

## JUMO TYA 202 - Three-Phase Thyristor Power Controller in Three-Phase Economy Circuit (709062)

- LCD display with info line
- Close mounting possible
- Network load optimization through dual energy management
- Current limiting
- Softstart function
- Phase-angle operation
- Burst-firing operation
- Resistance monitoring and limitation for MoSi2 heating elements
- Load monitoring for the detection of partial load failure or load short-circuit "Teach-In"
- Integrated diagnostic systems
- Energy meter
- Various field bus interfaces
- UL 508 approval



### Order details

<b>(1) Basic type</b>	
709062	Three-phase thyristor power controller in three-phase economy circuit
<b>(2) Version</b>	
8	Standard with default settings
9	Customer-specific configuration (specification in plain text)
<b>(3) Language</b>	
01	German
02	English
03	French
<b>(4) Load current / control</b>	
020-100	AC20A U <sup>2</sup> -control
020-010	AC20A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)
020-001	AC20A P-control (partial load failure detection, current limiting, current control)
032-100	AC32A U <sup>2</sup> -control
032-010	AC32A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)
032-001	AC32A P-control (partial load failure detection, current limiting, current control)
050-100	AC50A U <sup>2</sup> -control
050-010	AC50A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)
050-001	AC50A P-control (partial load failure detection, current limiting, current control)
100-100	AC100A U <sup>2</sup> -control
100-010	AC100A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)
100-001	AC100A P-control (partial load failure detection, current limiting, current control)
150-100	AC150A U <sup>2</sup> -control
150-010	AC150A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)
150-001	AC150A P-control (partial load failure detection, current limiting, current control)
200-100	AC200A U <sup>2</sup> -control
200-010	AC200A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)
200-001	AC200A P-control (partial load failure detection, current limiting, current control)
250-100	AC250A U <sup>2</sup> -control
250-010	AC250A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)
250-001	AC250A P-control (partial load failure detection, current limiting, current control)
<b>(5) Mains voltage</b>	
024	AC 24 V
042	AC 42 V
115	AC 115 V
230	AC 230 V
265	AC 265 V
400	AC 400 V
460	AC 460 V
500	AC 500 V
<b>(6) Interface</b>	

00	Not to be used
54	RS422/485, J-Bus, MOD-Bus
63	PROFINET-IO-Device (2 x RJ45)
64	PROFIBUS-DP (slave)
84	EtherCAT / System bus mTRON T / System bus variTRON (from FW 9.0)
<b>(7) Extra codes</b>	
252	Relay
257	Optocoupler

**Order code**

(1) (2) (3) (4) (5) (6) (7)  
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**Important information:**

Subordinate control loop U<sup>2</sup>, code 100: enables voltage control

Subordinate control loop I<sup>2</sup>, code 010: enables voltage control, current control, partial load failure detection, dual energy management, and current limiting

Subordinate control loop P, code 001: enables voltage control, current control, power control, partial load failure detection, dual energy management, current limiting, free-running economy circuit, and resistance limitation

The load voltage is also the voltage supply for the control electronics.

UL approval

**Overview of the voltage supply of the fans for variants with 250 A load current**

Load voltage	Voltage supply of the fan
<= AC 42 V	AC 24 V/20 VA
AC 115 V	AC 115 V/20 VA
>= 230 V	AC 230 V/20 VA

**Semiconductor fuses**

Overview of the ultrarapid semiconductor fuses for protecting thyristors against short-circuits (no lead protection)

Load current thyristor power controller	Order code	Part no.
20 A	709710/02 semiconductor fuse 40A (In=20A)-AC690V	00513108
32 A	709710/02 semiconductor fuse 80A (In=32/50A)-AC690V	00068011
50 A	709710/02 semiconductor fuse 80A (In=32/50A)-AC690V	00068011
100 A	709710/02-semiconductor fuse 160A (In=100A)-AC690V	00081801
150 A	709710/02 semiconductor fuse 350A (In=150A)-AC690V	00083318
200 A	709710/02 semiconductor fuse 550A (In=250A)-AC690V	00371964
250 A	709710/02 semiconductor fuse 550A (In=250A)-AC690V	00371964



**Stock versions**

Order code	Load current / control	Mains voltage	Part no.
709062/8-01-100-010-400-00/252	AC100A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)	AC 400 V	00574479
709062/8-01-150-010-400-00/252	AC150A I <sup>2</sup> -control (partial load failure detection, current limiting, current control)	AC 400 V	00595985

**Accessories**

Description	Part no.
USB cable, A-connector to Mini-B connect length 3 m	00506252
mounting element for DIN-rail 709062 (20A)	00555172
mounting element for DIN-rail 709062 (32)	00555527
Semi-conductor fuse 80A (In=50A)-AC690V	00068011
Semi-conductor fuse 160A (In=100A)-AC690	00081801
Semi-conductor fuse 350A (In=150A)-AC690	00083318
Semi-conductor fuse 550A (In=250A)-AC690	00371964
Semi-conductor fuse 40A (In=20A)-AC690V	00513108
mount. kit f. mount. rail 50A TYA202 160	00600097

**Software**

Description	Part no.
GSD-Generator JUMO 144.01.xx/1.xx (download free of charge on our website)	00432892
Setup JUMO TYA-201/S201/202/S202/203	00544869
EtherCAT Slave Information (ESI) Datei JUMO TYA-201/202/203	00703297
JUMO TYA PROFINET GSDML-Datei	00709880