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2 MACHINE AND MANUFACTURER IDENTIFICATION



Table with 2 columns: AVAILABLE MODELS, MANUFACTURER. Row 1: E140, PIUSI S.p.A. Via Pacinotti Z.I. Rangavino 46029 Suzzara (MN) Italy

3 FACSIMILE COPY OF EU DECLARATION OF CONFORMITY

The undersigned PIUSI S.p.A. Via Pacinotti 16/A z. Rangavino 46029 Suzzara - Mantova - Italy
HEREBY STATES under its own responsibility that the equipment described below: Description: Pump for the transfer of diesel fuel
Model: E140
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
complies with the following legislation:
- Machinery Regulations
- Electromagnetic compatibility
The technical file is at the disposal of the competent authority following motivated request at PIUSI S.p.A. or following request sent to the e-mail address: doc.tec@piusi.com
THE ORIGINAL DECLARATION OF CONFORMITY IS PROVIDED SEPARATELY WITH THE PRODUCT

4 MACHINE DESCRIPTION

PUMP Self-Priming, volumetric, rotating electric vane pump, equipped with by-pass valve.
MOTOR Asynchronous motor, single-phase and three-phase, 4 pole, closed type (protection class IP55 in conformance with EN 60034-5-86 regulations) self-ventilated, directly flanged to the pump body.

4.1 HANDLING AND TRANSPORT

Foreword Due to the limited weight and dimensions of the pumps, special lifting equipment is not required to handle them. The pumps are carefully packed before dispatch. Check the packing when receiving the material and store in a dry place.

STORAGE - Store in a covered and dry place
- Store the unit away from dirt and vibration
ENVIRONMENTAL CONDITIONS: Storage humidity: Max 90% Storage temperature: min -10 °C Max +50 °C

PACKAGING The pump is equipped comes packed suitably for shipment. On the packaging a label shows the following product information:

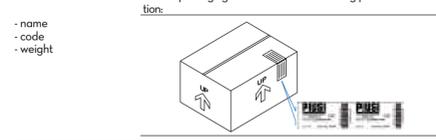


Table with 3 columns: MODEL, WEIGHT (Kg), PACKAGING DIMENSION(mm). Row 1: E140, 19.2, 350 x 250 x 300

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 The following symbols will be used throughout the manual to highlight safety information and precautions of particular importance.

ATTENTION This symbol indicates safe working practices for operators and/or potentially exposed persons.
WARNING This symbol indicates that there is risk of damage to the equipment and/or its components.

Manual preservation This manual should be complete and legible throughout. It should remain available to end users and specialist installation and maintenance technicians for consultation at any time.

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THIS MANUAL IS THE PROPERTY OF PIUSI S.p.A. ANY REPRODUCTION, EVEN PARTIAL, IS FORBIDDEN.

6 SAFETY INSTRUCTIONS

Mains - preliminary checks before installation Before any checks or maintenance work are carried out, disconnect the power source.
Maintenance control Before any checks or maintenance work are carried out, disconnect the power source.

FIRE AND EXPLOSION To help prevent fire and explosion: Use equipment only in well ventilated area.
Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline.

ELECTRIC SHOCK This equipment must be grounded. Improper grounding, setup or usage of the system can cause electric shock.

Electrocution or death Connect only to a grounded electrical outlets. Use only 3 wire extension cords in accordance with local electrical codes. Extension cords should have a ground lead. Ensure ground prongs are intact on power and extension cords.

Before each use check that the power connection cord and power plug are not damaged. If damaged, have power connection cord replaced before use by a qualified electrician.

Unsuitable extension leads can be hazardous, in accordance with current regulations, only sufficient cords that are labelled for outdoor use and have a dedicated conduction path should be used outdoors.

For safety reasons, we recommend that, in principle, the equipment be used only with a lock-leakage circuit breaker (max 30 mA).

Electrical connections must use ground fault circuit interrupter (GFCI). Installation operations are carried out with the box open and accessible electrical contacts. All these operations have to be done with the unit isolated from the power supply to prevent electrical shock!

Do not operate the unit when fatigued or under the influence of drugs or alcohol. Do not leave the work area while equipment is energized or under pressure.

Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards. Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.

Do not kink or over bend hoses or use hoses to pull equipment. Keep children and animals away from work area. Comply with all applicable safety regulations.

Do not exceed the maximum operating pressure or the temperature of the part with lower nominal value of the system. See Technical Data in all equipment manuals.

