

# Thyro-Power Manager

EN

## COMMISSIONING OF THYRO-POWER MANAGER

Quick Installation Guide, valid is only the actual AEG Power Solutions operating manual of Thyro-Power Managers (No. 8.000.024.628).

### CONTENTS

- 1. Connection for voltage supply
- 2. Network Load Optimization
- 3. Additional Measurement Device
- 4. Safety Notes
- 5. Operation
- 6. Contact

### 1. CONNECTION FOR VOLTAGE SUPPLY

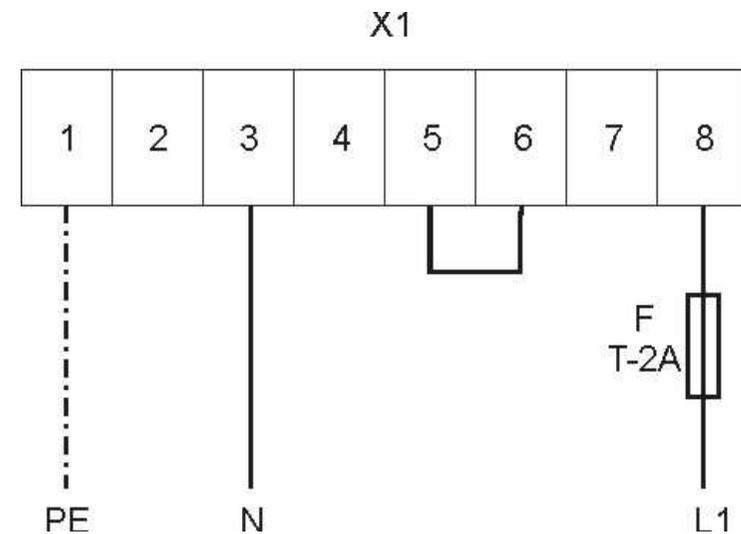


Figure 1: Connection diagram for voltage supply 230V-; 50/60 Hz



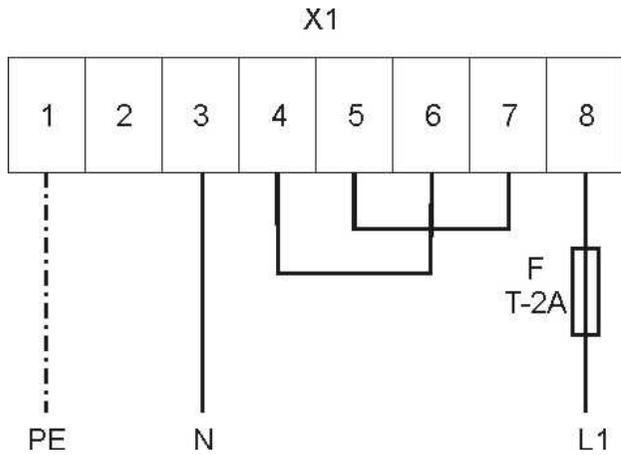


Figure 2: Connection diagram for voltage supply 110V~/50/60 Hz

## 2. NETWORK LOAD OPTIMIZATION

### 2.1. CONNECTION FOR NETWORK LOAD OPTIMIZATION / POWER CONTROLLER

The unit possesses 10 digital outputs at the terminals X3 and X4, in total. These are designed as potential-free optical coupler outputs. They are deployed as synchronization outputs (SYT) for the connected power controllers or power controller groups during the network load optimization process. Up to 10 power controllers can be connected per channel. To operate a 2-wire, shielded cable is required between Thyro-Power Manager and each power controller.

