smart Clamp range selection;
- Sampling frequency on transients recording 49 kSamples/sec;
- Compliance with power quality standard IEC 61000-4-30 Class A;
- Complete power quality analysis according to EN 50160 including signalling and interharmonics;
- Support for microSD memory card (8-GB supplied with the instrument) up to 32GB;
- Color-coded input terminals and terminal labels to suit your application region;
- Intuitive main menu and large icons that makes the equipment very easy to navigate and configure;
- Current clamp auto range selection;
- Powerful PC SW PowerView3 enables downloading, view, analysis of recorded data and professional report creation;
- Flexible clamps (without additional power supply) are included in the Euro set;
- Remote communication via Ethernet (GPS clock synchronization - optional).

Software:

PowerView PC SW platform contains a package of functionalities needed for profound evaluation of power quality phenomena and creation of complex reports like:

- Data download
- Predefined EN 50160 power quality test report
- Data merge
- Transfer of test data to other applications (MS Excel, MS Word, etc.)
- Filtering of recorded data
- Tool for repairing of downloaded results to prevent loss of data during transmission