Use fluids and solvents that are compatible with the wetted part of the system. Read the manufacturer's instructions of the fluids and solvents. For more information on the material, request the safety data sheet (MSDS) from the distributor or dealer.

Check the equipment every day. Immediately repair or replace worn or damaged parts only with original spare parts of the manufacturer. Make sure the equipment is classified and approved compliant with the standards of the environment where it is used.

Use the equipment only for the intended use. Contact your distributor for more information. Keep hoses and cables far from traffic areas, sharp edges, moving parts and hot surfaces.

Do not bend or overbend the hoses or use the hose to pull the equipment. Read MSDSs to know the specific hazards of the fluids you are using. Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

7 FIRST AID RULES

Electrocution disconnect the unit from the mains, or use a dry insulator as protection while moving the electrocuted person far from any conductor. Do not touch the electrocuted person with bare hands until he/she is far from any conductor. Ask qualified and trained people for help immediately.

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 Personal protective equipment that must be worn

Wear protective equipment that is suited to the operations that need to be performed; - resistant to cleaning products.

safety shoes; close-fitting clothing; protective gloves; safety goggles.

instruction manual Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

Other equipment

Protective gloves

9 TECHNICAL DATA

Table with 10 columns: Model, Voltage (V), Frequency (Hz), Absorption (A), Power (W), RPM, Nominal Flow Rate (l/min), Operating pressure (bar), Motor Protection. Row 1: E140, 230/250, 50, 5.7/5.1, 1150/1180, 1450/1450, 140/140, 2, IP55

Operating conditions of the declared data 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.

Under different suction conditions higher pressure values can be created that reduce the flow rate compared to the same back pressure values. To obtain the best performance, it is very important to reduce loss of suction pressure as much as possible by following these instructions:

- Shorten the suction tube as much as possible
- Avoid useless elbows or throttling in the tubes
- Keep the suction filter clean
- Use a tube with a diameter equal to, or greater than, indicated (see installation)

10 OPERATING CONDITIONS

10.1 ENVIRONMENTAL CONDITIONS

TEMPERATURE min. -4 °F / max +140 °F min. 20 °C / max +60 °C max. 90%
RELATIVE HUMIDITY

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

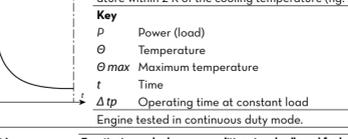
NOTE Depending on the model, the pump must be supplied by a single-phase alternating current line whose nominal values are shown in the table in Paragraph "TECHNICAL DATA".

The maximum acceptable variations from the electrical parameters are: Voltage: +/- 5% of the nominal value Frequency: +/- 2% of the nominal value

Power from lines with values outside the indicated limits can damage the electrical components.

10.3 WORKING CYCLE

Operation calculation S2 60 min: Operation at constant load for a given time (less than that required to reach thermal equilibrium), followed by a shutdown and rest period of sufficient duration to re-establish the machine temperature within 2 K of the cooling temperature (fig. 2).



ATTENTION Functioning under by-pass conditions is only allowed for brief periods of time (2-3 minutes maximum) whenever a particular installation carries the risk of functioning in by-pass mode for longer periods of time, it is necessary that the by-passed flow not be recirculated inside the pump, but be returned to the suction tank.

10.4 PERMITTED AND NON-PERMITTED FLUIDS

FLUIDS PERMITTED - DIESEL FUEL at a viscosity of from 2 to 5.35 cSt (at a temperature of 37.8°C). Minimum Flash Point (PM): 55°C, according to UNI EN 590 Paraffinic HVO/XTL EM 1594Q.

FLUIDS NON PERMITTED AND RELATED DANGERS - GASOLINE - FIRE - EXPLOSION
- INFLAMMABLE LIQUIDS with PM < 55°C - FIRE - EXPLOSION
- LIQUIDS WITH VISCOSITY > 20 cSt - MOTOR OVERLOAD

- WATER - PUMP OXIDATION
- FOOD LIQUIDS - CONTAMINATION OF THE SAME
- CORROSIVE CHEMICAL - PUMP CORROSION - INJURY TO PERSONS
- SOLVENTS - FIRE - EXPLOSION - DAMAGE TO GASKET SEALS

11 INSTALLATION

ATTENTION The pump must never be operated before the delivery and suction lines have been connected.

