

JUMO TYA 203 - Three-Phase Thyristor Power Controller (709063)

- 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	
709063	Three-phase power controller (three-phase load)
(2) Version	
8	Standard with default settings
9	Customer-specific configuration (specification in plain text)
(3) Language	
01	German
02	English
03	French
14	Spanish
(4) Load current / 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)
032-010	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)
050-010	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)
100-010	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)
150-010	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)
200-010	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)
250-010	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 U², code 100: enables voltage control

Subordinate control loop I², 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


Accessories

Description	Part no.
USB cable, A-connector to Mini-B connect length 3 m	00506252
mount. kit f. mount. rail 20A 709063 135	00648636
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

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