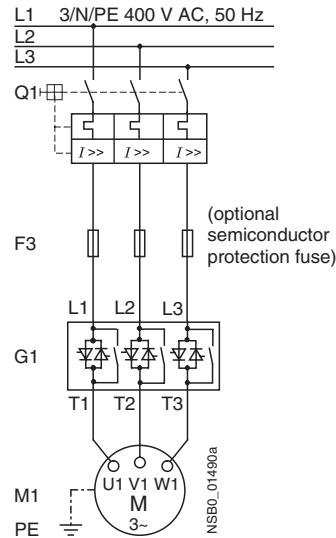


3RW44 connection examples for main and control circuits

Main circuit

Possibility 1a:

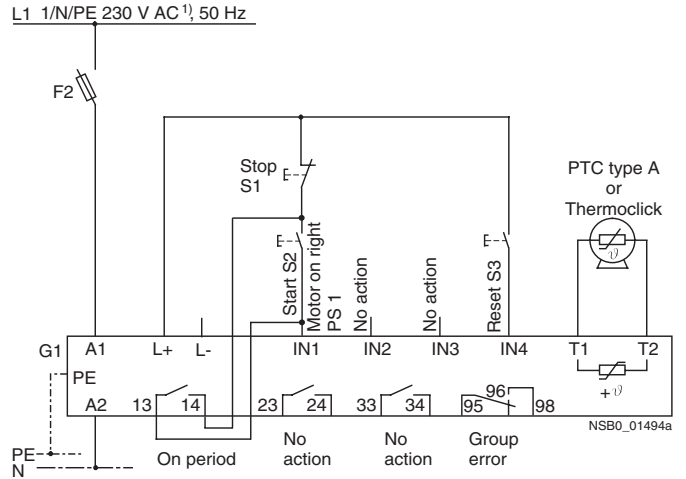
Inline circuit with motor starter protector and SITOR fuse (semiconductor protection only)



Control circuit

Possibility 1:

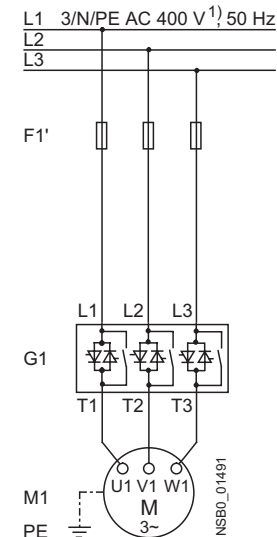
Control by pushbutton



Main circuit

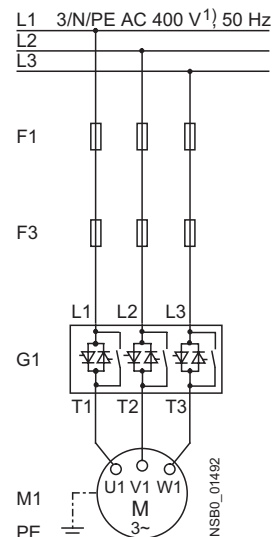
Possibility 1b:

Inline circuit with full-range protection (line and semiconductor protection)



Possibility 1c:

Inline circuit with line and SITOR fuse (semiconductor protection only)



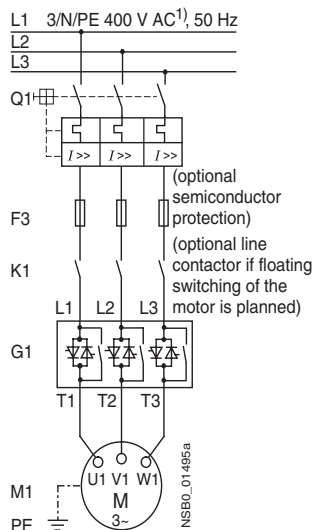
1) Permissible values for main and control voltage, see Technical Specifications.

3RW Soft Starters

Project planning aids

Main circuit

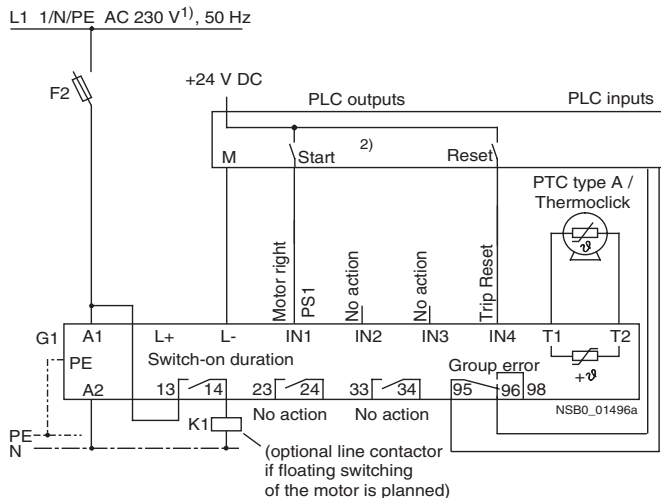
Possibility 2:
Inline circuit with main contactor



Control circuit

Possibility 2:
Control of a main contactor and control by means of PLC

Control circuit, option 1:
Activation of an optional main contactor
as well as activation via PLC



¹) Permissible values for main and control voltage, see Technical Specifications.

