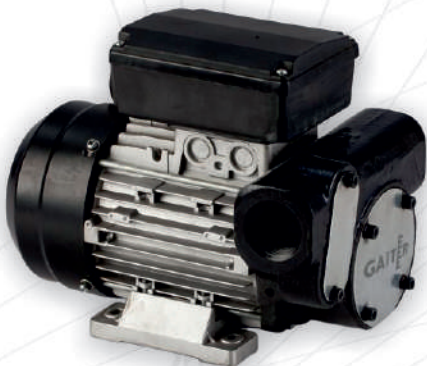


FUEL PUMP



MODI PUMP 60



EN

USE AND MAINTENANCE MANUAL

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TAKE CONTROL OF BUSINESS.



www.gaiter.pl
kontakt@gaiter.pl



+48 42 307 07 08
+48 501 060 090

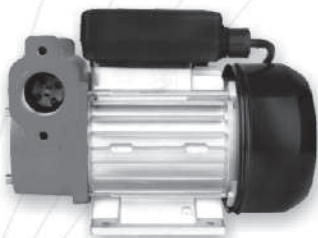
GAITER
TANKS, SENSORS
AND SYSTEMS

B EQUIPMENT AND MANUFACTURER IDENTIFICATION

AVAILABLE MODELS:

- **ModiPump60 230V**

Producer: **GAITER Sp. z o.o.**



C DEVICE DESCRIPTION

PUMP:

Self-priming volumetric rotary vane pump, equipped with a bypass valve

ENGINE:

Single-phase 4 pole, asynchronous induction motor, enclosed type, self-ventilated, directly flanged on pump with thermal protect, to prevent motor burned.

FILTER:

Suction filter suitable for periodic inspection.

C1 MOVING AND TRANSPORT

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

D GENERAL WARNINGS

Important Precautions

To ensure operator safety and to protect the pump from potential damage, workers must be fully acquainted with this instruction manual before performing any operation.

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.



NOTE:

This symbol indicates useful information.

Maintenance

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

E FIRST AID RULES

SPECIAL CAUTION

In case of problems resulting from eye / skin contact, inhalation or ingestion of the product, please refer to the safety data sheet.

IN CASE OF ELECTRIC SHOCK

Disconnect the power source, or use a dry insulator to protect yourself while you move the injured person away from any electrical conductor. Avoid touching the injured person with your bare hands until he is far away from any conductor. Immediately call for help from qualified and trained personnel. Do not operate switches with wet hands.

NOTE



Please refer to the safety data sheet for the product.

NO SMOKING



When operating the dispensing system, especially during refuel, do not smoke or use open fire.

F GENERAL SAFETY RULES

Protective clothing

It is recommended to wear protective clothing: Which is adapted to the activity being performed.

Main characteristics of clothing and equipment

Wear the following PPE during handling and installation:



Safety shoes



Tight-fitting clothing



Protective gloves



Goggles



Instruction manual

GLOVES



Long-term contact with the product may cause skin irritation, always wear protective gloves during dispensing.

ATTENTION



Never touch a wet plug or electrical outlet.

Do not switch on the dispensing system if the device is connected to the mains or essential parts are damaged. Such as inlet /outlet pipe or safety devices. Replace damaged tube immediately.

ATTENTION



Keep the electrical connection between plug and socket away from water.

Incorrect extension cords can be dangerous. According to the regulations in force, only suitable extension cords that are marked for outdoor use may be used.

ATTENTION



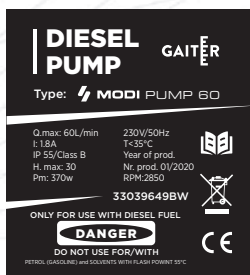
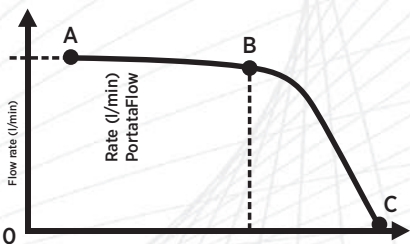
Several parts may become very hot during operation. May cause burns if touched.

G TECHNICAL DATA

G1 PERFORMANCE SPECIFICATIONS

The performance diagram shows flow rate as a function of back pressure.

Functioning Point	Model	Flow rate (l/min)	Back pressure (BAR)	Typical configuration			
				4 meters of pipe 1"	ModiFlow	Manual dispensing nozzle	Automatic dispensing nozzle
A (Maximum Flow Rate)	ModiPump 60	60	0,5	●		●	
B (Max Back pressure)	ModiPump 60	50	2,5	●	●		●
C (By-Pass)	ModiPump 60	0	3	Flow closed			



Return / back pressure / pressure drop (bar)



The curve relates to the following working conditions:

Liquid: Diesel

Temperature: 20° C

Suction conditions: The pipe and the position of the pump relative to the fluid level are such that the pressure at nominal flow produces 0.3 bar.