PRELIMINARY INSPECTION

- Verify that all components are present. Request any missing parts from the manufacturer.
- Check that the pump has not suffered any damage during transport or storage.

- Carefully clean the suction and delivery inlets and outlets, removing any dust or other packaging material that may be present.
- Check that the electrical data corresponds to those indicated on the data plate.

- Always install in an illuminated area.
- Make sure that the motor shaft turns freely.

11.1 POSITIONING, CONFIGURATIONS AND ACCESSORIES

NOTE In the case of installation in the open air, proceed to protect the pump by providing a protection roof. The pump can be installed in any position (pump axis vertical or horizontal).

The pump must be secured in a stable way using the holes on the bed of the motor and vibration damping devices.

ATTENTION THE MOTORS ARE NOT OF THE ANTI-EXPLOSIVE-TYPE. Do not install them where inflammable vapours could be present.

NOTE The broad range of pump accessories make it suitable for many different uses, installations and applications. The supporting base can be positioned in different ways. The pumps are furnished without line accessories. Following is a list of the most common line accessories whose use is compatible with the proper functioning of the pumps.

DELIVERY SUCTION

- DELIVERY - Automatic dispensing nozzle
- Manual dispensing nozzle
- Meter-Flexible tubing
SUCTION - Foot valve with filter nozzle
- Rigid and flexible tubing
- Pump suction filter

ATTENTION It is the responsibility of the installer to provide the necessary line accessories to ensure the correct and safe operation of the pump. The accessories that are not suitable to be used with the previously indicated material could damage the pump and/or cause injury to persons, as well as causing pollution.

To maximize performance and prevent damage that could affect pump operation, always demand original accessories.

11.2 NOTES ON SUCTION AND DELIVERY LINES

DELIVERY Foreword The choice of pump model must be made keeping the characteristics of the system in mind.

EFFECTS ON FLOW RATE Length and diameter of pipe, flow rate of dispensed liquid, accessories fitted, can create back pressures above those allowed. In this case, the pump mechanical control (bypass) will trip to reduce the flow rate.

HOW TO REDUCE EFFECTS ON FLOW RATE To avoid these problems, system flow resistances must be reduced using short and/or larger diameter pipes, as well as line accessories with low resistances (e.g., automatic nozzle for higher flow rates).

SUCTION Foreword The pumps are self-priming and characterized by good suction capacity. During the start-up phase, with an empty suction tube and the pump wetted with fluid, the electric pump unit is capable of suctioning the liquid with a maximum difference in height of 2 meters.

NOTE It is important to point out that the priming time can be as long as one minute and the presence of an automatic dispensing nozzle on the delivery line prevents the evacuation of air from the installation, and, therefore, prevents proper priming.

WARNING The installation of a foot valve is recommended to prevent the emptying of the suction tube and keep the pump wet. In this way, the pump will subsequently allow start up immediately.

CAVITATION When the system is functioning, the pump can work with pressure at the inlet as high as 0.5 bar, beyond which cavitation phenomena can begin as a consequence of flow rate and increase of system noise and pump damage.

HOW TO PREVENT CAVITATION It is important to ensure low vacuums at suction mouth by using: - short pipes with larger or identical diameter to that recommended - reduce bends to the utmost

- use large-section suction filters
- use foot valves with minimum possible resistance
- keep the suction filters clean because, when they become clogged, they increase the resistance of the system.

WARNING The difference in height between the pump and the fluid level must be kept as small as possible and, at any rate, within the 2 meters anticipated for the priming phase. If this height is exceeded, it will always be necessary to install a foot valve to allow for the filling of the suction tube and provide tubing of wider diameter. It is recommended that the pump not be installed at a difference in height greater than 3 meters.

In the case that the suction tank is higher than the pump, it is advisable to install an anti-siphon valve to prevent accidental diesel fuel leaks. Dimension the installation in order to control the back pressures due to water hammering.

12 CONNECTIONS

12.1 ELECTRICAL CONNECTIONS

ATTENTION IT IS THE INSTALLER'S RESPONSIBILITY TO CARRY OUT THE ELECTRICAL CONNECTIONS IN COMPLIANCE WITH THE RELEVANT STANDARDS.

WARNING Comply with the following (not exhaustive) instructions to ensure a proper electrical connection:

- During installation and maintenance make sure that power supply to the electric lines has been turned off.
- Use cables with minimum sections, rated voltages and installation type that are suitable for the characteristics indicated in paragraph "TECHNICAL DATA" and the installation environment.

