

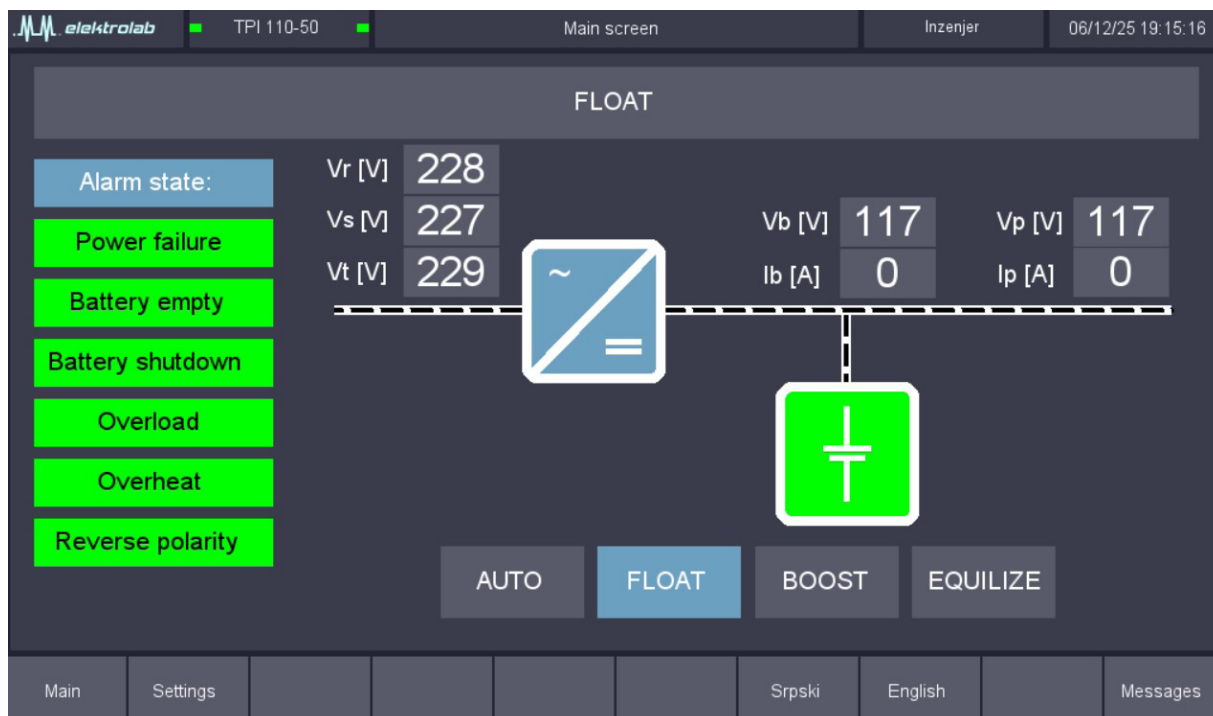
THYRISTOR BATTERY CHARGER-RECTIFIER

Model: TPI 110-63

DESCRIPTION:

- These power supply are used in the: Power plants / Transformer substations / Oil and gas industry / Railway systems / Airports / Hospitals / Industrial plants
- High quality DC power supply, long lifetime without reparations
- The device is powered from a three-phase mains voltage with galvanic isolation, supplies DC consumers and charges batteries in accordance with its nominal capacity according to the IUU characteristic.
- When the mains voltage disappears, there is no break and the consumers continue to be powered from the battery, when the batteries are discharged to the permissible limit, the device is switched off.
- When the mains voltage returns to the permitted limits, the device restarts (in a situation where the batteries are empty and the device is turned off) and continues to charge the batteries and supply the consumers.
- Operator panel - 10-inch screen, displays measured values, alarm statuses, parameter setting (remote and local parameterization), with color change in alarm occurrence statements, communication via LAN and VNC (virtual network computing), MODBUS protocol (reading and setting parameters).

