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2 MACHINE AND MANUFACTURER IDENTIFICATION

AVAILABLE MODELS: BIPUMP 12Vdc - BIPUMP 24Vdc
PRODUCT CODE: F0036301A
MODEL: F0036301A
DANGER: ONLY FOR USE WITH DIESEL FUEL
MANUFACTURER: Piusi S.p.A.

3 FACSIMILE COPY OF EU DECLARATION OF CONFORMITY

The undersigned Piusi S.p.A. Via Pacinotti 16/A, z.s. Rangovino 46029 Suzzara - Mantova - Italy
HEREBY STATES under its own responsibility that the equipment described below:
Description: PUMP INTENDED FOR DIESEL FUEL TRANSFER
Model: BIPUMP 12Vdc - BIPUMP 24Vdc
Serial number: refer to Lot Number shown on CE plate affixed to product
Year of manufacture: refer to the year of production shown on the CE plate affixed to the product

4 MACHINE DESCRIPTION

PUMP: Self-priming, volumetric, rotating vane pump, equipped with by-pass valve
MOTOR: Brush motor, DC, low tension with intermittent cycle, closed type in protection class IP55 according to CEI-EN 60034-5, directly flanged to the pump body
4.1 MOVING AND TRANSPORT
Foreword: Due to the limited weight and dimensions of the pumps, special lifting equipment is not required to handle them.
STORAGE: Store in a covered and dry place.
PACKAGING: The pump is equipped comes packed suitably for shipment.

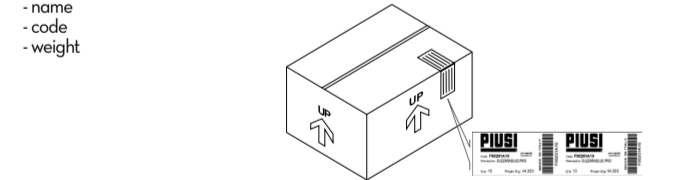


Table with 3 columns: MODEL, WEIGHT (Kg), PACKAGING DIMENSION (mm)
BIPUMP 12V - 24v, 9,9 / 10,4, 345 x 175 x 255

5 GENERAL WARNINGS

Warnings: To ensure operator safety and to protect the dispensing system from potential damage, workers must be fully acquainted with this instruction manual before attempting to operate the dispensing system.
Symbols used in the manual: ATTENTION, WARNING, NOTE
Manual preservation rights: This manual should be complete and legible throughout.

6 SAFETY INSTRUCTIONS

Main checks before installation: You must avoid any contact between the electrical power supply and the fluid that needs to be FILTERED.
Maintenance control: Before any checks or maintenance work are carried out, disconnect the power source.
FIRE AND EXPLOSION: Use equipment only in well ventilated area.
ELECTRIC SHOCK: This device must be grounded.
EQUIPMENT MISUSE: Do not leave the work area while device is energized or under pressure.

EQUIPMENT MISUSE: Misuse can cause injury or serious death
TOXIC FLUID OR FUMES HAZARD: Read MSDS to know the specific hazards of the fluids you are using.
HOT SURFACES: Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

SMOKING PROHIBITED: When operating the pump and in particular during refuelling, do not smoke and do not use open flame.
8 GENERAL SAFETY RULES: Wear protective equipment that is suited to the operations that need to be performed.

TOXIC FLUID OR FUMES HAZARD: Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.
HOT SURFACES: Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

7 FIRST AID RULES

Disconnect the power source, or use a dry insulator to protect yourself while you move the injured person away from any electrical conductor.
SMOKING PROHIBITED: When operating the pump and in particular during refuelling, do not smoke and do not use open flame.

8 GENERAL SAFETY RULES

Essential protective equipment characteristics: Wear protective equipment that is suited to the operations that need to be performed.
Personal protective equipment that must be worn: close-fitting clothing, protective gloves, safety goggles.
Protective equipment: instruction manual
Protective gloves: Prolonged contact with the treated product may cause skin irritation.

9 TECHNICAL DATA

Table with 7 columns: Voltage (V), Frequency, Absorption (A), RPM, Nominal Flow Rate (l/min), Motor Protection
BIPUMP 12V: 12, DC, .44, 2200, 85, IP55
BIPUMP 24V: 24, DC, 22,5, 2200, 85, IP55

ATTENTION: The curve refers to the following operating conditions: Fluid: Diesel Fuel, Temperature: 20°C
Suction Conditions: The tube and the pump position relative to the fluid level is such that a pressure of 0.3 bar is generated at the nominal flow rate.
ATTENTION: The temperature limits shown apply to the pump components and must be respected to avoid possible damage or malfunction.

10 OPERATING CONDITIONS

10.1 ENVIRONMENTAL CONDITIONS: TEMPERATURE: min. -4 °F / max. +140 °F, min. -20 °C / max. +60 °C
RELATIVE HUMIDITY: Max. 90%
ATTENTION: The temperature limits shown apply to the pump components and must be respected to avoid possible damage or malfunction.
10.2 ELECTRICAL POWER SUPPLY: In accordance with the model, the pump must be powered by a direct current line, the nominal values of which are indicated on the table in the paragraph TECHNICAL DATA.
10.3 DUTY CYCLE: The pumps have been designed for intermittent use and a 30-minute duty cycle under conditions of maximum back pressure.

