

Please read carefully before starting operation !

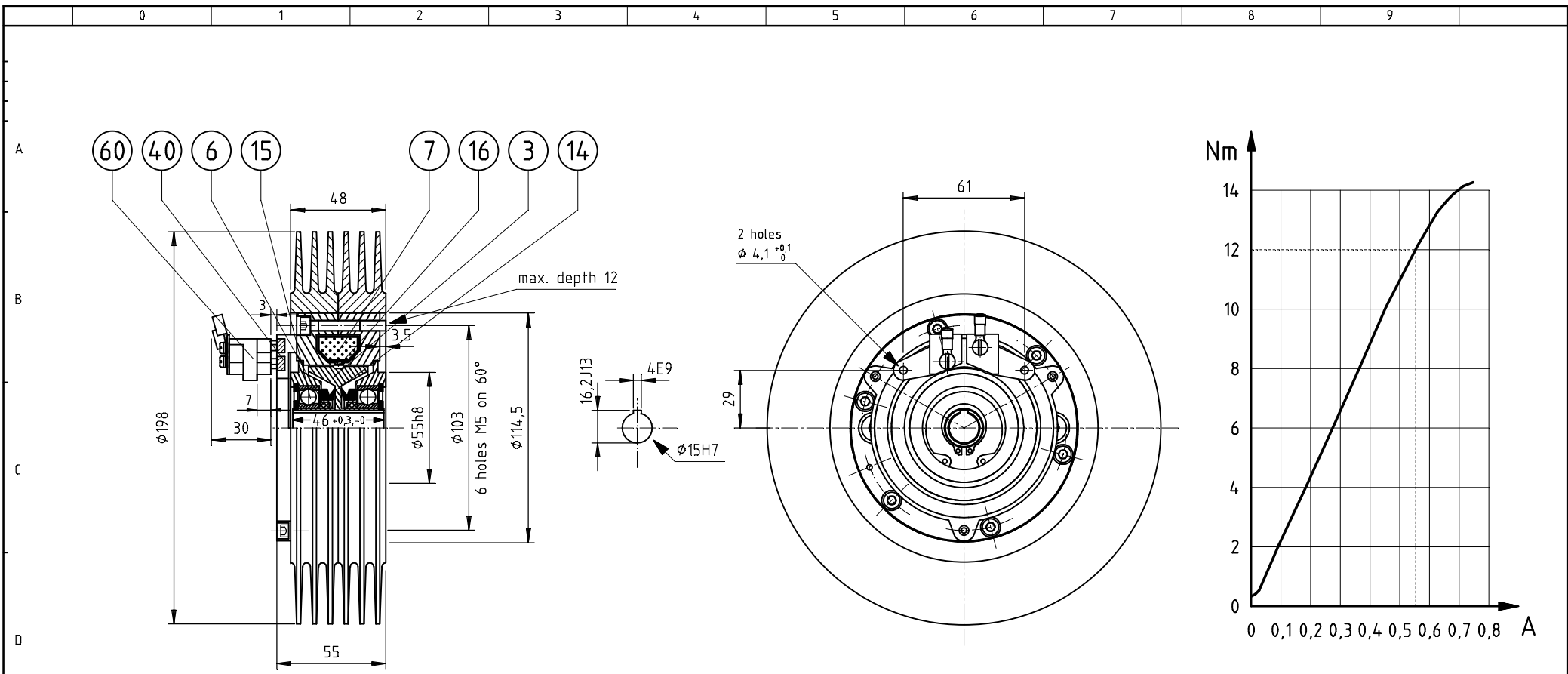
- Should any damage occur due to disregard of the following instructions the guarantee expires and the manufacturer is free from any obligations. The device can only be employed under operations parameters not exceeding the nominal capacity of the clutch or brake. Maximum torque and highest permissible power loss must be strictly observed. The available voltage must correspond to the operation voltage indicated on the identification plate. When a clutch of the E(R)AT ... -Type is used, the distance between the brush holders and the slide ring must correspond to the measure indicated on the table of dimensions.  
 If a brake is used, there is no slide ring and the connection is effectuated directly on the coil. Thereupon it must be checked that no body contact takes place.  
 If a clutch or a brake is operated in an extremely dustladen place (soot, wood chip, paper or cement dust) a dust cover should be provided. In such a case an additional fan should allow reliable dissipation of the heat developed.