Front panel layout:



- Fully automated - does not require human presence and supervision, once set parameters in the device are permanently stored for an unlimited period.
- Inside the cabinet, it has terminals for: three-phase mains supply / Battery supply / Consumer supply / remote signaling connector / LAN.

TECHNICAL SPECIFICATIONS:

MODEL:	TPI 110-63
INPUT:	
Input voltage:	3 x 400V +/-15 % / N, PE
Frequency:	50Hz +/-5%
OUTPUT:	
Nominal Voltage:	110V
Statistic output voltage tolerance:	+/-1%
Dynamic output voltage tolerance:	+/-5%
Nominal output current:	max 63A
Current tolerance:	+/-2%
Rectifier output voltage ripple:	<3%
Power factor:	>0,9
Voltage adjustment range:	Float / Boost / Equalizing charge from 105 V to 145 V (individually adjustable)
Current adjustment range:	Float current threshold / Charge current threshold / Maximum current (from 1 A to 50 A - individually adjustable)
Charging characteristic:	IU (DIN 41773)
Cooling:	natural + active regulation (automatic activation as required)
Noise level:	<50dB
Degree of protection:	IP20
Ambient temperature:	-10°C / +40°C
Cabinet dimensions:	Height 1600 mm x Width 600 mm x Depth 400 mm
Color:	RAL 7035
Thyristor full bridge:	6 pulse controlled
OPERATOR PANEL (10" TOUCH SCREEN):	1. Display of a single-pole scheme of the system that changes colors depending on the operating state in real time. 2. Control unit for parameterization: local and remote 3. Output / input for LAN communication
Communication protocol:	Modbus TCP / IP
SAFETY STANDARDS:	
LVD 2014/35/EU :	EN IEC 62368-1:2020 / EN IEC 62368-1:2020/A11:2020 / EN IEC 62368-1:2020/AC:2020-05
LVD 2014/35/EU :	EMC 2014/30/EU : EN IEC 61204-3:2018
Electrolytic capacitors for filtering the output voltage	
EMI filters to prevent interference.	
Varistor protection against overvoltage in the mains voltage.	

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PROTECTIONS:	<ul style="list-style-type: none"> Overheating Overload Battery overcharge Battery reverse polarity Deep battery discharge Low or high input mains voltage Excessive charging current Excessive load current
DSP digital signal processor technology	
Weight:	161 kg
CHARGER OPERATING MODES:	<ol style="list-style-type: none"> 1. Automatic 2. Float charge 3. Charge 4. Equalizing (deep) charge
ADJUSTABLE PARAMETERS (via operator panel+MODBUS):	<ol style="list-style-type: none"> 1. Float voltage 2. Charge voltage 3. Equalizing charge voltage 4. Alarm activation voltage level for "Battery Discharged" 5. Battery and rectifier shutdown voltage level 6. Maximum charging current (common for all charging modes) 7. Float current threshold 8. Charge current threshold
Alarms:	<ol style="list-style-type: none"> 1. Mains voltage failure 2. Battery discharged 3. Battery disconnected 4. Overload 5. Overtemperature 6. Battery reverse polarity
MEASUREMENTS DISPLAYED:	<ol style="list-style-type: none"> 1. Battery (rectifier) voltage 2. Battery charging current 3. Load current 4. Mains voltage – each phase individually

DECLARATION OF CONFORMITY
No. 01-06 / 25

Manufacturer : M.M.Elektrolab,
Đžona Kenedija 11, 11130 Beograd, Srbija

declares under its own responsibility that the rectifier systems listed below:

<i>Product name</i>	<i>Single phase and three phase automatically regulated thyristor rectifiers with or without additional branch</i>
<i>Model</i>	<i>PI 1825 / PI 2425 / MPI 2463 / TPI 2463 / MPI 4863 / TPI 4863 / MPI 110-30 / MPI 110-40 / TPI 110-25 / TPI 110-50 / TPI 110-63 / TPI 110-125 / TPI 220-30 / TPI 220-50 / TPI 220-100 / TPI 110-63 DG / TPI 110-125 DG / TPI 220-50 DG / TPI 220-100 DG</i>