Under different suction conditions, higher pressures can be created which reduce the flow rate compared to the same back pressure values.

For best performance, it is very important to minimize suction pressure loss by following these instructions:

- Shorten the suction pipe as much as possible
- Avoid unnecessary elbows or glands in the pipes
- Keep the suction filter clean
- Use a pipe with a diameter equal to or greater than that indicated (see Installation)

H ELECTRICAL SPECIFICATIONS

PUMP MODEL	POWER SUPPLY			CURRENT
	Current	Voltage (V)	Frequency (Hz)	Maximum (*) (A)
ModiPump	AC	230	50	4,5

(*) referred to operations in by-pass mode

11 PRELIMINARY INSPECTION:

1. Check that all elements are present. Ask for the missing parts from the manufacturer.
2. Check that the device has not been damaged during transport or storage.
3. Carefully clean the suction and delivery inlets and outlets, removing any dirt or other packaging components that may be present.
4. Make sure the motor shaft turns freely.
5. Check that the electrical data correspond to the markings on the nameplate.
6. Always install in a lit place.
7. Install the pump in a ventilated place to avoid the accumulation of vapors.
8. We recommend the use of a suction filter.

12 PUMP INSTALLATION:

Pumps can be installed in any position
(the pump axis can be vertical and horizontal).

Attach the pump with bolts of the correct size to the mounting holes in the pump base.



ATTENTION ENGINES CAN EXPLODE. DO NOT install them there,
WHERE are flammable substances or vapours.

It is the installer's responsibility to provide the necessary accessories to ensure correct and safe operation of the pump. Accessories that are not original may damage the pump and/or cause injury and contamination.

Always use original accessories to maximize performance and prevent damage that could affect pump performance.

J DAILY USE

INITIAL PROCEDURES:

The pump is for professional use only.

1. If using a flexible pipe, attach the ends of the pipe to the tank.
In the absence of an appropriate socket, solidly grasp the delivery pipe before beginning dispensing
2. Before starting the pump, make sure that the discharge valve is closed (dosing nozzle or line valve).
3. Turn on the ON/OFF switch. The bypass valve allows operation with a closed only for a short time.
4. Open the discharge valve by firmly grasping the end of the pipe - the nozzle.
5. When dispensing, do not inhale the pumped product.
6. After closing the supply valve/nozzle, turn off the pump as soon as possible.
7. If liquid is spilled during pouring, cover it with soil or sand to soak it up and limit the spread.



ATTENTION Make sure the pump is turned off after use.
In the event of a power cut, switch off the pump immediately.

K MAINTENANCE



ATTENTION MAINTENANCE MUST BE PERFORMED ONLY
BY AUTHORIZED AND QUALIFIED PERSONNEL.

ATTENTION:

Due to this design, the pump requires simple maintenance. Before performing any maintenance, disconnect the pump from any electrical and hydraulic power sources.

The use of personal protective equipment (PPE) is mandatory during maintenance. In any case, keep the following basic recommendations in mind for the proper functioning of the pump

ONCE

Check for loose pipe connections to prevent leakage.

A WEEK:

Check and keep the filter installed in the suction line clean.

ONCE

Check the pump housing and keep it clean and free from contamination.

A MONTH:

Check that the power cables are in good condition.

ATTENTION

Do not put your fingers into the pump openings while the pump is running

L PROBLEMS AND SOLUTIONS**IN CASE OF ANY PROBLEMS CONTACT SERVICE**

PROBLEMS	POSSIBLE REASONS	SOLUTIONS
THE PUMP MOTOR DOES NOT START	No electricity	Check the electrical connection and security systems.
	Locked rotor	Check for possible damage or obstruction of the rotors components.
	Engine problems	Please contact the service department.
AFTER STARTING THE ENGINE IS NOT RUNNING WITH FULL POWER	Low electricity voltage on the voltage line	Restore the voltage within the predicted limit.
LOW FLOW OR NO FLOW	Low liquid level in the tank	Refill the tank.
	Foot valve blocked	Clean or replace valve.
	Filter clogged	Clean the filter.
	Excessive suction pressure	Lower the pump with respect to the level of the tank or increase the cross-section of the tubing
	High loss of head in the delivery circuit (working with the by-pass open)	Use shorter pipes or of greater diameter.
	By-pass valve blocked	Dismantle the valve, clean and/or replace it.
	Air entering the pump or the suction pipe	Check the seals of the connections.
	Pipe suction constriction	Use suitable pipes for high pressure operation.
	Low rotation speed	Check the voltage at the pump Adjust the voltage and/or use cables of greater cross-section .
	The suction pipe is not correctly positioned at the bottom of the tank	Lift up the pipe.
NOISY PUMP RUN	Cavitation occurring	Reduce suction pressure.
	Irregular functioning of the by-pass	Dispense fuel until the air is purged from the by-pass system.
	Air present in the diesel fuel	Verify the suction connections.
PUMP BODY LEAK	Seal damaged	Check and replace the seal.