


Controller family: TST EWA4

About this application note

This application note describes the connection of a 230 V AC motor symmetrically (Steinmetz) and asymmetrically with a single-phase mains connection to the door control unit.

Note:

 The instructions are supplementary information to the operating instructions for the relevant door control unit. Please read the corresponding operating instructions first.

Safety instructions and warnings

DANGER

Electrical power supply!

Danger to life if unprotected parts of the body or tools are touched. There are open, live components in the door control unit.

Some components on the control board are still under voltage after switching off the mains voltage.

Before accessing the terminal blocks

- > Switch off the door control unit.
- > Wait at least 4 minutes until the voltage has dissipated.
- > Secure the plant to prevent it from being switched back on.

ATTENTION

Instructions for the electrical connection

Read the safety notes and instructions in the manual for the relevant door control unit!

Terminals can be damaged.

There are springs in the terminals that ensure secure contact with the pin headers.

- Before connecting the cables, always disconnect the terminals on the door control unit.
- Once the cables have been connected, plug the terminals into the door control unit in the initial position.

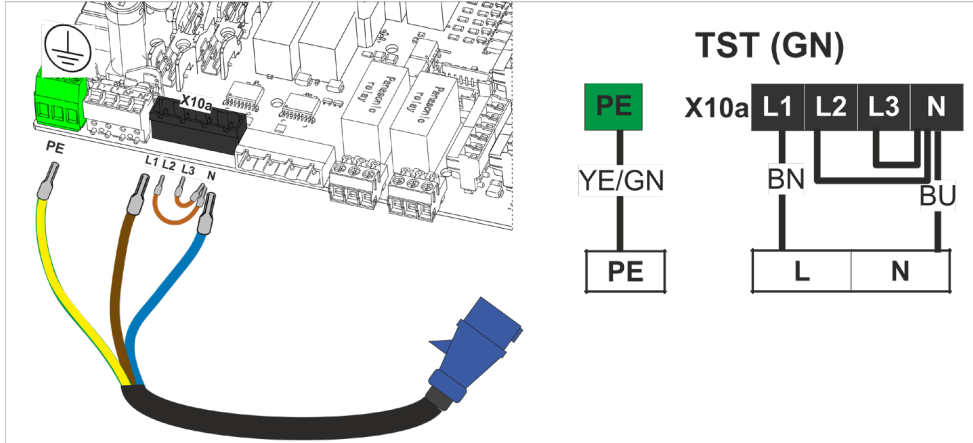
Commissioning by qualified personnel

The product must be commissioned and decommissioned by qualified specialists.

Unintentional operation or uncontrolled door movement must be prevented.

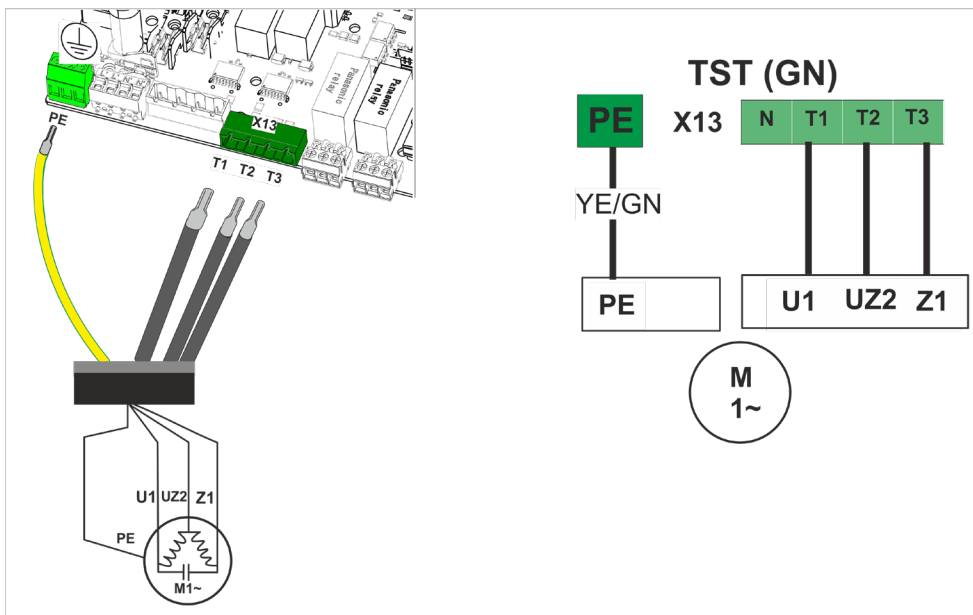
1 Connect single phase motor symmetrically

1.1 Connect supply voltage



1. Connect wires for supply voltage to terminal X10a.
2. Connect the protective conductor to the PE terminal.
3. X10a: Wire jumpers on L2 and N as well as on L3 and N.