Is in conformity with the relevant Union harmonisation legislation and the following standards have been applied:

<i>Electromagnetic Compatibility (EMC) Directive</i> <i>2014/30/EU</i>	<i>Applied standard:</i> <i>EN IEC 61204-3:2018</i>
<i>Low Voltage Directive (LVD)</i> <i>2014/35/EU</i>	<i>Applied standards:</i> <i>EN IEC 62368-1:2020</i> <i>EN IEC 62368-1:2020/A11:2020</i> <i>EN IEC 62368-1:2020/AC:2020-05</i>

Place and date:

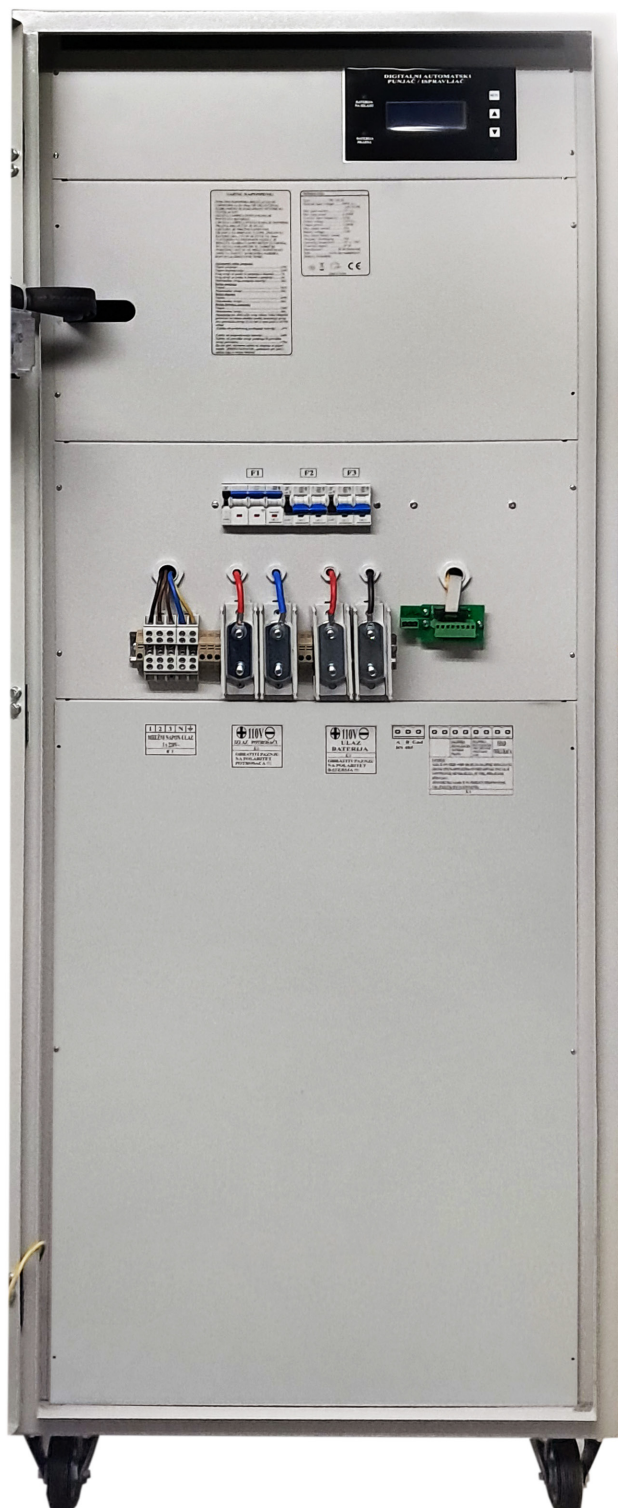
Beograd, 15.6.2025

Signed for and on behalf of:

Milutinovic Miroslav, owner



TERMINAL AND FUSE ARRANGEMENT:




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