



# TSA160NT – TSA162

Door control unit DCU5  
for automatic swing doors, closing  
with spring force  
2-leaf drives, TSA160 NT at  
active leaf, TSA162 at the fixed leaf


GB Supplementary wiring diagram

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## 1 Symbols and means of representation

Important information and technical notes are emphasised in order to illustrate the correct operation.

Symbol	Meaning
▶	Symbol for an action: Here you have to do something. ▶ Observe the sequence if there are several action steps.
	Does not conform to DIN 18650 Symbol in a table or for a piece of information on safety sensors.

## 2 Notes

- This wiring diagram is valid in addition to the wiring diagram DCU5, Mat. No. 120062.
- The drive TSA162 is used to control the fixed leaf of a 2-leaf swing door. The drive TSA160 NT has to be mounted at the active leaf. The combination with the drives TSA160NT F or TSA160NT Inverse at the active leaf is not possible.
- The combination TSA160NT - TSA162 is not tested in accordance with DIN 18650.
- The control of the DCU5 control of the active leaves is commissioned with the keys S1 and S2.
- The programme switches MPS and MPS-ST are used as external programme switches.
- The programme switches TPS and DPS cannot be used.
- The Stop function is not available.

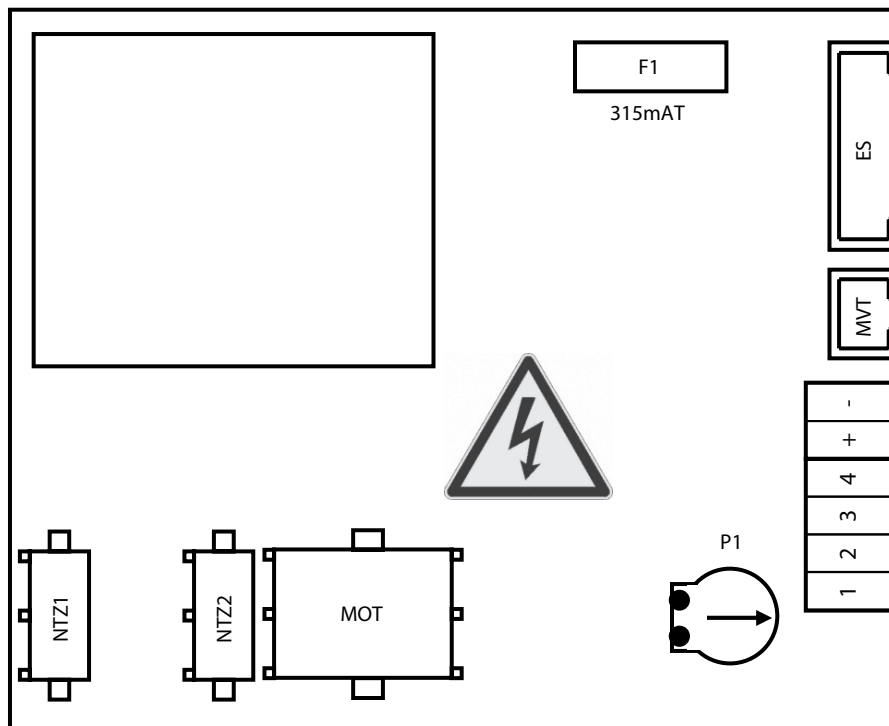
## 3 Validity

Valid for drives from:

- Software Version DCU5 V2.1
- Hardware Revision DCU500 Rev B
- Hardware Revision TSA162 Rev A

## 4 Control TSA162

- Control TSA162, Mat. No. 70014
- F1: 24 V, 315 mA T, 5 × 20 mm
- P1: Actuation delay time 0 s ... 4.5 s
- The actuation delay time is determined by the DCU5 control of the active leaf.
- ▶ Set the potentiometer to left stop (0 s).
- Maximum permissible current draw: 120 mA



## 5 Actuation and safety sensor

The maximum permissible current draw of the respective control is to be taken into account when calculating the number of sensors.