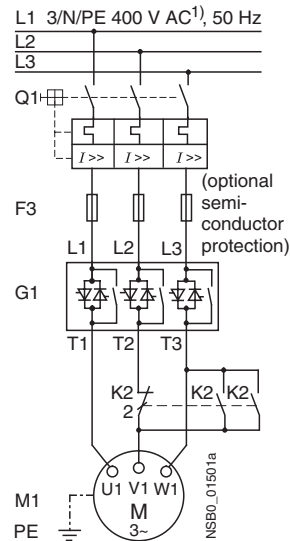
²) **Caution. Risk of restarting!**

The start command (e.g. from the PLC) must be reset prior to a reset command because a new, automatic restart will take place automatically if a start command is active after the reset command. This applies especially in case of motor protection tripping.

For safety reasons we recommend incorporating the group error output (terminals 95 and 96) in the controller.

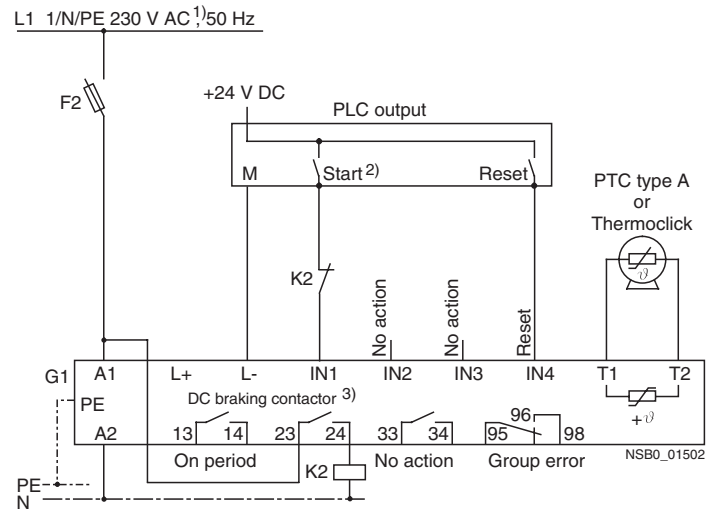
Main circuit

Possibility 3a:
Inline circuit with ramp-down function DC braking³⁾
(for device types 3RW44 22 to 3RW44 25)



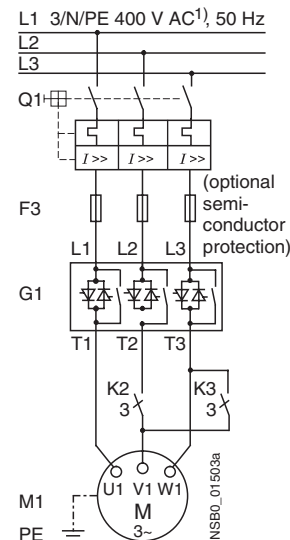
Control circuit

Possibility 3a:
Control of the DC braking contactor³⁾



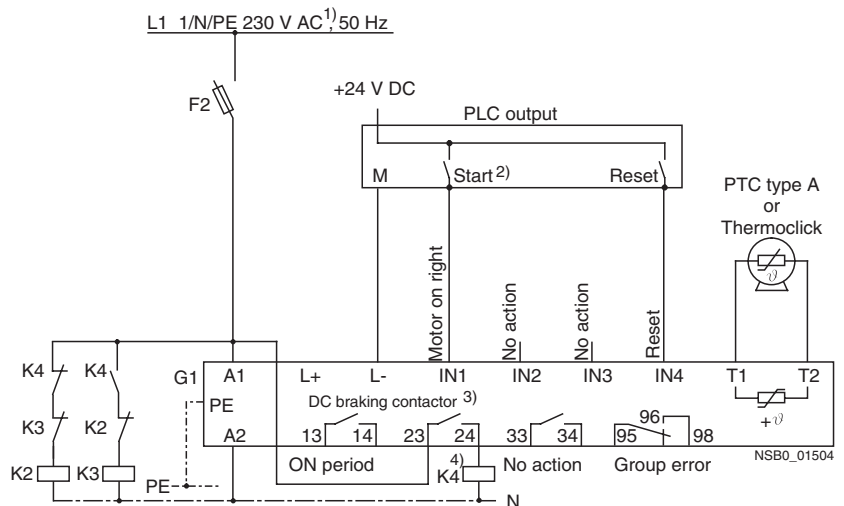
Main circuit

Possibility 3b:
Inline circuit with ramp-down function DC braking³⁾
(for device types 3RW44 26 to 3RW44 47)



