

# AMK

# AMKASYN

## Digital drive systems

**Motor encoder exchange  
for the encoder types I, L or E**

**Motor series      DW13-60-4  
                         DW13-100-4  
                         DW13-150-4  
                         without holding break**

Rights reserved to make technical changes

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28/2005

Part No.: 201014

**AMK**

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## 1 Safety instructions

- There is **danger to life** if this is not complied with!
- Incorrect behaviour leads to personal injury and material damage.
- Observe the warning and information signs!
- Observe the national/international and plant- specific regulations and requirements
- Perform work only on stationary motor disconnected from the power supply.
- Work on electrical machines may be performed only by skilled personnel, under the use of suitable equipment and methods.
- Cleanliness in all maintenance work.
- Use only original AMK spare parts. No liability warranty if non-AMK parts are used!
- AMK motors consist of precision parts, therefore the greatest care and cleanliness in disassembly/assembly.  
Encoders and sensors contain electro statically sensitive devices (ESD). Observe protective measures!
- Draw off or fit drive elements on the shaft end of the motor only with suitable tools.  
**Under no circumstances** may you use blows (hammer blows) and open flames (welding burners, soldering lamps)! (Endangering the bearings and true running of the shaft end)
- AMK does not overtake any liability for damages which were caused by incorrect maintenance and repair.
- All guarantee demands defunct when the motor will be opened.

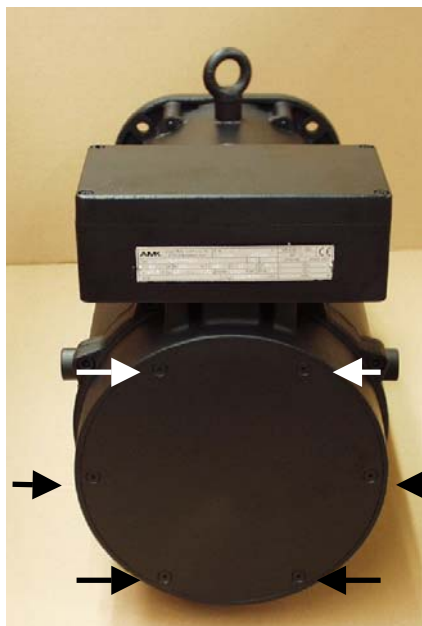
## **2 List of tools**

- 1.) Hexagon key, size 2
- 2.) Hexagon key, size 3
- 3.) Hexagon key, size 4
- 4.) Torque wrench hexagon key, size 2
- 5.) Torque wrench hexagon key, size 4
- 6.) Phillips screwdriver Ph0

## **3 Auxiliary tool**

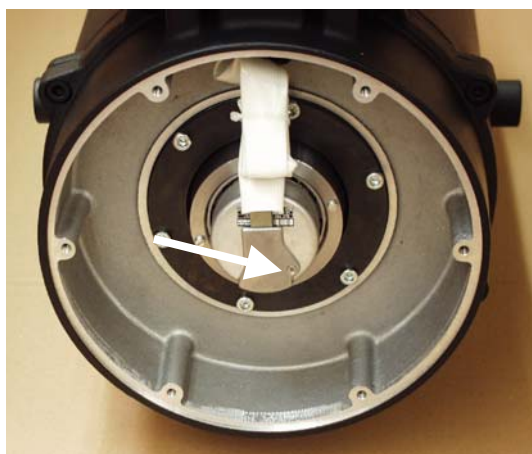
- 1.) Auxiliary screw M 8\*95
- 2.) Cable tie

## 4 Dismantling



### Step 1

Remove the casing cover with the hexagon key, size 3

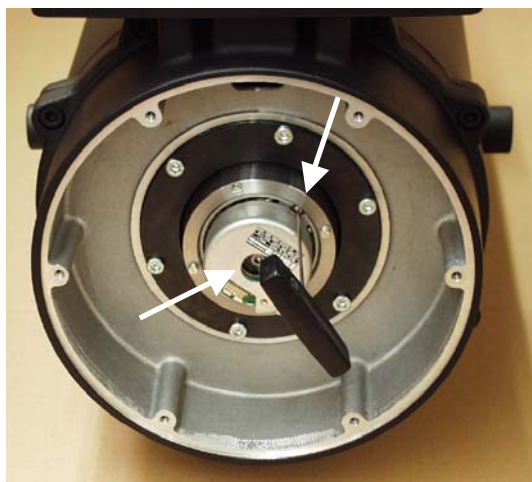


### Step 2

Remove the encoder cover by using a Phillips screwdriver size PH 0.

Loose the cable tie.

Remove the encoder cable.



### Step 3

Open the hexagon socket screw by using a hexagon key size 2.

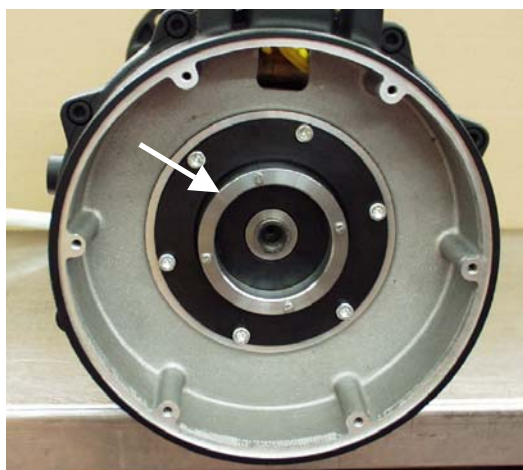
### Step 4

Remove the hexagon socket screw from the encoder hollow shaft.  
(Hexagon key, size 4)



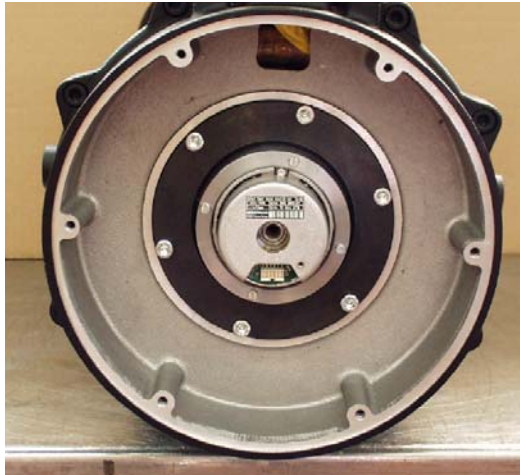
**Step 5**

Screw in the auxiliary hexagon bolt (M 8\*95) to loose the encoder from the shaft.



