

JUMO TYA 201 - Single-Phase Thyristor Power Controller (709061)

- 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

(1) Basic type	
709061	Single-phase thyristor power controller
(2) Version	
8	Standard with default settings
9	Customer-specific configuration (specification in plain text)
(3) Language	
01	German
02	English
03	French
(4) Load current / control	
020-100	AC20A U ² -control
020-010	AC20A I ² -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 ² -control
032-010	AC32A I ² -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 ² -control
050-010	AC50A I ² -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 ² -control
100-010	AC100A I ² -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 ² -control
150-010	AC150A I ² -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 ² -control
200-010	AC200A I ² -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 ² -control
250-010	AC250A I ² -control (partial load failure detection, current limiting, current control)
250-001	AC250A P-control (partial load failure detection, current limiting, current control)
(5) Mains voltage	
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
(6) Interface	

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)
(7) Extra codes	
252	Relay
257	Optocoupler

Order code

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

Subordinate control loop U^2 , code 100: enables voltage control

Subordinate control loop I^2 , 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.

Voltage supply overview of the fans for variants with 250 A load current

Load voltage	Voltage supply of the fan
\leq AC 42 V	AC 24 V/20 VA
AC 115 V	AC 115 V/20 VA
\geq 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.
709061/8-01-020-001-230-00/252	AC20A P-control (partial load failure detection, current limiting, current control)	AC 230 V	00556184
709061/8-01-020-010-230-00/252	AC20A I ² control (partial load failure detection, current limiting, current control)	AC 230 V	00558975
709061/8-01-020-010-400-00/252	AC20A I ² control (partial load failure detection, current limiting, current control)	AC 400 V	00558978
709061/8-01-020-100-400-00/252	AC20A U ² -control	AC 400 V	00543450
709061/8-01-020-001-400-00/252	AC20A P-control (partial load failure detection, current limiting, current control)	AC 400 V	00543453
709061/8-01-032-010-230-00/252	AC32A I ² -control (partial load failure detection, current limiting, current control)	AC 230 V	00573234
709061/8-01-032-100-400-00/252	AC32A U ² -control	AC 400 V	00575814
709061/8-01-032-010-400-00/252	AC32A I ² -control (partial load failure detection, current limiting, current control)	AC 400 V	00573237
709061/8-01-050-100-230-00/252	AC50A U ² -control	AC 230 V	00543446
709061/8-01-050-100-400-00/252	AC50A U ² -control	AC 400 V	00543451
709061/8-01-100-100-400-00/252	AC100A U ² -control	AC 400 V	00543452
709061/8-01-100-001-400-00/252	AC100A P-control (partial load failure detection, current limiting, current control)	AC 400 V	00543455
709061/8-01-150-100-400-00/252	AC150A U ² -control	AC 400 V	00573708

Accessories

Description	Part no.
USB cable, A-connector to Mini-B connect length 3 m	00506252
mount. kit f. mount. rail 20A TYA201/S20	00555169
mount. kit f. mount. rail 709061/65 60mm	00555526
Semi-conductor fuse 40A (In=20A)-AC690V	00513108
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
mount. kit f. mount. rail 50A TYA201/S20	00600095

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