Control circuit

Possibility 3b:
Control of the DC braking contactor³⁾



¹⁾ Permissible values for main and control voltage, see Technical Specifications.

Caution. Risk of restarting!

The start command (e.g. from the PLC) must be reset prior to a reset command because a new, automatic restart will take place automatically if a start command is active after the reset command. This applies especially in case of motor protection tripping.
For safety reasons we recommend incorporating the group error output (terminals 95 and 96) in the controller.

³⁾ If the ramp-down function "Combined braking" is selected, no braking contactor is required.

If the ramp-down function "DC braking" is selected, a braking contactor must be used in addition. Type, see Fuse Assignment (inline circuit) on pages 6/33 to 6/35.

For applications with large centrifugal masses ($J_{Load} > J_{Motor}$) we recommend the function "DC braking". The output 2 must be switched over to "DC braking contactor".

⁴⁾ Auxiliary relay K4, e.g.:

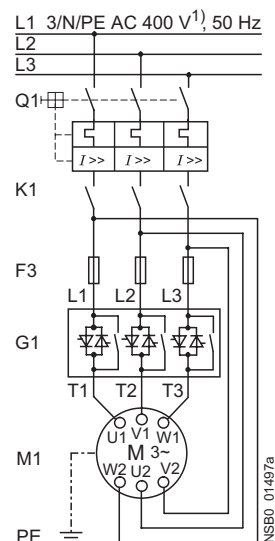
LZX:RT4A4T30 (230 V AC rated control supply voltage),
LZX:RT4A4S15 (115 V AC rated control supply voltage).

3RW Soft Starters

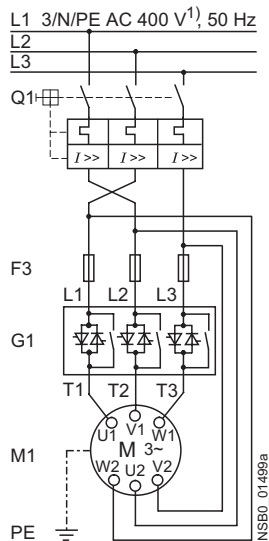
Project planning aids

Main circuit

Possibility 4a:
Inside-delta circuit

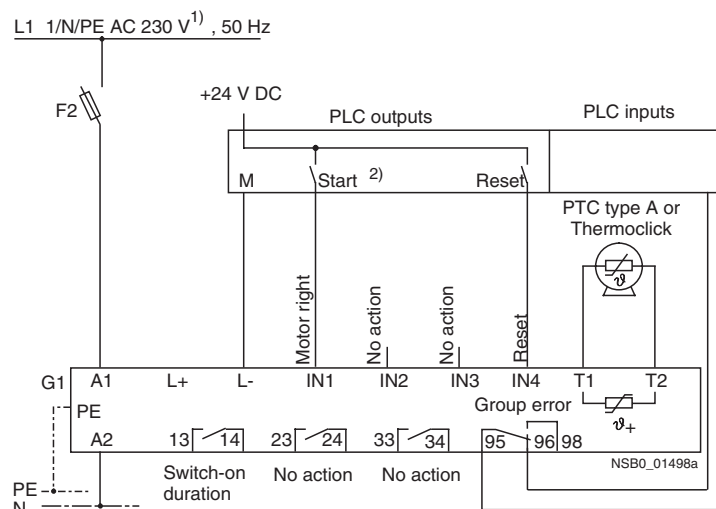


Possibility 4b:
Change of direction of rotation for
inside-delta circuit



Control circuit

Possibility 4:
Control by means of PLC



1) Permissible values for main and control voltage,
see Technical Specifications.

2) **Caution. Risk of restarting!**

The start command (e.g. from the PLC) must be reset prior to a reset command because a new, automatic restart will take place automatically if a start command is active after the reset command. This applies especially in case of motor protection tripping.
For safety reasons we recommend incorporating the group error output (terminals 95 and 96) in the controller.