# AC Motors AC Brake Motors

# Addendum to the operating instructions

# **Retrofitting IS plug connector**

Edition 12/99

Installation and startup of AC motors/AC brake motors must be performed only by trained personnel observing the relevant accident prevention regulations and operating instructions!



For additional information on the assembly and installation as well as startup and operation, refer to the "AC Motors/AC Brake Motors" operating instructions.



To retrofit an IS plug connector, you have to modify (DT63) or replace (DT71 ... DV132S) the lower part of the terminal box.

You find information on how to wire the upper part of the IS plug connector in the "AC Motors/AC Brake Motors" operating instructions.

The terminal box lower section as well as the IS lower section are referred to as "adapter plate" in the parts lists.

## **Tools required**

- Standard tools
- Torx 20 screwdriver
- Wire strippers
- Hexagon key 7 and 8
- Small crosstip screwdriver AP 1x100
- Small slotted screwdrivers 3.5 and 5.5

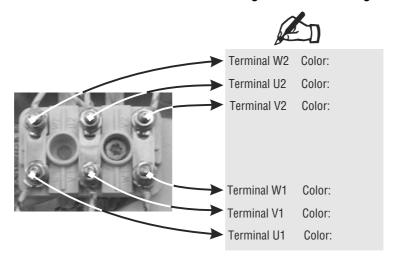
#### First, unscrew the terminal box cover.

Prerequisite for retrofitting an IS plug connector:

- The cables to be connected to the IS plug connector must extend out of the the stator housing by 150 mm (motor, brake, TF/TH)
- The cable cross sections must be between 0.25 mm<sup>2</sup> and 4 mm<sup>2</sup>.



Write down the color code of the terminals for connecting the motor winding.



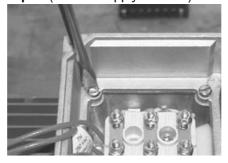
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Disconnect the cables from the terminal block and brake rectifier BGE/BG/BSG (if installed). Remove the current/voltage relay SR/UR and the brake rectifier BGE/BG/BSG (if installed). Do not unscrew the SR/UR from the DT63!



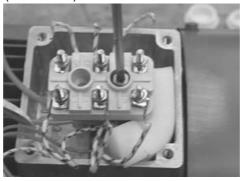
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Remove the terminal box lower part (does not apply to DT63).



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Unscrew the terminal block (Torx screw).

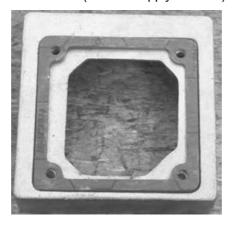


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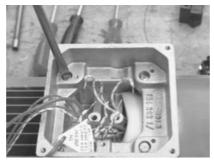
If cable lugs are used, remove them from the cable ends and strip the cable for 9 mm. No conductor end sleeves are necessary.

Apply sealing compound to the gasket from the IS retrofit set (preferably Hylomar L-Spezial) and place the gasket into the IS lower section (does not apply to DT63).



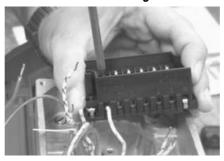
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Secure the IS lower section to the stator so that the protruding part is located over the fan (does not apply to DT63).

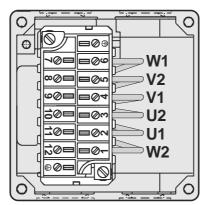


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Wire the IS plug connector lower section (part number 184 425 3) as shown in the following figures and according to the color codes noted on Page 2.



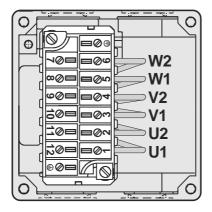
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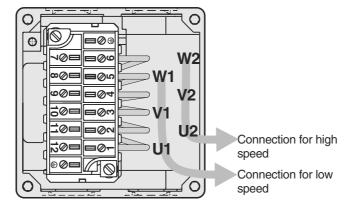
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 $\triangle/\Upsilon\Upsilon$  connection for pole-changing motors in Dahlander connection

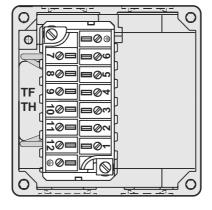


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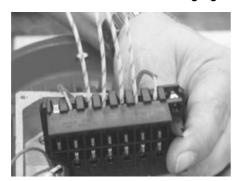
Connection of TF or TH

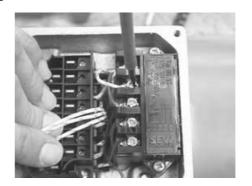
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## Wire the brake as shown in the following figures





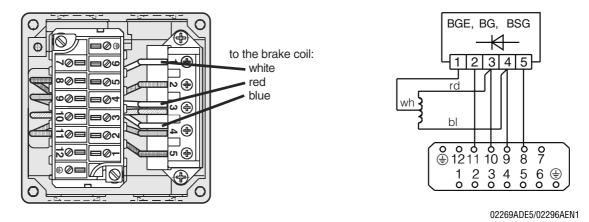
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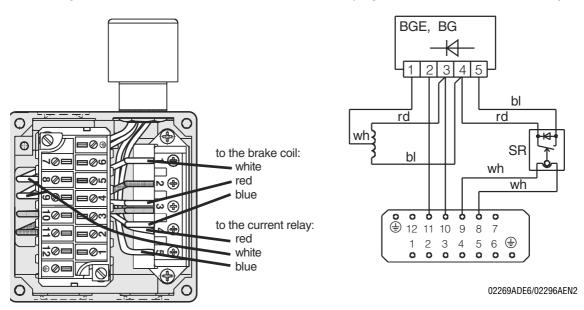
# For DT71 ... DT90, you have to install the BG1 brake rectifier supplied with the retrofit set!

Connecting the brake rectifier in the lower section of the IS plug connector:

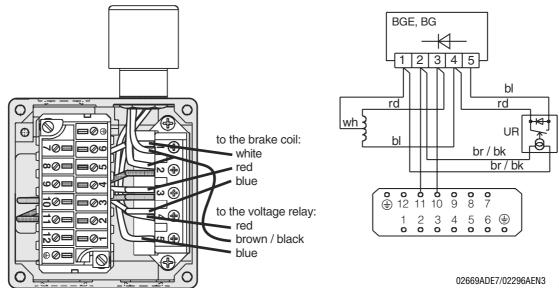




Connecting the brake rectifier in the lower section of the IS plug connector with SR current relay:

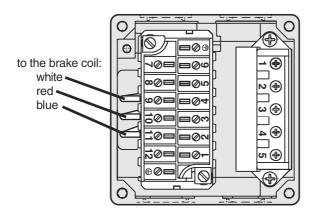


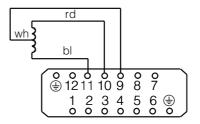
Connecting the brake rectifier in the lower section of the IS plug connector with UR current relay:





## Brake rectifier in control cabinet





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After wiring work is complete, secure the lower section of the IS plug connector in the IS lower section.



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Screw on the brake rectifier again (with washers).



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Screw the current/voltage relay SR/UR with gasket into Pg16 in the IS lower section.

For wiring the upper section of the IS plug connector (part number 184 424 5), refer to the "AC Motors/AC Brake Motors" operating instructions.



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