

MTB25-AA

Power Supply Module, rack mount (h=100mm) including 14TE-front plate

- **DC Out: 60-140V_{DC}, unstabilized max. 25A**
- **without auxiliary voltage rectifier for 24 V_{DC}**
- **without integrated regeneration resistor**

The power supply MTB 25-AA serves as DC voltage supply for step motor drives and AC-servo modules which need only one supply voltage.

It rectifies and smoothes one- or three-phase input voltages from 40 to 85 V_{AC}.

At an output voltage of 120 V_{DC} it's rated power is 3000 W with a three-phase supply, respectively 960 W with an one-phase supply.

The input voltages are fused by F1, F2, F3, rated 16 A TD each.

An external regeneration resistor (9 Ω / 500 W) is needed for operation.

The LEDs in the front plate indicate:

- LED "U_Z" (green)** LED is on, when DC Out Bus Voltage is present.
- LED "Ballast" (red)** LED is blinking, when energy, generated from a decelerating motor, is converted into heat in a regeneration resistor.
LED permanently on, if no external regeneration resistor is connected.

MTB25-AB

Power Supply Module, rack mount (h=100mm) including 14TE-front plate

- **DC Out: 60-140V_{DC}, unstabilized max. 25A**
- **with auxiliary voltage rectifier for 24 V_{DC}, 3 A max.**
- **with integrated regeneration resistor**

The technical data of this power supply corresponds to those of type MTB25-AA. An additional rectifier producing a smoothed auxiliary voltage of 24 V_{DC} max. 3 A is provided with the MTB25-AB, in order to feed components which need logic- and motor voltage supplies separately.

For this purpose, it is necessary to have an isolated supply (one- or three-phase) of 19 V_{AC} which is fused on the additional PCB by three 4 A TD fuses.

Furthermore, an external regeneration resistor for a continuous dissipation of 30 W is integrated, and fused by F4 (8 A TD).

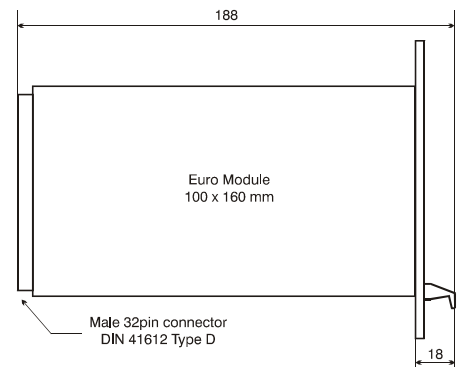
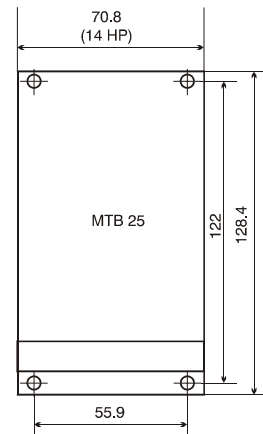
Thus, an optionally connectable, bigger regeneration resistor is dispensable when using step motors.

Remark:

Never pull out components from the 19" rack while power is on. Else you risk damages to the power supply and devices connected:



Power Supply Module MTB25



Technical Data MTB25-AA and MTB25-AB

Rated AC input voltage	1 x 85 V _{rms} (40 V _{eff} ... 95 V _{rms}) 3 x 85 V _{rms} (40 V _{rms} ... 95 V _{rms})
Rated DC Output (Bus) voltage	$U_{VCC} = 120 V_{DC}$ (55 V _{DC} ... 140 V _{DC})
Rated output current	8 A _{DC} (1 ~), 25 A _{DC} (3 ~)
Rated output power	960 W (1 ~), 3 kW (3 ~)
Regeneration circuit	
Peak power	3.2 kW
Continuous power	500 W
Regen circuit cut-in threshold	$U_{VCC} > U_{IN} \times \sqrt{2} + 5 V$
External regeneration resistor	9 Ohm, 500 W

Connector male 32pin connector, DIN 41612 type D

Internal regeneration resistor * Peak power 650 W
Continuous power
without forced ventilation 30 W
with forced ventilation 60 W