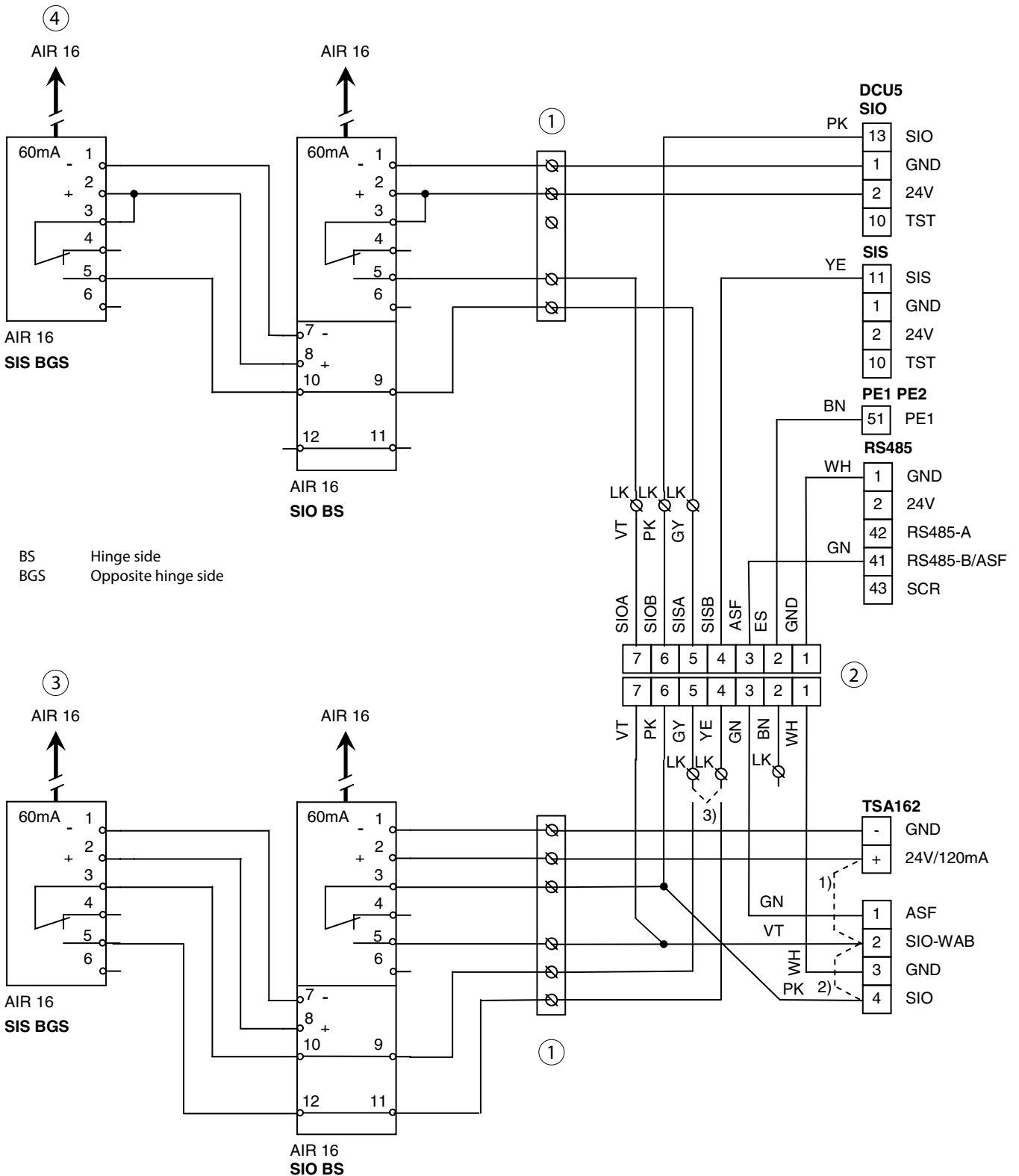
### 5.1 Actuation

Actuation of the fixed leaf is effected by the DCU5 control via the ASF signal.

- ▶ Set the parameter 1 - EF of the DCU5 to 03.

## 5.2 Presence sensor AIR16

Configuration of the AIR16 module: Background fade out (HAB), dark-switching (D).



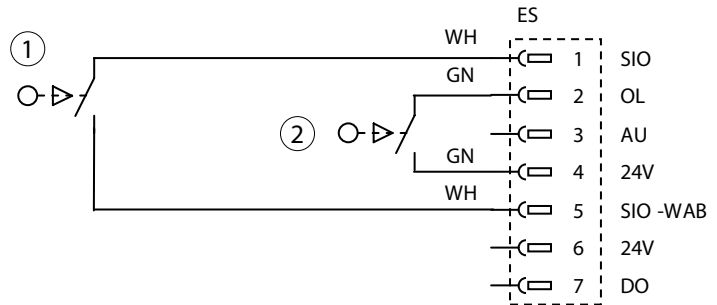
- 1 Door transmission cable
- 2 Terminal strip intermediate cover
- 3 Fixed leaf (TSA162)
- 4 Active leaf (DCU5)

- 1) Remove jumper + (24V/120mA) – 2 (SIO-WAB)
- 2) If an SIO is connected to the TSA162 control, remove Jumper 2-4.
- 3) For operation without SIS mount the jumper LK (GY) – LK (YE) at the fixed leaf.

