



*COSTRUZIONE MACCHINE AGRICOLE di
DODALDO & C SNC*

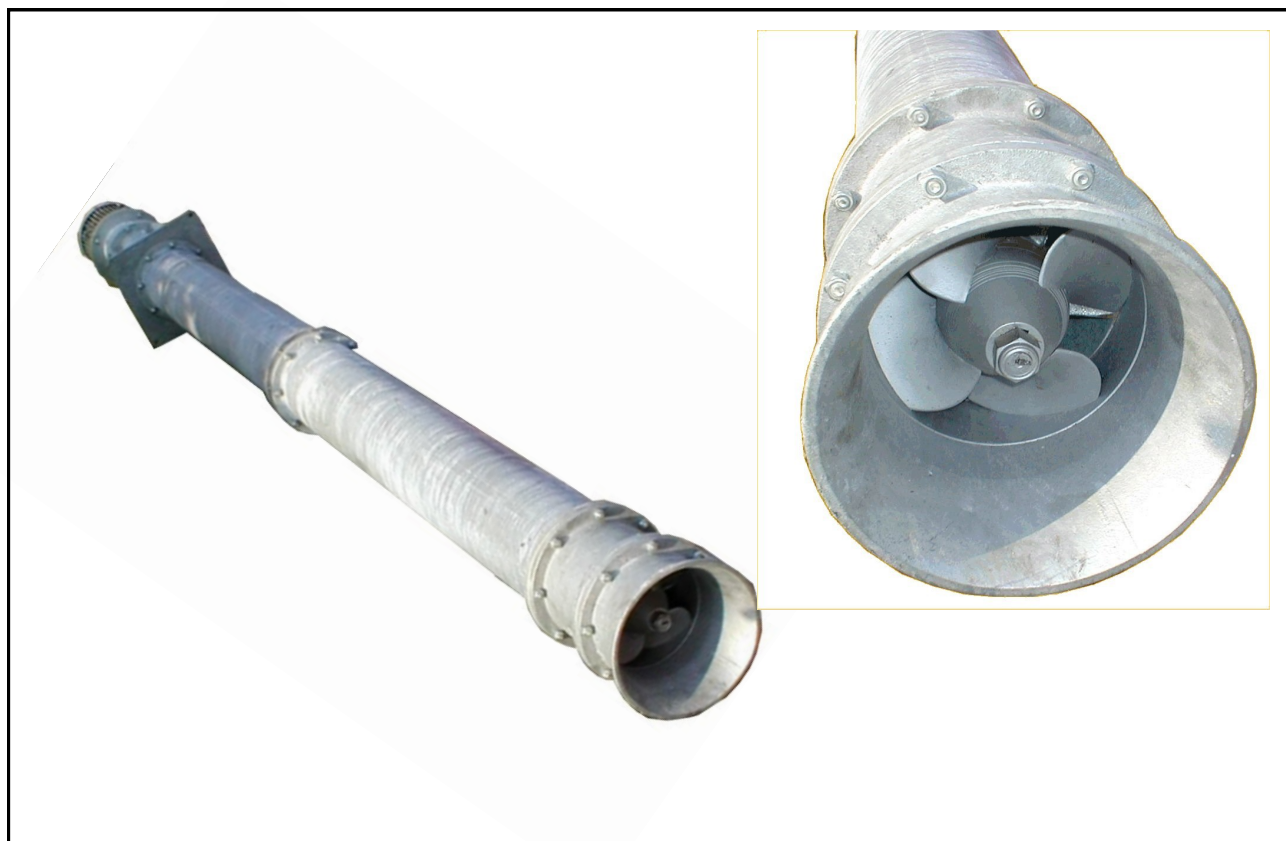
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USE AND MAINTENANCE MANUAL

HIGH FLOW PROPELLER PUMPS



All data, pictures and performances mentioned in this manual are only approximate.

The manufacturer reserves the right to make changes without prior notice.

DODA thanks you for purchasing a product in its range and invites you to read this booklet.

