

JUMO TYA HL301 – One-phase Thyristor power controller

- LED display with control panel
- Setup software with wizard for easy commissioning
- Phase angle control and burst firing operation in one device
- Partial load break monitoring
- Process data recording
- Energy meter
- Various fieldbus interfaces
- UL 508 approval up to 700A



Order details

| | |
|--------------------------|--|
| (1) Basic type | |
| 709081 | JUMO TYA HL301 one-phase thyristor power controller |
| (2) Version | |
| 0 | Standard version |
| (3) Load current | |
| 120 | AC 120 A |
| 150 | AC 150 A |
| 180 | AC 180 A |
| 210 | AC 210 A |
| 300 | AC 300 A |
| 400 | AC 400 A |
| 500 | AC 500 A |
| 600 | AC 600 A |
| 700 | AC 700 A |
| 800 | AC 800 A |
| (4) Mains voltage | |
| 115 | AC 115 V |
| 230 | AC 230 V |
| 400 | AC 400 V |
| 480 | AC 480 V |
| 600 | AC 600 V |
| 690 | AC 690 V |
| (5) Output | |
| 000 | Without |
| 005 | 4 to 20 mA |
| 040 | 0 to 10 V analog |
| (6) Interface | |
| 00 | Not to be used |
| 54 | RS422/485, J-Bus, MOD-Bus |
| 63 | PROFINET-IO Device (2x RJ45) |
| 64 | PROFIBUS-DP (slave) |
| 84 | EtherCat |
| 85 | Ethernet (Modbus TCP) |
| 86 | Ethernet IP |
| (7) Extension | |
| 00 | None |
| 01 | Energy totalizer |
| 02 | Datalogging |
| 03 | Datalogging and Energy totalizer |
| 04 | Bluetooth device |
| 05 | Bluetooth device and Energy totalizer |
| 06 | Bluetooth device and Datalogging |
| 07 | Bluetooth device with Datalogging and Energy totalizer |
| 08 | Heater brake |
| 09 | Heater brake and Energy totalizer |
| 10 | Heater brake with Datalogging |
| 11 | Heater brake, Datalogging, Energy totalizer |

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|------------------------|--|
| 12 | Heater brake with Bluetooth device |
| 13 | Heater brake, Energy totalizer and Bluetooth device |
| 14 | Heater brake with Datalogging and Bluetooth device |
| 15 | Heater brake, Datalogging with Energy totalizer and Bluetooth device |
| 16 | Current limit |
| 17 | Current limit with Energy totalizer |
| 18 | Current limit with Datalogging |
| 19 | Current limit with Datalogging and Energy totalizer |
| 20 | Current limit with Bluetooth device |
| 21 | Current limit with Bluetooth device and Energy totalizer |
| 22 | Current limit with Bluetooth device and Datalogging |
| 23 | Current limit with Bluetooth device, Datalogging and Energy totalizer |
| 24 | Current limit with Heater brake |
| 25 | Current limit with Heater brake and Energy totalizer |
| 26 | Current limit with Heater brake and Datalogging |
| 27 | Current limit with Heater brake, Datalogging and Energy totalizer |
| 28 | Current limit with Heater brake with Bluetooth device |
| 29 | Current limit, Heater brake with Bluetooth device and Energy totalizer |
| 30 | Current limit, Heater brake with Bluetooth device and Datalogging |
| 31 | Current limit, Heater brake with Bluetooth device, Datalogging, Energy totalizer |
| (8) Fan voltage | |
| 1 | AC 115 V |
| 2 | AC 230 V |
| 3 | DC 24 V |
| (9) Extra codes | |
| 000 | Without approval |
| 061 | With UL approval |