## 6 Limit switch

### 6.1 Open position, background elimination SIO

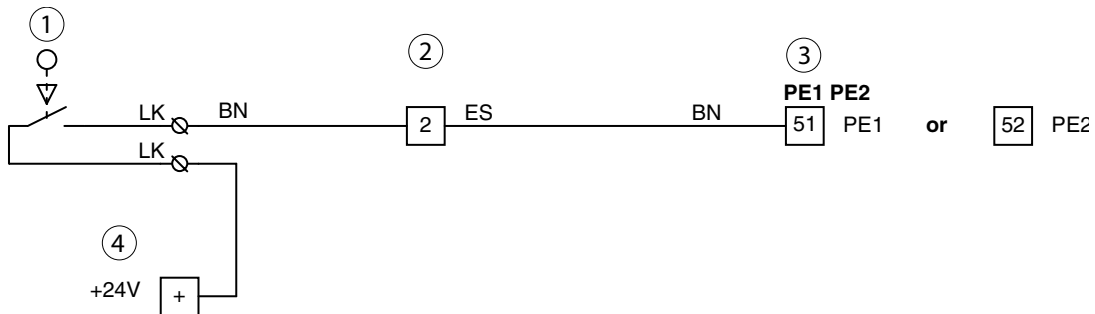
- 1 Yellow cam: Background elimination SIO
- 2 Blue cam: Open position



- ▶ Set the blue cam so that the limit switch is operated in the open position of the door.  
If the door contacts a wall during opening:
- ▶ Set the yellow cam so that the SIO is faded out before the wall is contacted.
- The yellow cam can be used to monitor the closed position if the Background elimination function is not required (see fixed leaf closed position).

### 6.2 Fixed leaf closed position

- Supplementary cam switch, Mat. No. 71154
- Closing sequence control on the basis of the monitoring of the closed position of the fixed leaf is possible as of software Version DCU5 V2.1. In the case of a software version lower than V2.1 and for drives without integrated mechanical closing sequence control, closing sequence control is carried out time-controlled.
- When the door leaf is not closed, the contact is closed and 24 V is applied to the PE input of the active leaf control. The active leaf closes when the fixed leaf has reached the closed position.
- ▶ Set the parameter 12 - E1 or 13 - E2 of the DCU5 to 06.

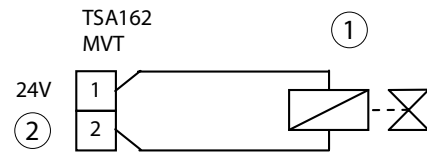
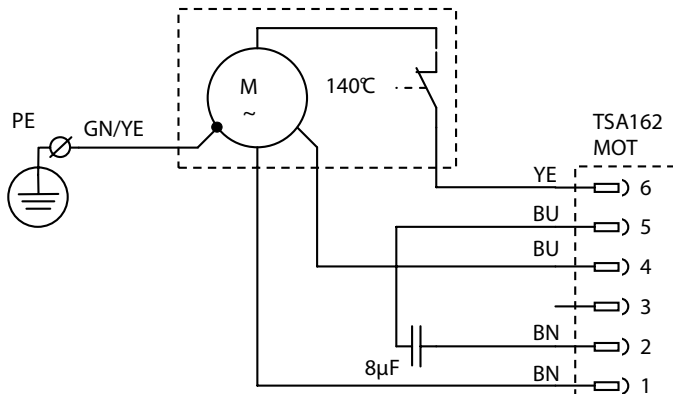


- |   |  |   |                   |
|---|--|---|-------------------|
| 1 | Supplementary cam switch closed position | 3 | Active leaf DCU5  |
| 2 | Terminal strip intermediate cover kit    | 4 | Fixed leaf TSA162 |