- Always make sure that the cover of the terminal strip box is closed before switching on the power supply, after having checked the integrity of the seal gaskets that ensure the IP55 protection grade.

- All motors are equipped with a grounding terminal that is to be connected to the ground line of the electrical system.

ATTENTION - Verify that the terminal strip blades are positioned according to the diagram provided for the available power supply voltage.

- Verify the correct direction of rotation of the motor (see the paragraph overall dimensions), and, if not correct, invert the connection of the two cables in the power supply plug or on the terminal strip.

- The pumps are supplied without electrical safety equipment such as fuses, motor protectors, systems to prevent accidental restarting after power failures or others. It is indispensable to install an electric panel, upstream from the pump's power supply line, equipped with an appropriate residual current operated circuit breaker.

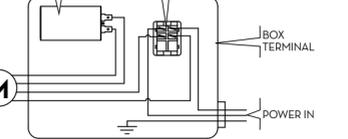
- It is the installer's responsibility to perform the electrical connections with respect for the applicable regulations.

NOTE The characteristics of the capacitor are shown on the identification plate for each pump model. he switch has the sole function of starting/stopping the pump and cannot in any way substitute for the main circuit breaker provided for in the applicable regulations.

ATTENTION Verify that the terminal strip blades are positioned according to the diagram provided for the available power supply voltage.

SINGLE-PHASE MOTORS Single-phase motors are supplied with a pre-existing 2-meter cable with electric plug. To change the cable, open the terminal strip cover and connect the line according to the following diagram.

Single-phase motors are supplied with a bi-polar switch and capacitor wired and installed inside the terminal strip box (see diagram).



12.2 PIPING CONNECTIONS

FOREWORD Before carrying out any connection, refer to the visual indications (i.e. arrow on the pump head, to identify suction and delivery).

ATTENTION Wrong connection can cause serious pump damage.

PRELIMINARY INSPECTION

- Check that the machine has not suffered any damage during transport or storage.
- Clean the inlet and outlet openings, removing any dust or residual packing material.

- Make sure that the motor shaft turns freely.
- Check that the electrical specifications correspond to those shown on the identification plate.

CONNECTING Before connection, make sure that the tubing and the suction tank are free of dirt and thread residue that could damage the pump and its accessories.

- Before connecting the delivery tube, partially fill the pump body with diesel fuel to facilitate priming.
- Do not use conical threaded joints that could damage the threaded pump openings if excessively tightened.

SUCTION TUBING - Minimum recommended nominal diameter: 1 1/2
- Nominal recommended pressure: 10 bar
- Use tubing suitable for functioning under suction pressure.

DELIVERY TUBING ATTENTION - Use tubing suitable to resist back pressures of 0.8 bar
- Minimum recommended nominal diameter: 1
- Nominal recommended pressure: 10 BAR

NOTE It is the installer's responsibility to use tubing with adequate characteristics. The use of tubing unsuitable for use with Diesel fuel can damage the pump, injure persons and cause pollution.

Loosening of the connections (threaded connections, flanging, gasket seals) can cause serious ecological and safety problems. Check all the connections after the initial installation and on a daily basis after that. Tighten the connections, if necessary.

To connect the Piusi stem connection flanges, use M8 screws with a torque of 25 Nm

13 INITIAL START-UP

FOREWORD - Check that the quantity of fluid in the suction tank is greater than the amount you wish to transfer.
- Make sure that the residual capacity of the delivery tank is greater than the quantity you wish to transfer.

- Make sure that the piping and line accessories are in good condition.
- Always install a suction filter to protect the pump.

ATTENTION Do not run the pump dry for more than 20 minutes. This can cause serious damage to its components. Fluid leaks can damage objects and injure persons.

NOTE - Never start or stop the pump by connecting or cutting out the power supply
- Single-phase motors are provided with an automatic thermal protection switch.

ATTENTION Extreme operating conditions can raise the motor temperature and, consequently, cause the thermal protection switch to stop it. Turn off the pump and wait for it to cool before resuming use. The thermal protection automatically turns off when the motor is sufficiently cool.

ATTENTION During the priming phase, the pump must discharge all the air that is initially present from the delivery line. Therefore it is necessary to keep the outlet open to permit the evacuation of the air.

WARNING If an automatic type dispensing nozzle is installed on the end of the delivery line, the evacuation of the air will be difficult because of the automatic stopping device that keeps the valve closed. It is recommended that the automatic nozzle be temporarily removed during initial start-up.