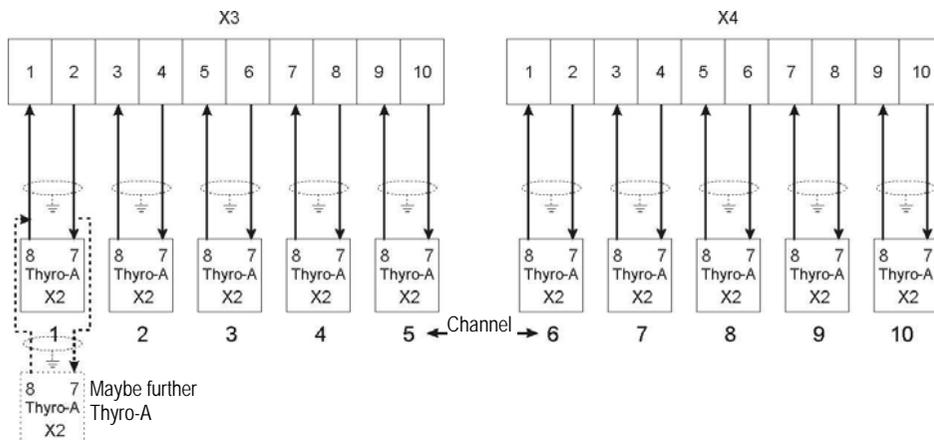


Figure 3: Connection Diagram for Network Load Optimization using Thyro-A

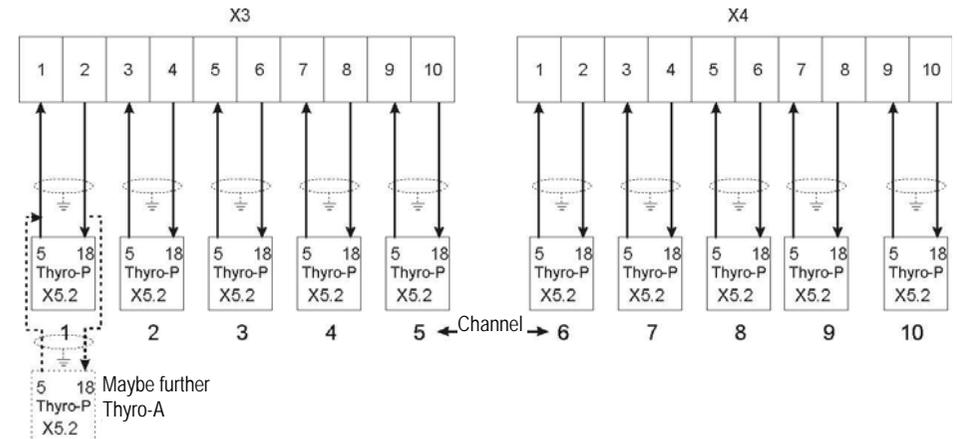


Figure 4: Connection Diagram for Network Load Optimization Using Thyro-P

## 2.2. NETWORK LOAD OPTIMIZATION SETTINGS

### Setting the Operating Mode

The selected function must be set using the switch S3. Switch position 1 = automatic static network load optimization

### Setting the Number of Power Controllers

If network load optimization is used, the number of connected power controllers or power controller groups must be set by using the switch S2. Switch position 1 = 1<sup>st</sup> power controller, 2 = 2<sup>nd</sup> power controller etc. up to A = 10th power controller

### Setting the Elementary Period Duration T0

By using the potentiometer R309 it is possible to set the elementary period duration T0. It is default set to 50 periods = 1s ex works. **Usually, this setting does not have to be changed.**

## 3. ADDITIONAL MEASUREMENT DEVICE

### 3.1. CONNECTION FOR NETWORK PEAK VALUE MONITORING / MEASUREMENTS

If electrical current or voltage converters are connected to the measurement inputs (figure 5), the effective value is measured (throughout the integration time interval), and furthermore outputted as DC signal (0 – 10V) to the three analog outputs. Additionally, the measurement values are also internally available, and may be queried via a PC or bus system.

The load resistance also has to be connected externally to the current converters. Within standard default setting the following measurement values are read out: output 1 - measurement value 1, output 2 - measurement value 2, output 3 - measurement value 3. The following figure displays the principle structure and the connection diagram if using as additional measurement device.