Storage : Clutches and brakes must be stored in a dry place and protected against corrosion. The device can only be stored in its welded plastic hull containing moisture absorbing chips.

- Installation :  
 Installation of the device must be carried out with care in order to prevent damaging of bearing and packing. Any use of force impairs the function. The borehole present should be lightly smeared with a rust proofing grease. The system being lubricated for life, any other lubrication with oil or grease is not admitted as it would impair the performance of the device.
- Starting operation :  
 Clutches and brakes should be taken into operation by means of short current pulses to allow proper distribution of the magnetic particles. Thereupon the rotor speed correspond to the use required.
- Dismounting, Repairs :  
 Instructions for repair are supplied on request free of obligation. Upon disassembly of clutches and brakes any shock by knocks and shoves must be prevented. When removing the rotor a brace can be used.

|   |          |       |        |            |                                  |              |  |  |                        |                     |  |                |
|---|----------|-------|--------|------------|----------------------------------|--------------|--|--|------------------------|---------------------|--|----------------|
| c |          |       | Datum  | 29.12.1993 | Zeichnungsnummer/ drawing number |              |  |  | operating instructions | Komm.Nr             |  | Vertragsnummer |
| b |          |       | Bearb. | KIPP       | 1.1232E                          |              |  |  |                        | General-Information |  |                |
| a |          |       | Gepr.  |            |                                  |              |  |  |                        |                     |  |                |
|   | Änderung | Datum | Name   | Norm       | Einbauort:                       | Ersatz fuer: |  |  |                        |                     |  |                |





Applicable for horizontal and vertical shaft position !

In order to avoid magnetic leakage flux and to achieve a good heat removal, non-ferrous metals should be used for installation or attachment of auxiliary components (not for drive shaft).

dimensions and specifications subjekt to change

| rated torque          | residual torque       | field values   |               |                    | resistance at 20°C | operating times      |                       | axial force is inadmissible |                    |                    | admissible max. radial force: N |                         |                       |        |
|-----------------------|-----------------------|----------------|---------------|--------------------|--------------------|----------------------|-----------------------|-----------------------------|--------------------|--------------------|---------------------------------|-------------------------|-----------------------|--------|
|                       |                       | maximum values | rated current |                    |                    | t <sub>on</sub> [ms] | t <sub>off</sub> [ms] | max. admissible power loss  |                    |                    | mass moment of inertia          |                         | weight                |        |
| M <sub>max</sub> [Nm] | M <sub>res</sub> [Nm] | P [W]          | U [V]         | I <sub>N</sub> [A] | R [Ω]              |                      |                       | P <sub>v</sub> [W]          | P <sub>v</sub> [W] | P <sub>v</sub> [W] | J [kgm <sup>2</sup> ]           | J [kgm <sup>2</sup> ]   |                       | m [kg] |
| 12                    | 0,56                  | 24             | 24            | 0,55               | 23                 | 240                  | 150                   | 70                          | 190                | 310                | 5,2·10 <sup>-3</sup>            | 14,0·10 <sup>-3</sup> * | 0,25·10 <sup>-3</sup> | 2,8    |
|                       |                       |                |               |                    |                    |                      |                       | 150*                        | 600*               | 1050 *             |                                 |                         |                       | 4,6 *  |

\*) heat sink "R"

| item | amount | parts                                |
|------|--------|--------------------------------------|
| 3    | 1      | internal rotor                       |
| 6    | 2      | felt gasket                          |
| 7    | 1      | field coil 24-VDC                    |
| 14   | 2      | V ring gasket                        |
| 15   | 2      | ball bearing                         |
| 16   | -      | air gap for magnetic powder slipping |
| 40   | 1      | slipping                             |
| 60   | 1      | brush holder assy.                   |