IF THE PUMP DOES NOT PRIME Depending on the system characteristics, the priming phase can last from several seconds to a few minutes. If this phase is prolonged, stop the pump and verify:

- that the pump is not running completely dry (fill with fluid from the delivery line);
- that the suction pipe guarantees against air infiltration;
- that the suction filter is not clogged;

- that the suction height is not higher than 2 mt.
- that all air has been released from the delivery pipe.

When priming has occurred, verify that the pump is operating within the anticipated range, in particular:

- that under conditions of maximum back pressure, the power absorption of the motor stays within the values shown on the identification plate.
- that the suction pressure is not greater than 0.5 bar;
- that the delivery back pressure does not exceed the maximum back pressure for the pump.

14 EVERY DAY USE

USE PROCEDURE 1 If using flexible tubing, attach the ends of the tubing to the tanks. In the absence of an appropriate slot, solidly grasp the delivery tube before beginning dispensing.

2 Before starting the pump make sure that the delivery valve is closed (dispensing nozzle or line valve).

3 Turn the ON/OFF switch to ON. The by-pass valve allows functioning with the delivery closed for only brief periods.

4 Open the delivery valve, solidly grasping the end of the tubing.

5 Close the delivery valve to stop dispensing.

6 When dispensing is finished, turn off the pump. To avoid damaging the pump, after use, make sure the pump is off.

ATTENTION In case of a power break, switch the pump off straight away. Functioning with the delivery closed is only allowed for brief periods (2-3 minutes maximum). After use, make sure the pump is turned off.

15 MAINTENANCE

Safety instructions E140 pump is designed and constructed to require a minimum of maintenance. Before carrying out any maintenance work, disconnect the dispensing system from any electrical and hydraulic power source. During maintenance, the use of personal protective equipment (PPE) is compulsory.

In any case always bear in mind the following basic recommendations for a good functioning of the pump:

All maintenance must be performed by qualified personnel. Tampering can lead to performance degradation, danger to persons and/or property and may result in the warranty being voided.

- Check that the pipe connections are not loose to prevent any leaks;
- Check and keep the filter installed on the suction line clean.
- Check the pump body and keep it clean and free of any impurities;
- Check and keep the pump filter clean and any other filters installed.

16 NOISE LEVEL

In normal operating conditions, noise emissions of all models do not exceed 74 dB at a distance of 1 metre from the electric pump.

17 PROBLEMS AND SOLUTIONS

For any problems contact the authorised dealer nearest to you.

Table with 3 columns: PROBLEM, POSSIBLE CAUSE, CORRECTIVE ACTION. Row 1: Lack of electric power, Rotor jammed, Motor problems. Row 2: The motor is not turning, The motor protecting thermal switch has tripped, Motor problems. Row 3: The motor turns slowly when starting, Low voltage in the electric powerline, Low level in the suction tank, Foot valve blocked, Filter clogged, Excessive suction pressure, High loss of head in the circuit (working with the by-pass open), By-pass valve blocked, Air entering the pump or the suction tubing, A narrowing in the suction tubing, Low rotation speed.

Refill the tank. Clean and/or replace the valve. Clean the filter. Lower the pump with respect to the level of the tank or increase the cross-section of the tubing. Use shorter tubing or of greater diameter.

Disassemble the valve, clean and/or replace it. Check the voltage at the pump. Adjust the voltage and/or use cables of greater cross-section.

Check the seals of the connections. Use tubing suitable for working under suction pressure.

Raise the tubing. Cavitation occurring. Reduce suction pressure. Irregular functioning of the by-pass. Dispense until the air is purged from the circuit.

Verify the suction connections. Air present in the diesel fuel. Check the voltage at the pump. Adjust the voltage and/or use cables of greater cross-section.

INCREASED PUMP NOISE The suction tubing is resting on the bottom of the tank. Raise the tubing.

LEAKAGE FROM THE PUMP BODY Seal damaged. Check and replace the mechanical seal. Suction circuit blocked. Remove the blockage from the suction circuit.

THE PUMP DOES NOT PRIME THE LIQUID Malfunction of foot valve fitted on suction circuit. Replace foot valve. The suction chambers are dry. Add liquid from pump delivery side. The pump chambers are dirty or blocked. Remove the blockages from the suction and delivery valves.

