



**MORE THAN SENSORS  
AND AUTOMATION**

# JUMO TYA HL series

Single-phase and three-phase thyristor controllers



## Top features at a glance

- Flexibility through a wide area of application
- UL 508 certification for models up to 700 A
- Energy conservation through optional load management
- Process reliability and optimization through data logging
- Reduced space requirement in the control cabinet due to compact size





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## Product description

This JUMO TYA HL 301/302/303 product series offers a powerful solution for thermal processes with its wide area of applications (300 to 800 A), compact design, and efficient top-bottom wiring. The integrated data logging function ensures a high degree of process reliability and smooth plant operation. Comprehensive setup features, including an oscilloscope to visualize the output voltage, significantly simplify the configuration and startup.

## Other advantages

- Certification for the American market
- Communication with numerous controls
- Simple configuration via USB interface
- Simple and variable external current limiting using the 2nd analog input
- Optimal adjustment of the output power through a wide range of control modes
- Quick and easy top-bottom wiring
- Powerful setup program saves time
- High degree of plant and process reliability through condition monitoring
- Optimization of load distribution and avoidance of current peaks
- Configuration changes in just a few steps via the integrated control panel

## Technical data

Product name	JUMO TYA HL 301/302/303
Product designation	Single-phase and three-phase thyristor controllers
Type	Type 709081/82/83
Nominal current	300 to 800 A
Nominal voltage	230 to 690 V
Control types	U, I, P, U <sup>2</sup> , I <sup>2</sup>
Certifications	cUL 508 to 700 A, UL at 800 A
Field bus interfaces	Modbus RTU <b>Optional:</b> PROFINET, PROFIBUS, Ethernet IP, Modbus TCP, EtherCAT
Analog inputs	Standard signal (0 to 10 V, 0 to 20 mA), potentiometer
Digital inputs	2
Load management	Up to 24 zones (optional)
Setup program	Wizard, oscilloscope, remote control option
Miscellaneous	Operating panel, SD memory card

## Areas of application

Thermoprocess technology; water and wastewater; renewable energy; food and beverage; transportation; HVAC; semiconductor production; surface coatings