Auxiliary voltage out 24 V_{DC} *
Rated input voltage 1 x 19 V_{rms} or 3 x 19 V_{rms}
Rated output voltage 24 V_{DC} (20 ... 28 V_{DC})
Rated output current 2 A_{DC} (1 ~), 3 A_{DC} (3 ~)

* MTB25-AB only

Order Code

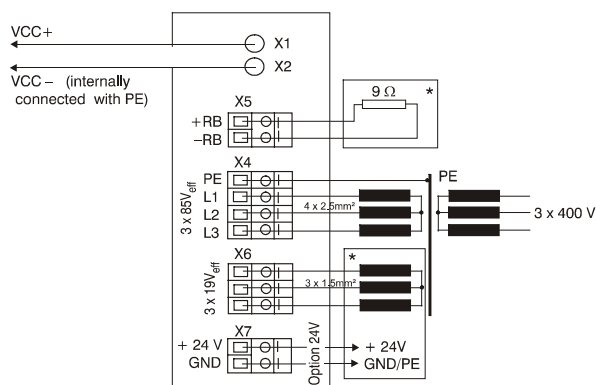
MTB 25-85-012-AA (Standard)

MTB 25-85-012-AB (with option "24 V ext. out" and internal regeneration resistor)

Optional Motherboard MB-MTB-03

This optionally available motherboard simplifies wiring substantially in comparison with the connection via a VG connector. The connections for the supply and the external regeneration resistor are wired to screw terminals. The bus voltage is led to bolts for an easy soldering of DC-bus bars to the motherboards of the drives.

Connecting a MTB25 via Motherboard



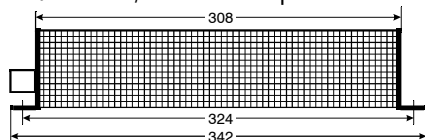
* if necessary

Remark:
If you are going to supply several MTBs from one common transformer, you must provide isolated secondary windings for every MTB.

Optional Regeneration Resistor 9RK

The ceramic power dump resistor in a shielding metal grid housing is available for drive applications needing quick active braking, thereby using the maximum power dump circuit performance of the MTB 25.

Resistance value: 9 Ω / Continuous power: 500 W / Peak power 3 kW

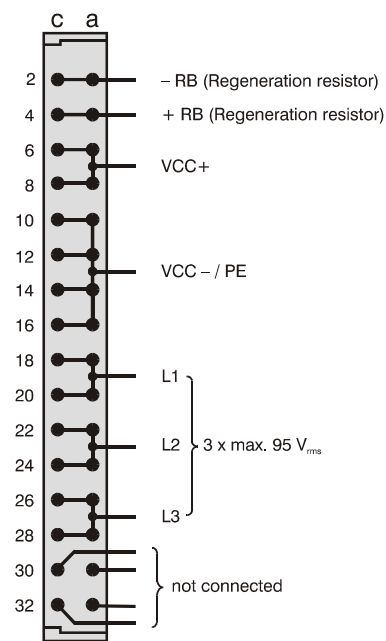


Transformers

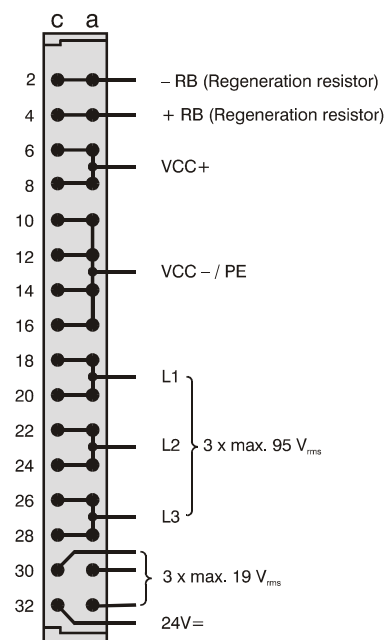
One-phase and three-phase isolating transformers with secondary voltages of 49 V, 61 V and 85 V AC for generating bus voltages of 70 V, 85 V or 120 V_{DC} are available in various power ranges to feed the MTB series power supplies.

Connector Pinout

(male 32pin connector, DIN 41612 type D)



MTB 25-AA



MTB 25-AB