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:

The packaging consists of biodegradable cardboard which can be delivered to companies for normal recycling of cellulose.

Disposing of packing materials Metal Parts Disposal Disposal of electric and electronic components

European Directive 2012/19/EU requires that all equipment marked with this symbol on the product and/or packaging not be disposed of together with non-differentiated urban waste. The symbol indicates that this product must not be disposed of together with normal household waste. It is the responsibility of the owner to dispose of these products as well as other electric or electronic equipment by means of the specific refuse collection structures indicated by the government or the local governing authorities.

Disposing of RAEE equipment as household waste is strictly forbidden. Such wastes must be disposed of separately.

Any hazardous substances in the electrical and electronic appliances and/or the misuse of such appliances can have potentially serious consequences for the environment and human health. In case of the unlawful disposal of solid wastes, fines will be applicable as defined by the laws in force.

Other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial waste.

Miscellaneous parts disposal



MADE IN ITALY Installazione uso e manutenzione IT
Installalton, use and maintenance EN
BULLETTIN MOS38A ITEM_01
BULLETTIN MOS38A ITEM_01
piusi.com

PIUSI Fluid Handling Innovation
Disposing of RAEE equipment as household waste is strictly forbidden. Such wastes must be disposed of separately.
Any hazardous substances in the electrical and electronic appliances and/or the misuse of such appliances can have potentially serious consequences for the environment and human health.
In case of the unlawful disposal of solid wastes, fines will be applicable as defined by the laws in force.
Other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial waste.

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2 IDENTIFICAZIONE MACCHINA E COSTRUTTORE



MODELLI DISPONIBILI COSTRUTTORE	• E140
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3 COPIA FACSIMILE DI DICHIARAZIONE UE DI CONFORMITÀ

La sottoscritta PIUSI S.p.A. Via Pacinotti 16/A z. Rangivino - 46029 Suzzara (MN) Italy

DICHIARA sotto la propria responsabilità, che l'apparecchiatura descritta in appresso:

Designazione: **Pompa destinata al travaso di Gasolio**

Modello: **E140**

Matriciola: riferirsi al Lot Number riportato sulla targo CE apposta sul prodotto

Anno di costruzione: riferirsi all'anno di produzione riportato sulla targo CE apposta sul prodotto.

è conforme alla seguente legislazione:

- **Regolamento Macchine**
- **Compatibilità Elettromagnetica**

Il fascicolo tecnico è a disposizione dell'autorità competente su richiesta motivata presso PIUSI S.p.A. o a seguito di richiesta inviata all'indirizzo e-mail: doc_tec@piusi.com.

LA DICHIARAZIONE DI CONFORMITÀ ORIGINALE È FORNITA SEPARATAMENTE A CORREDO DEL PRODOTTO

4 DESCRIZIONE DELLA MACCHINA

POMPA	Elettropompa rotativa auto-adescenti di tipo volumetrico a palette, equipaggiata con valvola di by-pass.
MOTORE	Motore a scapione monofase e trifase, a 4 pol, di tipo chiuso (classe di protezione IP55 secondo la normativa EN 60034-5(B6) autoventilato, direttamente flangiato al corpo pompa.

4.1 MOVIMENTAZIONE E TRASPORTO

PREMESSA

Dato il limitato peso e dimensione delle pompe, la movimentazione non richiede l'ausilio di mezzi di sollevamento. Prima della spedizione le pompe vengono accuratamente imballate. Controllare l'imballo al ricevimento ed immagazzinare in luogo asciutto.

STOCCAGGIO

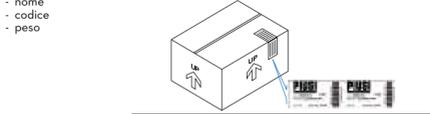
- Conservare in un luogo coperto e asciutto.
- Conservare l'unità a riparo da sporcizia e vibrazioni

CONDIZIONI AMBIENTALI

Umidità di stoccaggio: Max 90%
Temperatura di stoccaggio: Min -10 °C
Max +50 °C

IMBALLO

L'elettropompa è fornita con imballo idoneo alla spedizione. Sull'imballo, viene applicata una etichetta riportante le seguenti informazioni sul prodotto.



MODELLO	PESO (Kg)	DIMENSIONI IMBALLO (mm)
E 140	19,2	350 x 250 x 300

5 AVVERTENZE GENERALI

Avvertenze importanti

Per salvaguardare l'incolumità degli operatori, per evitare possibili danneggiamenti e prima di compiere qualsiasi operazione, è indispensabile aver preso conoscenza di tutto il manuale istruzioni.