Order code

(1) (2) (3) (4) (5) (6) (7) (8) (9)
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Base prices depending on rated voltage, rated current, and certification

| Rated voltage | 115V/230V 400V/480V | 600V | 690V | 115V/230V 400V/480V | 600V |
|----------------------|------------------------|------------|------------|------------------------|------------|
| Approvals | CE | CE | CE | CE & UL | CE & UL |
| Rated current | | | | | |
| 120 A | - | - | 1,950.90 € | - | - |
| 150 A | - | - | 2,007.60 € | - | - |
| 180 A | - | - | 2,115.75 € | - | - |
| 210 A | - | - | 2,229.15 € | - | - |
| 300 A | 1.903,65 € | 2.094,75 € | - | 1.999,20 € | 2.198,70 € |
| 400 A | 2.259,60 € | 2.485,35 € | 2.609,25 € | 2.371,95 € | 2.609,25 € |
| 500 A | 2.753,10 € | 3.028,20 € | 3.179,40 € | 2.890,65 € | 3.179,40 € |
| 600 A | 3.082,80 € | 3.391,50 € | 3.559,50 € | 3.237,15 € | 3.560,55 € |
| 700 A | 3.356,85 € | 3.692,85 € | 3.877,65 € | 3.524,85 € | 3.877,65 € |
| 800 A | 3.599,40 € | 3.958,50 € | 4.156,95 € | 4.141,20 € | 4.552.80 € |

Spareparts

Super-fast semiconductor fuses for short-circuit protection of thyristors (not for line protection).
 Please note that some models require multiple fuses for protection.

| Size | 200 kARMS Symmetrical A.I.C | | | | | Quantity for each phase | Material number |
|----------------------|-----------------------------|----------------------|---|---|-----|-------------------------|-----------------|
| | Fuse Code | Total Current (ARMS) | Fuse I ² t at 500Vac* (A2 Sek) | Fuse I ² t at 660Vac* (A2 Sek) | Vac | | |
| 115V,230V, 400V,480V | | | | | | | |
| 300A | FUFMM350 | 350 | 73500 | 105000 | 690 | 1 | 30072444 |
| 400A | FUFMM550.2 | 550 | 150500 | 215000 | 690 | 1 | 30072372 |
| 500A | FUFMM700 | 700 | 294000 | 420000 | 690 | 1 | 30072226 |
| 600A | FU2055920.250 | 1000 | 246400 | 352000 | 690 | 4 | 30072232 |
| 700A | FU2055920.250 | 1000 | 246400 | 352000 | 690 | 4 | 30072232 |



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|------|----------|------|--------|--------|-----|---|----------|
| 800A | FUFMM550 | 1100 | 602000 | 860000 | 690 | 2 | 30072229 |
|------|----------|------|--------|--------|-----|---|----------|

| Size | 200 kARMS Symmetrical A.I.C | | | | | Quantity for each phase | Material number |
|------|-----------------------------|----------------------|---|---|-----|-------------------------|-----------------|
| 690V | Fuse Code | Total Current (ARMS) | Fuse I ² t at 500Vac* (A2 Sek) | Fuse I ² t at 660Vac* (A2 Sek) | Vac | | |
| 120A | FU2055920.160 | 160 | 15400 | 16940 | 690 | 1 | 30072235 |
| 150A | FU2055920.200 | 200 | 25000 | 27500 | 690 | 1 | 30072234 |
| 180A | FU2055920.250 | 250 | 44000 | 48400 | 690 | 1 | 30072232 |
| 210A | FU2055920.315 | 315 | 77000 | 84700 | 690 | 1 | 30072233 |
| 400A | FUFMM550 | 550 | 215000 | 236500 | 690 | 1 | 30072229 |
| 500A | FUFMM700 | 700 | 420000 | 462000 | 690 | 1 | 30072226 |
| 600A | FU2055920.250 | 900 | 352000 | 387200 | 690 | 4 | 30072232 |
| 700A | FU2055920.250 | 900 | 352000 | 387200 | 690 | 4 | 30072232 |
| 800A | FUFMM550 | 1100 | 602000 | 860000 | 690 | 4 | 30072229 |

Accessories

| Description | Part no. |
|--|----------|
| Semiconductor fuse FUFM350 (350 A) | 30072444 |
| Semiconductor fuse FUFMM550 (550 A) | 30072229 |
| Semiconductor fuse FUFMM550.2 (550 A) | 30072372 |
| Semiconductor fuse FUFMM700 (700 A) | 30072226 |
| Semiconductor fuse FU2055920.160 (160 A) | 30072235 |
| Semiconductor fuse FU2055920.200 (200 A) | 30072234 |
| Semiconductor fuse FU2055920.250 (250 A) | 30072232 |
| Semiconductor fuse FU2055920.315 (315 A) | 30072233 |