10.4 FLUIDS PERMITTED / FLUIDS NOT PERMITTED

FLUIDS PERMITTED: DIESEL FUEL at a viscosity of from 2 to 5,35 cSt (at a temperature of 37,8°C).
FLUIDS NON PERMITTED AND RELATED DANGERS: GASOLINE, INFLAMMABLE LIQUIDS, LIQUIDS WITH VISCOSITY > 20 cSt, WATER, FOOD LIQUIDS, CORROSIVE CHEMICAL PROD., SOLVENTS.

11 INSTALLATION

11.1 PRELIMINARY INSPECTION: Verify that all components are present. Request any missing parts from the manufacturer.
11.2 POSITIONING THE PUMP: The pumps can be installed in any position (with pump axis in vertical or horizontal position).

11.3 NOTES ON SUCTION AND DELIVERY LINES

DELIVERY: The selection of the pump model must be made taking into account the characteristics of the system.
SUCTION: The self-priming pumps have a good suction capability.
ATTENTION: It is always advisable to prime the pump without an automatic dispensing nozzle.

12 CONNECTIONS



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SUCTION: The self-priming pumps have a good suction capability.
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11.4 CONFIGURATION AND ACCESSORIES

NOTE: Following is a list of the most common accessories whose use is compatible with the proportioning of the pumps.
DELIVERY: 1 Automatic dispensing nozzle, 2 Manual dispensing nozzle, 3 Meter, 4 Flexible tubing
SUCTION: 1 Foot valve with filter, 2 Rigid and flexible tubing, 3 Suction filter
ELECTRICAL POWER SUPPLY: 1 Line cord, 2 m, 2 Line cord, 4 m

11.5 LINE ACCESSORIES

ATTENTION: It is the responsibility of the installer to provide the necessary line accessories to ensure the correct and safe operation of the pump.

12 CONNECTIONS

12.1 ELECTRICAL CONNECTIONS: Before installation and maintenance make sure that power supply to the electric lines has been turned off.
12.2 CONNECTING THE PIPING: Before any connections, please refer to the indications (sticker on the pump) to detect suction and delivery univocally.

13 INITIAL START-UP

GETTING STARTED: Check that the quantity of diesel fuel in the suction tank is greater than the amount you wish to transfer.
ATTENTION: Extreme operating conditions with working cycles longer than 30 minutes can cause the motor temperature to rise.

14 DAILY USE

FOREWORD: Before any connections, please refer to the indications (sticker on the pump) to detect suction and delivery univocally.
SUCTION PIPES: If not already fitted, fill a suction filter.
DELIVERY PIPES: It is the installer's responsibility to use tubing with adequate characteristics.

15 MAINTENANCE

NOTE: Maintenance must be performed only by authorized and properly trained personnel.
ONCE A WEEK: Check and keep the filter installed on the suction line clean.
ONCE A MONTH: Check the pump body and keep it clean and free of any impurities.

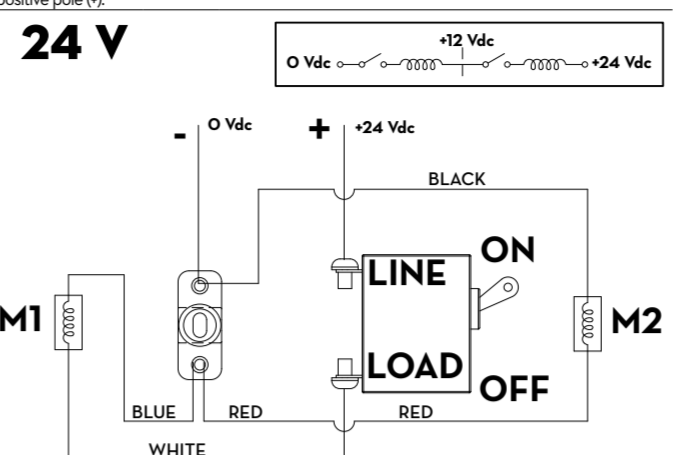
16 NOISE LEVEL

Under normal working conditions the noise emission from all models does not exceed the value of 75 db at a distance of 1 meter from the electric pump.

17 PROBLEMS AND SOLUTIONS

Table with 3 columns: PROBLEM, POSSIBLE CAUSE, CORRECTIVE ACTION
THE MOTOR IS NOT TURNING: Lack of electric power, Rotor jammed, Motor problems
THE MOTOR TURNS SLOWLY WHEN STARTING: Low voltage in the electric power line, Low level in the suction tank

12.2 CONNECTING THE PIPING



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18 DEMOLITION AND DISPOSAL

Foreword: If the system needs to be disposed, the parts which make it up must be delivered to companies that specialize in the recycling and disposal of industrial waste and, in particular:
Disposing of packing materials: The packaging consists of biodegradable cardboard which can be delivered to companies for normal recycling of cellulose.

14 DAILY USE

FOREWORD: This pump is for professional use only.
USE PROCEDURE: If using flexible tubing, attach the ends of the tubing to the tanks.
ATTENTION: After use, make sure the pump is turned off.

15 MAINTENANCE

NOTE: Maintenance must be performed only by authorized and properly trained personnel.
ONCE A WEEK: Check and keep the filter installed on the suction line clean.
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MADE IN ITALY

Käyttäjän asennusopas ja huolto FI
Installation, use and maintenance manual EN
BULLETIN M0141 E FIEN_00