Inside you will find the necessary information for correct use of the machine you have purchased. Please, therefore, follow the instructions contained herein and read the booklet in all its parts.

Please also store the booklet in a safe place and keep it unaltered. The content of this manual may be changed without notice, and without additional obligations, in order to include changes and improvement to the units already provided.

Any reproduction or translation of any part of this booklet is prohibited without prior authorisation.

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EC DECLARATION OF CONFORMITY AS
DEFINED BY DIRECTIVE 2006/42/EC AND FOL-
LOWING MODIFICATIONS

1. INTRODUCTION

The machines described in this manual are “high flow propeller pumps”, which are designed to transfer waters from basin or channels.

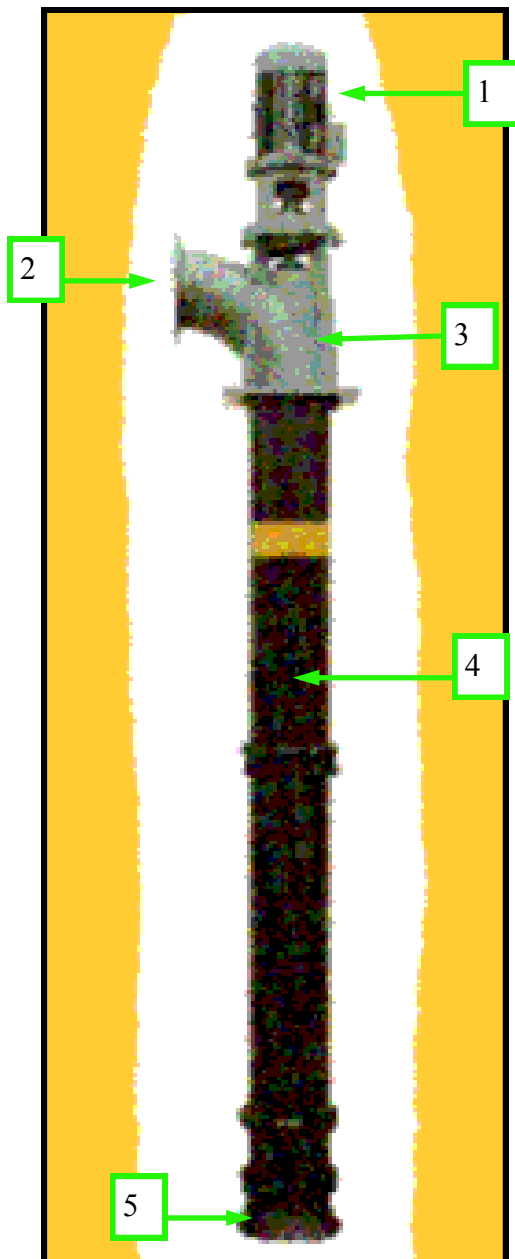
They can be easily moved and quickly installed.

Available in a wide range of models with different performances and power absorptions, they are supplied with electric motor.

The galvanised frame, the oil bath drive line and heavy duty materials ensure a machine long life and a simple maintenance.

From the technological point of view, the concept adopted for all other DODA products has been applied to this machine as well:

" Highest quality for highest reliability and longest service life ."



- 1) Electric motor
- 2) Delivery pipe outlet
- 3) Pump head
- 4) Line piping
- 5) Suction bell

fig. 1

2. CONSTRUCTION

PEV” propeller pumps are characterised by a simple and rugged construction consisting of three main elements:

- PUMP CASING
- COLUMN PIPE
- DISCHARGE UNIT

2.1 PUMP CASING

Single or multistage. Each stage consists of a diffuser, inside of which the propeller rotates. At the bottom, the lowest component is the suction bell which is always one, even if the pump casing is multistage.

2.2 PROPELLER

The propeller is provided with adjustable special designed blades which turn around the spherical hub.

Propeller blades inclination is adjusted by the manufacturer in order to get the highest efficiency requested by the pump.

