



A 12, A 13, A 14, A 15, A 16, A 401, A 500

AD 401

A 12 KW, A 13 KW, A 14 KW, A 15 KW, A 16 KW, A 401 KW, A 500 KW

AD 401 KW

AW 15, AW 16, AW 401

Biral Umwälzpumpen – Circulateurs Biral – Pompe di circolazione Biral

Biral Circulation Pumps – Biral circulatiepompen – Bombas de circulación Biral

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 **Biral**[®]

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1. Safety information

1.1 General remarks

These installation and operating instructions contain items of information of fundamental importance which must be taken into account during assembly, operation and maintenance. They should therefore be read without fail before installation and commissioning by the fitter and also the responsible specialist staff/operator. They must always be available for consultation at the plant's place of deployment.

Not only are the general safety hints included in this «Safety Hints» section to be observed, but also the special items of safety information included in the other sections.

1.2 Identification of notices



The safety information contained in these installation and operating instructions, non-compliance with which can lead to danger for people, are specially marked with the general danger symbol «Safety sign according to DIN 4844-W9».



This symbol is a warning of dangerous electric voltage. «Safety sign according to DIN 4844-W8».

Warning

You will find this symbol in the case of safety information non-compliance with which can endanger the machine and its functions.

Information signs mounted directly on the plant, such as, for example

- rotating direction arrow
- symbols for fluid connections

must be obeyed without fail and be kept in a fully legible state.

1.3 Staff qualification and training

The staff deployed for assembly, operating, maintenance and inspection tasks must show that they have the appropriate qualifications for such work. The field of responsibility, competence and supervision of the staff must be stipulated exactly by the operator.

1.4 Risks in the event of non-compliance with the safety information

Non-compliance with the safety information can result in both danger for persons and also for the plant and the environment. Non-compliance with the safety information can lead to the loss of claims for damages of any kind.

In detail, non-compliance, for example, may result in the following risks:

- failure of important functions in the plant
- failure of prescribed methods for servicing and maintenance
- danger to persons through electrical and mechanical causes

1.5 Safety-conscious work

The safety information contained in these installation and operating instructions, the existing national regulations for the prevention of accidents, as well as any internal working, operating and safety regulations stipulated by the operator must be observed.

1.6 Safety information for the operator/operating personnel

Any risks from electric power must be eliminated (For details see, for example, the regulations published by NIN (CENELEC) and the I.E.E.).

1.7 Safety information for installation, maintenance and inspection works

The operator has to ensure that all installation, maintenance and inspection works are carried out by authorised and qualified specialist personnel who have informed themselves adequately about the requirements by a thorough study of the installation and operating instructions.

Basically, any works on the plant should only be carried out when it is at a standstill and not carrying any electrical current.

Directly after completion of the works, all safety and protective installations must be mounted or activated again.

Before re-commissioning, the points listed in the section «*Electrical connection*» must be observed.

1.8 Unauthorised reconstruction and production of spares

Reconstruction of or changes to pumps are only permissible after consultation with the manufacturer. Genuine spare parts and accessories authorised by the manufacturer serve the cause of safety.

The use of other parts can cancel any liability for the resultant consequences of this.

1.9 Improper operating methods

The operating reliability of the pumps supplied is only guaranteed with appropriate application of the section «*Intended application*» of the Installation and Operating Instructions. The limit values given in the technical data must not be exceeded on any account.

2. Transport/storage

The pumps are delivered ex works in suitable packaging.



Biral AG
Südstrasse 10
CH-3110 Münsingen
T +41 31 720 90 00
F +41 31 720 90 10
E-Mail: info@biral.ch
www.biral.ch
www.biralcampus.ch



Biral GmbH
Kesselsgracht 7a
52146 Würselen
T +49 2405 408070
F +49 2405 40807-19
E-Mail: info@biral.de
www.biral.de