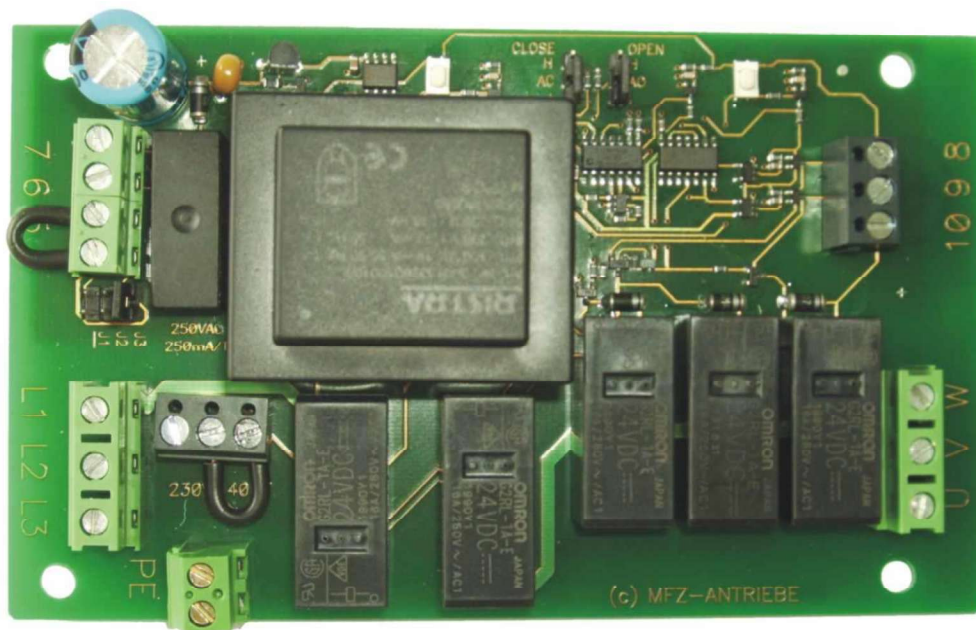


# Controller for door drives AS100



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The gate control AS 100 is conceived to operate door units with three-phase motors in dead-man operation mode.

For example, a triple switch is connected with to open or close a gate.

#### ▪ SAFETY INSTRUCTIONS

- Please consider valid national and local directives and regulations related to the start-up of motorised doors in your country. The person and/or the company installing the unit is responsible of the complete unit. The installer has to respect the important norms and directives ( such as DIN EN 12453, DIN EN 13241-1) and establish the technical documents related to the whole unit. The technical documents have to be enclosed to the door's unit.
- Installation and maintenance works at the control AS 100 have only to be done by specialised technicians in electrics.
- During works on electrical devices, the unit must be switched off supply. All regulations related to protection must be considered.
- Dead-man operation mode is only allowed if the unit is visible from the instruction switches and the operators were instructed correspondingly.
- The operation of the gate control in self-locking mode is only allowed if the protecting equipment required in EN 13241-1 und EN 12453 are used.



**If you do not respect the safety instructions, you are personally liable for the resulting damages on persons and materials.**

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#### ▪ Connection of mains cable

- ⇒ The circuit distribution protected by fuse has to be connected to the screw terminals X1, L1, L2, L3 of the mother board. The value of safety fuse should not exceed 4A.
- ⇒ The mains plug must be accessible and installed near by the control.
- ⇒ The value of the supply voltage (230V AC or 400V AC) must be set at the screw terminal X6 through the bridge.



**A wrong connection of the bridge may destroy the control.**

#### ▪ Connection of three-phase drive

- ⇒ The three-phase drive has to be connected to the screw terminals X2, U, V, W.
- ⇒ Change of sense of rotation: after connecting the drive, the sense of rotation must be checked with the key buttons OPEN and CLOSED. If the moving direction does not correspond to the direction of the arrow indicated on the pressed button, so the screw terminals of the connections U and V must be exchanged.