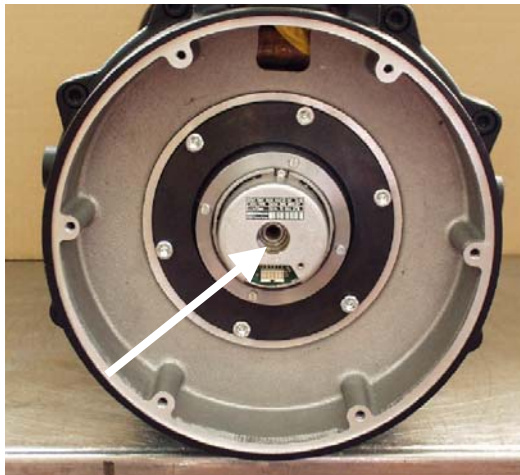
**Do not remove the encoder mounting ring!**

## 5 Assembly



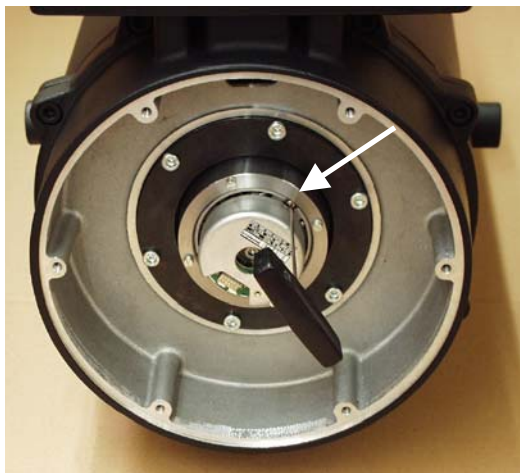
### Step 6

Insert new encoder.



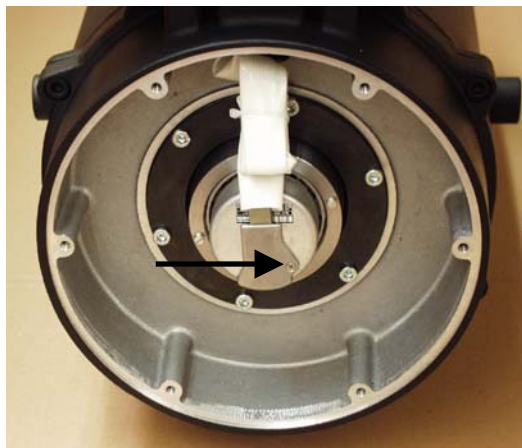
### Step 7

Put the hexagon socket screw M 5\*45 with the washer through the hollow shaft encoder. Fasten the screw with **5,2Nm**. (Torque wrench hexagon key, size 4)



### Step 8

Fasten the hexagon socket screw with **0,65Nm**. (Torque wrench hexagon key, size 2)



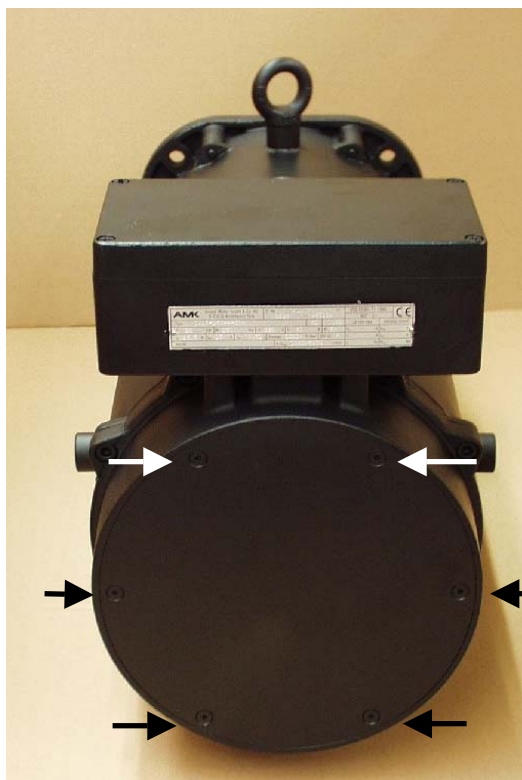
**Step 9**

Put on the encoder cable.

**Step 10**

Fix the encoder cover by using a Phillips screwdriver size PH 0.  
(M 3\*25)

Fix the encoder cable by using a cable tie.



**Step 11**

Fix the casing cover by using a hexagon key, size 3 and the screws  
M 5\*12.

## 6 Impressum

**Title** PDK\_201014\_Wartung\_DW13\_Gebertausch

**Objective** Description for the encoder exchange on DW 13 motors

**Part number** 201014

**History**

Date
2005/28

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**To assure a fast and accurate response to solve customer problems we ask for your cooperation in providing us with the following information:**

- Nameplate data
- Software version
- System configuration and application
- Description of problem and presumed cause of failure
- Diagnostic message ( error code )

**Publisher**

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