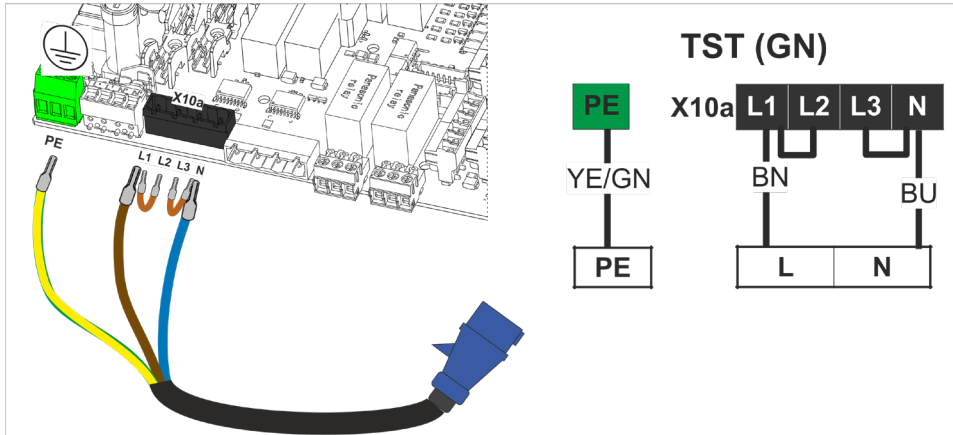
1.2 Connect single phase motor



1. Connect the wires for the motor cable to terminal X13.
2. Connect the protective conductor to the PE terminal.

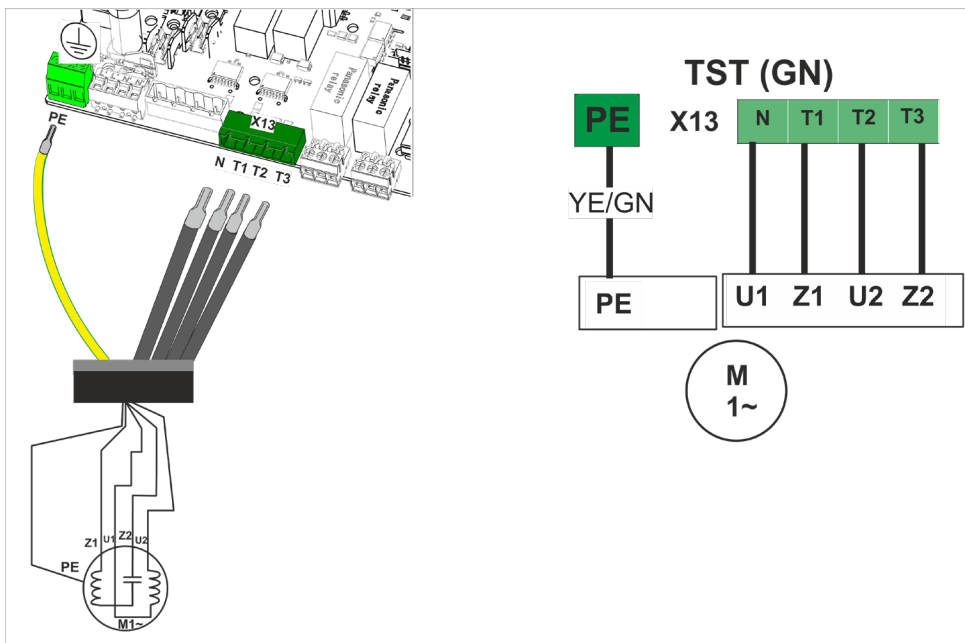
2 Connect single phase motor asymmetrically

2.1 Connect supply voltage



1. Connect wires for supply voltage to terminal X10a.
2. Connect the protective conductor to the PE terminal.
3. X10a: Wire jumpers on L1 and L2 as well as on L3 and N

2.2 Connect single phase motor



info about this connection diagram:

Primary winding = U1 and U2

Auxiliary winding = Z1 and Z2




The auxiliary capacitor of the motor must always be connected in series to the auxiliary winding.

If the direction of rotation is wrong, T1 must be exchanged with T3.


1. Connect the wires for the motor cable to terminal X13.
2. Connect the protective conductor to the PE terminal.

3 Set motor data on the door control unit

The display shows:

1. Briefly press the  button.
2. Select the value for the connected motor type with the  or  button:

motor type	value
single phase motor symmetrically	1
single phase motor asymmetrically	2

3. Press and hold the  button for three seconds.
- ↳ Motor type is setted.

Indicator display	
7-segment	Plain text display
P . 10A	P:Motor type 10A=
-	P:Motor type 10A= <u> </u> ✓