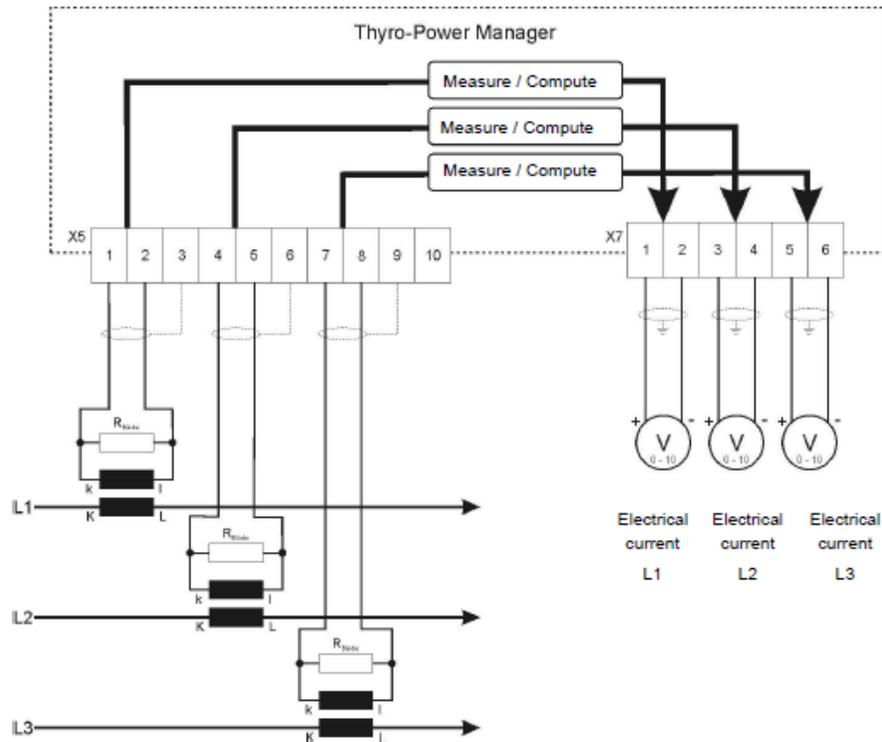


Figure 5: Connection Diagram for Additional Measurement Device

### 3.2. SETTING THE NETWORK PEAK LOAD MONITORING / MEASUREMENTS:

No settings are necessary for the additional measurement device. Converters or load resistances have to be configured in a manner so that a 1V- measurement voltage is generated at a nominal electrical current. Thus, a voltage of 10V- results at the respective analog output.

### 3.3. SETTING THE LIMITING VALUE FOR MONITORING

If the additional measurement device is also used as network peak load monitoring, limiting value could be set via the help of the potentiometer R310. Standard setting is 200%, the

potentiometer is set on right stop, whereby 100% meaning 1V- at the measurement inputs / load resistances.

## 4. SAFETY NOTES



The commissioning of the unit is permitted only upon expert installation!

For this see the currently valid AEG Power Solutions operating manual of Thyro-Power Manager.

## 5. OPERATION



Mains voltage - Danger!

Activate the unit only if it is secured that all necessary measures for protection against electric shock are implemented.

### 5.1. REGULAR OPERATION

Enabling mains voltage during regular operation activates the unit. Subsequently, the green power LED H100 and the green ON LED H101 should burn. If network load optimization is used, the LEDs H201 - H210 turn ON one after another (contingent to the selected number). All measurements and functions are performed as selected.

For more information and integration of software for programming, measurement and indication please see our comprehensive and actual valid operations manual.

## 6. CONTACT

### TECHNICAL QUERIES

If you have any technical queries regarding the subjects dealt with in these operating instructions, please get in touch with our team for power controllers:

Phone: +49 (0) 2902 763-520

### COMMERCIAL QUERIES

If you have any commercial queries on power controllers, please get in touch with:

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### SERVICE-HOTLINE

Our team is at your service on the following hotline:

Phone: +49 (0) 2902 763-600

### INTERNET

Further information about our company or products please visit:

<http://www.aegps.com>

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