2.3 COLUMN PIPE

The column pipe consists of one or more flanged pipes, bearings with rubber or bronze bush lubricated by the liquid pumped and internal shafts with replaceable chromium-plated bushes.

2.3 COLUMN PIPE

The discharge unit consists of: support base, discharge head (below the floor level or above the floor level discharge), drive unit complete with grease lubricated thrust bearings for the rotating assembly support, base frame for electric motor or right angle drive in case of diesel engine or tractor, and flexible coupling.

3. MANUFACTURING MATERIALS

Standard version, suitable for non-aggressive or moderately charge water:

3.1 PUMP CASING

- Suction bell bronze
- Diffuser bronze
- Spherical hub bronze
- Propeller blades bronze

3.2 DRIVE LINE

- Piping galvanized or painted steel, or stainless steel
- Shaft c40 steel + stainless steel

3.3 DISCHARGE HEAD

Discharge head galvanized steel or stainless steel

4. LOADING AND UNLOADING OF THE MACHINE

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The loading and unloading of the machine can be carried out:

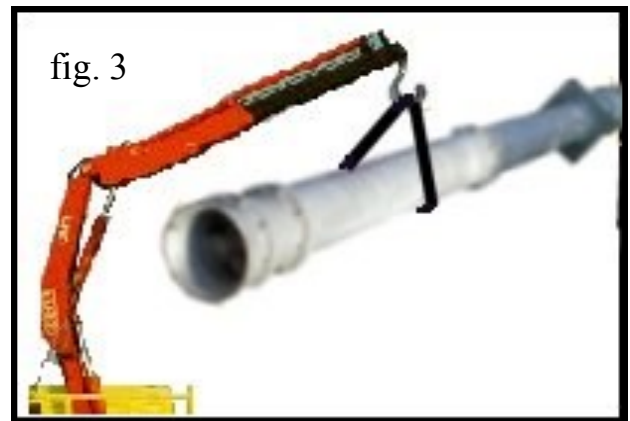
- by means of forklift truck or
- by means of a hoisting crane.

N.B.: the carrying capacity of the sling has to be seven times as much as the machine total weight (if it is made of a textile fibre).

WARNING: in any case the machine can not be lifted by catching on the weakest parts of the structure (delivery pipes, etc...).

WARNING : before lifting the structure, be sure that it is well-balanced.

WARNING: never move abruptly or bump the stainless steel parts with the forks of the lift truck.



5. GENERAL INSTRUCTIONS

- 1) Check that no component has been damaged during transport, on the contrary contact immediately our dealer .
- 2) The power supply connection has to be carried out only by skilled workers and according to DODA instructions (by connecting the cables of the electric motor to the power supply or the pump to the tractor by means of the cardan shaft).
DODA is in no way responsible for any electric connection.
Please follow the instructions on the motor plate and on the sticker showing the rotation direction.
- 3) Before starting the machine, check that the rotating driving parts are suitably protected, as foreseen by their manufacturer.
- 4) If the protection of a rotating component is not provided, the user has to supply the machine with it in conformity with the provisions of the law.
- 5) DODA takes no responsibility for modifications which could alter the characteristics of the machine bought.
- 6) DODA machines must not be installed on structures which are not in conformity with EC safety regulations foreseen by the Community Directives.
- 7) Before setting the machine in motion, read carefully all directions in the **“Use and Maintenance”** manual.
Above all, you have to be sure to have completely understood the machine functioning.
- 8) The machine has been designed and manufactured for the treatment of water and slurry, but not of chemical products.
Therefore if these substances are treated with our machine, it could be damaged permanently.
- 9) Check if the machine length is suitable for the tank depth.
- 10) As regards machines with oil-bath drive line, the driving pipe and the gearboxes (if present) have to be filled up with oil.
- 11) Prevent rubber parts of the machine from coming into contact with oil, grease or oil derivatives.