## 7 Motor, solenoid valve

1~ motor, 220–230 V, 1.10 A, 50 Hz

cos phi 0.98, 0.125 kW, S2-6 min., WSK 140 °C, C 8µF, 400 V DB, IP 44, EN 60034

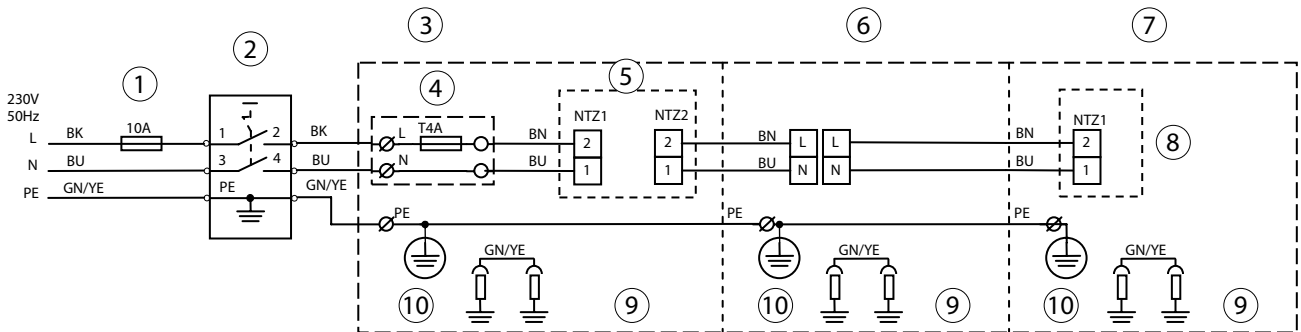


1 Solenoid valve 24 V/160 mA

2 Solenoid valve

## 8 Mains connection

Drive rated wattage 2 x 300 W

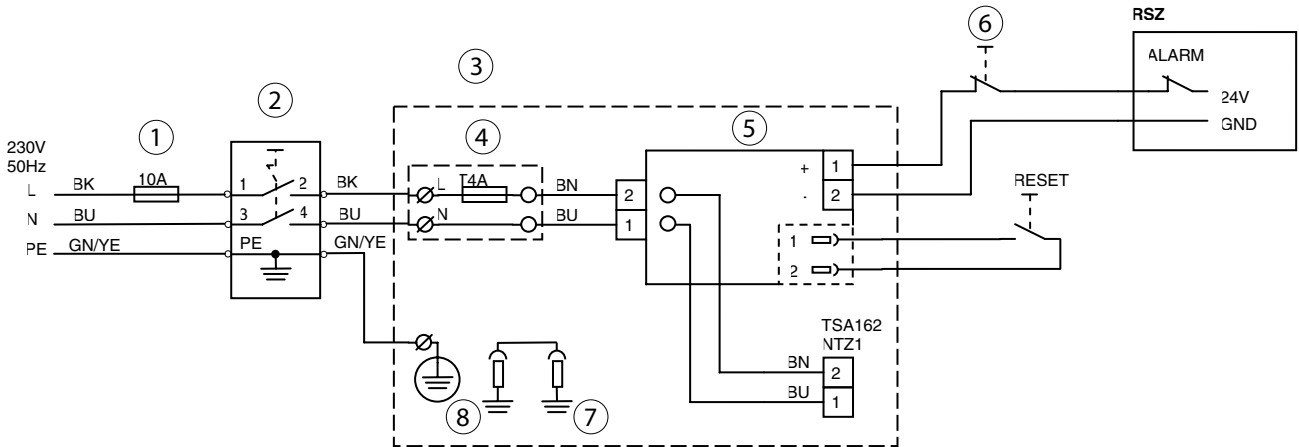


- 1 Mains fuse provided by customer
- 2 Master switch (provided by customer)
- 3 Fixed leaf drive TSA162
- 4 Safety terminal strip
- 5 Control TSA162

- 6 Intermediate cover kit
- 7 Active leaf drive TSA160NT
- 8 Door control unit DCU5
- 9 Drive hood
- 10 Base plate

## 9 Smoke switch control unit at TSA160NT - TSA162 ZR

- Accessory TSA160 ZR, Mat. No. 26928
- The drive does not have an approval for use in fire-protection areas.
- ▶ Observe the mounting and operating instructions of the smoke switch control unit,
- In case of a fire alarm or a power failure the door opener and motor are separated from the control. TSA160NT-TSA162 ZR closes by means of spring force. At 2-leaf doors both leaves close.
- ▶ After the power has been switched back on, the Reset switch has to be pressed.
- The power disconnection circuit board places a load of approx. 25 mA on the smoke switch control unit.



- |   |                                    |   |                                      |
|---|------------------------------------|---|--------------------------------------|
| 1 | Mains fuse provided by customer    | 5 | ZR power disconnection circuit board |
| 2 | Master switch provided by customer | 6 | CLOSE DOOR circuit breaker           |
| 3 | Fixed leaf drive TSA162 ZR         | 7 | Drive hood                           |
| 4 | Safety terminal strip              | 8 | Base plate                           |

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