#### ▪ Connection of the external instructions switches OPEN, STOP, CLOSED

- ⇒ To operate from outside, a triple switch (such as KDT 3) can be connected to the screw terminals X3, 4, 5, 6, 7. Optionally, a triple switch can be connected to through the screw terminal X4. If the block of binding posts is not configured, so a jumper must bridge the stop contact.
- ⇒ The line of external instruction devices must be installed safe according to protective earthing (double insulation).
- ⇒ Here both key buttons related to OPEN and CLOSED should be executed as closer. As the key button related to stop in the safety circuit is already configured, it must be connected as opener.



**The area of danger must be visible since the dead-man operation mode runs with key buttons.**

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### ▪ Connection of limit switch

- ⇒ The limit switch and safety limit switch OPEN and CLOSED should be connected to the screw terminals 8, 9, 10.

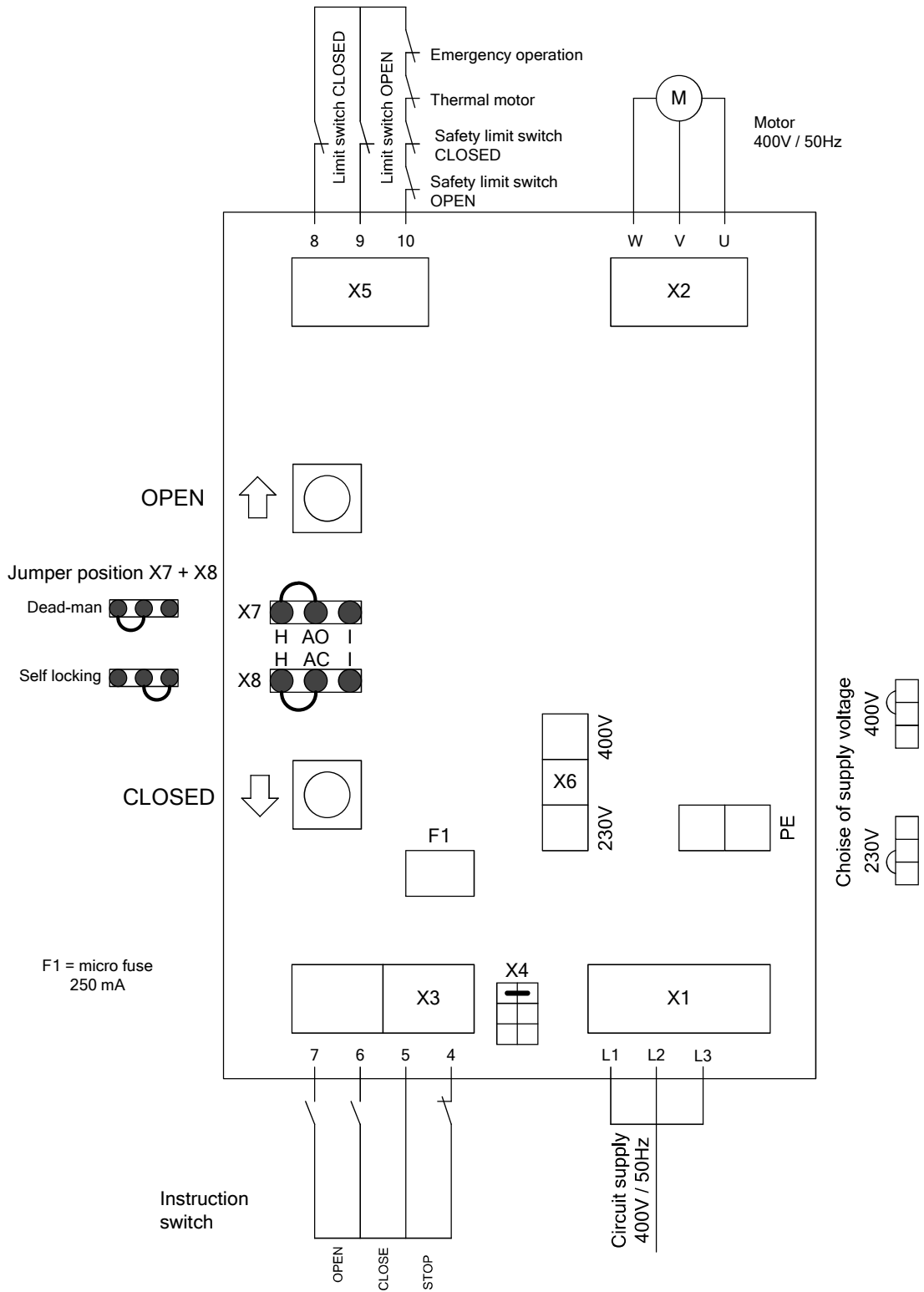
### ▪ Connection of direct safety switches