6. PRELIMINARY CHECKS

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VERSION WITH OIL-BATH DRIVE LINE

The machines are supplied with lubricant in the drive pipes. Before setting the unit in motion, check the minimum oil level:

- Unscrew the cap,
- Check the minimum level.

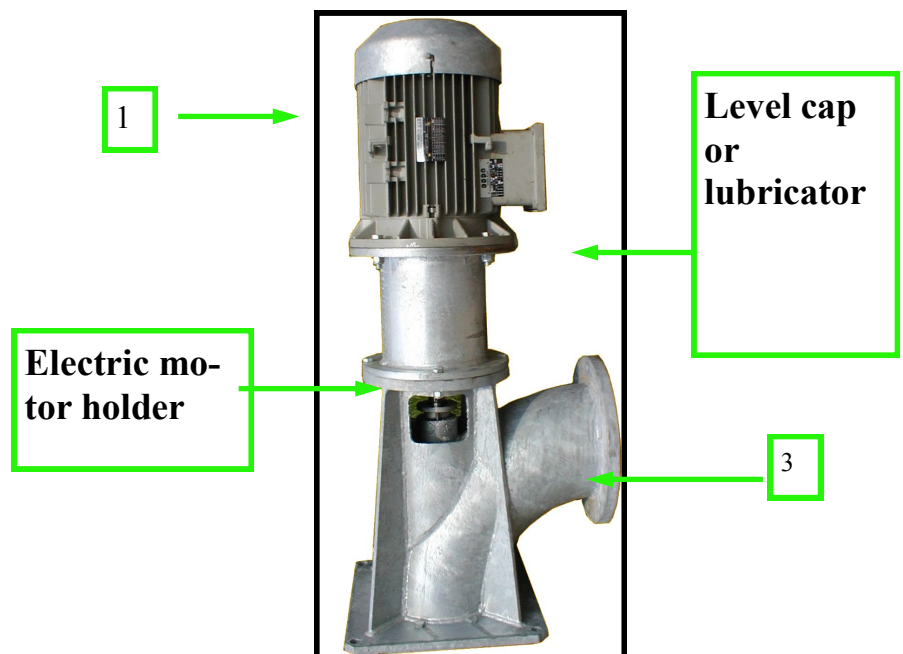
In case the oil is below the minimum level, contact the manufacturer.

VERSION WITH DRIVE LINE NOT IN OIL BATH

Instead of the oil level cap, a lubricator is installed. Lubricate periodically.

- Screw the cap again.
- Check periodically the minimum level cap: the oil has never to be under the indicated level.

N.B. During checkings, the drive pipe has to lie vertically.



7. OPERATING AND SAFETY RULES

- 1) Both during working phases and inspection ones, wear always proper clothing (overalls, gloves, helmet, accident prevention shoes, fastened clothes, etc...).
- 2) The machine has always to be used in a well lit place.
- 3) Since gases released by non homogeneous wasted are poisonous, check that:
 - the work area is adequately ventilated;
 - the machine is not used near to flames.
- 4) Never inspect the liquid manure tank alone. If you loose your balance or if you feel faint due to fumes, ask for help immediately.
- 5) If you do not need to work in a tank, cover it.
- 6) Only adults can employ the machine and in a the place not be accessible to children.
- 7) Do not carry out operations or adjustments when the machine is in motion or when it is supplied.
- 8) The machine has to be employed only if all necessary protections are correctly positioned, by following the instructions indicated in the previous paragraphs to avoid possible contacts with moving parts.
Do not damage or remove such protections.
- 9) The machine can be set in motion only if it has already been filled up with oil (drive pipes and gearbox).
- 10) Before starting work phases, check that the whole assembly is stable (machine and tractor).
- 11) During maintenance verify that the machine is perfectly standing and disconnected from supply.
- 12) The trolley has not to be used for road transportation (if foreseen).
- 13) During operation, maintenance or adjustment, the rubber parts of the machine (gaskets, etc...) have not to come into contact with oil, grease or oil derivatives.
- 14) Be sure that the motor rotation is clockwise as indicated by the arrow on the motor (when foreseen).
- 15) As regards machines provided with electrical supply, the connection has to be carried out in a place protected from rainfall.
- 16) If the delivery pipe is connected to pipes or hoses, check that the suitable fastening joints are in perfect conditions; do not stop near them: hazard of bursting and tearing.
- 17) Work and keep the machine in a dry area, protected from atmospheric precipitation if it is not used for a long time.