Simbologia utilizzata nel manuale

Questo simbolo indica norme antinfortunistiche per gli operatori e/o eventuali persone esposte.

ATTENZIONE

Questo simbolo indica che esiste la possibilità di arrecare danno alle apparecchiature e/o ai loro componenti.

NOTA

Questo simbolo segnala informazioni utili.

Il presente manuale deve essere integro e leggibile in ogni sua parte. L'utente finale ed i tecnici specializzati autorizzati all'installazione e alla manutenzione, devono avere la possibilità di consultarlo in ogni momento.

Conservazione del manuale

6 Diritti di riproduzione

Tutti i diritti di riproduzione di questo manuale sono riservati alla Piusi S.p.A. Il testo non può essere usato in altri stampati senza autorizzazione scritta della Piusi S.p.A. e Piusi S.p.A. IL PRESENTE MANUALE È PROPRIETÀ DELLA PIUSI S.P.A. OGNI RIPRODUZIONE, ANCHE PARZIALE E VIETATA. Il presente manuale è di proprietà di Piusi S.p.A., la quale è esclusiva titolare di tutti i diritti previsti dalle leggi applicabili, ivi comprese a titolo esemplificativo le norme in materia di diritto d'autore. Tutti i diritti derivanti da tali norme sono riservati a Piusi S.p.A.; la riproduzione, anche parziale del presente manuale, la sua pubblicazione, modifica, trascrizione, comunicazione al pubblico, distribuzione, commercializzazione in qualsiasi forma, traduzione e/o elaborazione, prestito, ed ogni altra attività riservata per legge a Piusi S.p.A.

6 ISTRUZIONI DI SICUREZZA

Rete elettrica - verificare preliminarmente all'installazione

ATTENZIONE

Evitare assolutamente il contatto tra l'alimentazione elettrica e il liquido da pompare.

Primo di qualsiasi intervento di controllo o manutenzione, togliere L'ALIMENTAZIONE

Per prevenire rischi di incendio e esplosione:

Utilizzare la stazione solo in zone ventilate

Mantenere l'area di lavoro libera da rottami, compresi scarti di lavorazione e serbatoi di solventi e benzina.

Non inserire o disinserire la spina o azionare l'interruttore in presenza di vapori infiammabili.

Tutti i dispositivi presenti nell'area di lavoro devono aver messo a terra.

Interrompere immediatamente ogni azione in presenza di scintille o scossa. Non utilizzare la stazione prima di aver identificato e risolto il problema.

Tenere un estintore funzionante nell'area di lavoro.

SHOCK ELETTRICO

Folgorazione o morte

Collegare solo a prese con messa a terra.

Utilizzare solo cavi dotati di messa a terra, in base alle normative vigenti.

Prolunghe non adatte possono risultare pericolose.

Assicurarsi che spina e presa delle prolunghe siano intatte.

Prolunghe non adatte possono risultare pericolose

In esterno, utilizzare solo prolunghe adatte allo specifico utilizzo, in base alle normative vigenti.

L'allacciamento tra spina e presa deve rimanere lontano dall'acqua.

Non esporre alla pioggia. Installare in luogo riparato.

Non toccare mai la spina e la presa con mani bagnate.

Non accendere il sistema di distribuzione nel caso il cavo di allacciamento alla rete o parti importanti dell'apparecchio, per es. il tubo di aspirazione/mandata, la pistola, oppure i dispositivi di sicurezza siano danneggiati.

Sostituire immediatamente il tubo danneggiato prima dell'uso.

Primo di ogni utilizzo, verificare che il cavo di allacciamento e la spina non siano danneggiati. Se danneggiati, far sostituire il cavo e la spina da personale qualificato.

L'allacciamento tra spina e presa deve rimanere lontano dall'acqua.

All'aperto utilizzare solo prolunghe autorizzate e previste per quell'utilizzo, con sezione di conduzione sufficiente, in base alle normative vigenti.

Come norma generale di sicurezza elettrica si consiglia sempre di alimentare il dispositivo proteggendo la linea con:

- interruttore sezionatore magnetotermico di portata di corrente adeguata alla linea elettrica
- interruttore differenziale (Residual Current Device) da 30 mA

Il collegamento elettrico deve avere un interruttore salvavita (GFCI).