- ⇒ Safety elements that directly intervene in the control process are to be connected in range to the stop contact.
- ⇒ There are, among others: emergency shut-down respectively safety-catch, feed protection and protection of integrated door.

### ▪ Technical data AS 100

Distribution voltage	400V – 415V AC / 50 – 60 Hz
Current consumption	max. 120 mA
Safety fuse	secondary 250 mA
Switching capacity	1,1 kW
Mechanical useful life	10 x 10 <sup>6</sup>
Electronic useful life	10 x 10 <sup>6</sup>
Ambient temperature	5°...55° C
Humidity	45 to 85% RH
Position of installation	as wished

■ Circuit diagram AS 100



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## Declaration of incorporation

in accordance with Directive 2006/42/EC (Machinery) for the incorporation of an incomplete machine per Annex II, Part 1B

Marantec Legden GmbH & Co.KG  
Neue Mühle 4  
D- 48739 Legden

## Declaration of conformity

in the sense of the directives Electromagnetic Compatibility 2014/30/EU and RoHS 2011/65/EU

We hereby declare that the product cited below

Product designation: **Controller for industrial doors**

Type designation : **AS 100**

is intended as partly completed machinery exclusively for installation in a door system and has been developed, designed and manufactured in accordance with the following directives:

Machinery Directive 2006/42/EC

Directive Electromagnetic Compatibility 2014/30/EU

RoHS Directive 2011/65/EU

In addition, the requirements of the Low Voltage Directive 2014/35/EU according to Annex I Part 1.5.1 of the Machinery Directive 2006/42/EC are fulfilled.

Applied and consulted standards::

- EN 12453 Doors - Safety in use of power operated doors: Requirements and test methods
- EN 12978 Doors and gates - Guards for power operated doors and gates: Requirements and test methods
- EN ISO 13849-1 Safety of machinery - Safety-related parts of control systems -Part 1: General principles for design
- EN 60335-1 Household and similar electrical appliances - Safety -Part 1: General requirements
- EN 60335-2-103 Household and similar electrical appliances - Safety -Part 2-103: Particular requirements for drives for gates, doors and windows
- EN 61000-6-2 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards – Immunity for industrial environments
- EN 61000-6-3 Electromagnetic compatibility (EMC) -Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments

The relevant technical documentation has been compiled in accordance with Annex VII, part B of the Machinery Directive (2006/42/EC).

We shall transmit this information in electronic form, in response to a justified request by the market surveillance authorities, in a timely manner.

Person authorised to compile the technical documentation is the undersigned.

Incomplete machines in accordance with Directive 2006/42/EC are only intended for incorporation in other machines or incomplete machines or systems or for combination with them, in order to form a machine with them in accordance with the aforementioned directive. This product must therefore not be put into service until the complete machine/system into which it is incorporated is compliant with the provisions of the aforementioned directives. Any change to this product that we have not approved will void this regulation..

Legden, 04.11.2019



Michael Hörmann, General Manager

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