8. MAINTENANCE

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Before carrying out any maintenance stop the machine and check that it is not supplied.

- 1) Check periodically the oil level of any component which requires lubrication (drive pipes). Every two years replace the oil completely (Use **synthetic lubricant Mobil Glygoyle 11**).
- 2) At the end of the machine employment, clean it to prevent the slurry from hardening. That can cause damages.
- 3) Check the wear conditions of the impeller and replace it if necessary.
- 4) Check that no foreign bodies could enter the pump body (i.e. wooden pieces, stones or anything that could damage the impeller blades).

For any spare parts apply directly to DODA authorized dealers.

9. STICKERS

The machine is provided with the following stickers:

**LIVELLO
OLIO**

FILL UP THE MACHINE WITH OIL TILL THE LEVEL INDICATED AND CHECK IT PERIODICALLY.

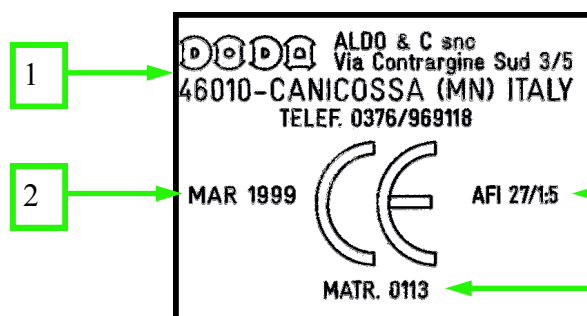
ATTENZIONE

Prima di posizionare la macchina verificare che il motore sia collegato nel senso di rotazione indicato dalla freccia.

WARNING

*Before placing the pump control the turning direction of the motor it must run as pointed out by the arrow. **DODA***

THIS NOTICE REMINDS YOU TO CHECK THE ROTATION DIRECTION OF THE ELECTRIC MOTOR BEFORE SETTING THE MACHINE IN MOTION.