Le operazioni di installazione sono effettuate con scatola aperta e contatti elettrici accessibili. Tutte queste operazioni devono essere fatte con apparecchio isolato dalla rete elettrica per evitare pericoli di folgorazione!

Non mettere in funzione l'unità quando si è affaticati o sotto l'influenza di droghe o alcol.

Non lasciare l'area di lavoro mentre l'apparecchio è acceso o in funzione.

Spegnere l'apparecchio quando non in uso.

Non alterare o modificare l'apparecchiatura. Alterazioni o modifiche all'apparecchiatura possono rendere nulle le omologazioni e causare pericoli per la sicurezza.

Disporre tubo flessibile e cavi di alimentazione lontano da zone di passaggio, spigoli vivi, parti in movimento e superfici calde.

Non attorcigliare il tubo o usare un tubo più resistente.

Tenere bambini e animali lontano dall'area di lavoro

Rispettare tutte le normative di sicurezza vigenti.

Non superare la pressione massima di lavoro o la temperatura del componente con minore valore nominale del sistema.

Vedere dati tecnici in tutti i manuali della macchina.

Utilizzare liquidi e solventi compatibili con le parti umide dell'apparecchio. Vedere dati tecnici in tutti i manuali della macchina. Leggere le avvertenze del costruttore dei liquidi e solventi. Per ottenere maggiori informazioni sul materiale, richiedere la scheda di sicurezza (MSDS) al distributore o al rivenditore.

Verificare l'apparecchio ogni giorno. Riparare o sostituire immediatamente le parti consumate o danneggiate esclusivamente con pezzi di ricambio originali del produttore.

Assicurarsi che l'apparecchio sia classificato e approvato conformemente alle normative per l'ambiente nel quale si impiega.

Utilizzare l'apparecchio solo per l'uso previsto. Contattare il vostro distributore per maggiori informazioni.

Mantenere i tubi flessibili e i cavi lontani dalle zone di transito, spigoli, parti in movimento e superfici calde.

Non piegare o piegare eccessivamente i tubi flessibili o utilizzare i tubi flessibili per trainare l'apparecchio.

Per problematiche derivanti dal prodotto trattato con occhi, pelle, inalazione e ingestione fare riferimento alla scheda di sicurezza del fluido utilizzato

Conservare i liquidi trattati in contenitori adatti e conformi alle normative applicabili.

Il contatto prolungato con il prodotto trattato può provocare irritazione alla pelle; durante l'erogazione, utilizzare sempre i guanti di protezione.

Pericolo di fumi e fluidi tossici.

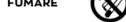
7 NORME DI PRONTO SOCCORSO

Persone colpite da scariche elettriche

Staccare l'alimentazione, o usare un isolante asciutto per proteggere l'operazione di spostamento dell'infortunato lontano da qualsiasi conduttore. Evitare di toccare l'infortunato con le mani nude fino a che quest'ultimo non sia lontano da qualsiasi conduttore. Chiedere immediatamente l'aiuto di persone addestrate e qualificate. Non intervenire sugli interruttori a mani bagnate.

Non fumare vicino alla pompa e non usare la pompa vicino a fiamme libere.

VIETATO FUMARE



8 NORME GENERALI DI SICUREZZA

Indossare un equipaggiamento di protezione che sia:

- idoneo alle operazioni da effettuare;
- resistente ai prodotti impiegati per la pulizia.

Scarpe antinfortunistiche;

Indumenti attillati al corpo;

Guanti di protezione;

Occhiali di sicurezza;

Manuale di istruzioni

Altri dispositivi

Manuale di istruzioni

Guanti protettivi

Il contatto prolungato con il prodotto trattato può provocare irritazione alla pelle; durante l'erogazione, utilizzare sempre i guanti di protezione.

11 INSTALLAZIONE

ATTENZIONE

CONTROLLI PRELIMINARI

Verificare la presenza di tutti i componenti. Richiedere al produttore gli eventuali componenti mancanti.

Controllare che la pompa non abbia subito danni durante il trasporto o l'immagazzinamento.

Pulire con cura le bocche di aspirazione e mandata, eliminando eventuale polvere o eventuale materiale di imballaggio residuo.

Controllare che i dati elettrici corrispondano a quelli indicati in targhetta.

Installare sempre in luogo illuminato.

Assicurarsi che l'albero motore ruoti liberamente.