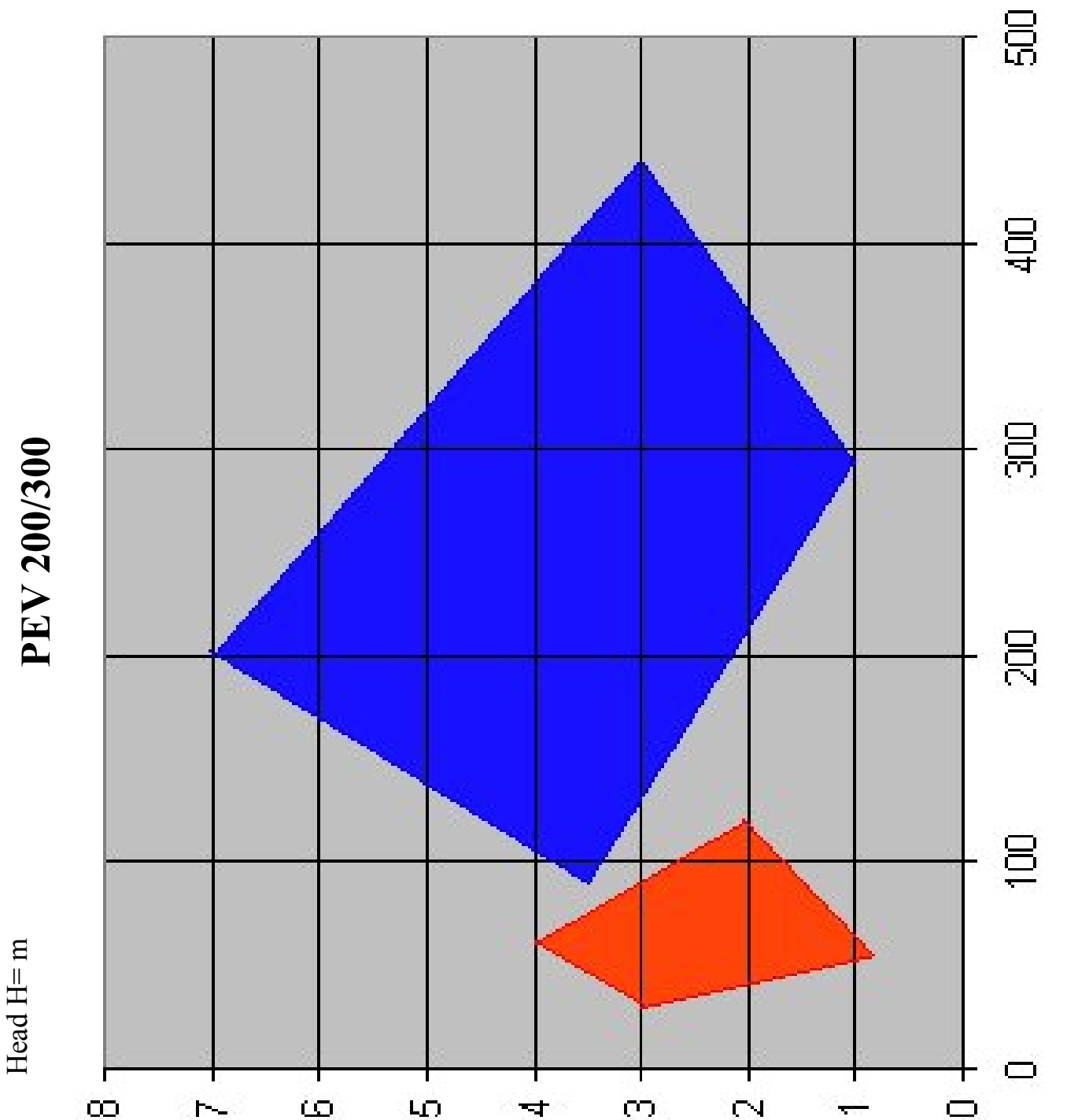
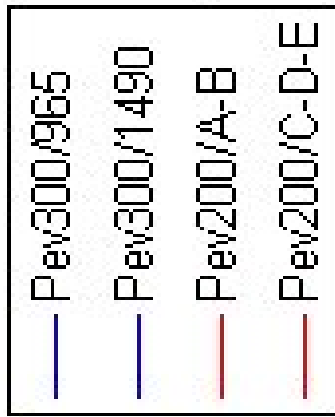
Data plate indicating the conformity with EC regulations:

- 1) NAME OF THE FIRM
- 2) MONTH AND YEAR OF PRODUCTION
- 3) SERIAL NUMBER
- 4) TYPE OF MACHINE

9. PERFORMANCES AND TECHNICAL DATA

MODELS:

- PEV 200 from 1 to 10 HP not in oil bath
- PEV 300 from 3 to 50 HP in oil bath



NOTES

NOTES

**EC DECLARATION OF CONFORMITY
AS DEFINED BY DIRECTIVE 2006/42/EC
AND FOLLOWING MODIFICATIONS**

WE

DODA ALDO & C. S.N.C.

Via Contrargine Sud, 3/5
46010 Canicossa (Mantova)

HEREBY DECLARE UNDER OUR OWN RESPONSIBILITY THAT THE
FOLLOWING PRODUCTS:

PEV HIGH FLOW PROPELLER PUMP

TO WHICH THIS DECLARATION REFERS, CONFORM TO DIRECTIVE 2006/42/EC
AND FOLLOWING MODIFICATIONS.

BUSCOLDO (MANTOVA)

.....
(Name, signature, corresponding stamp)



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