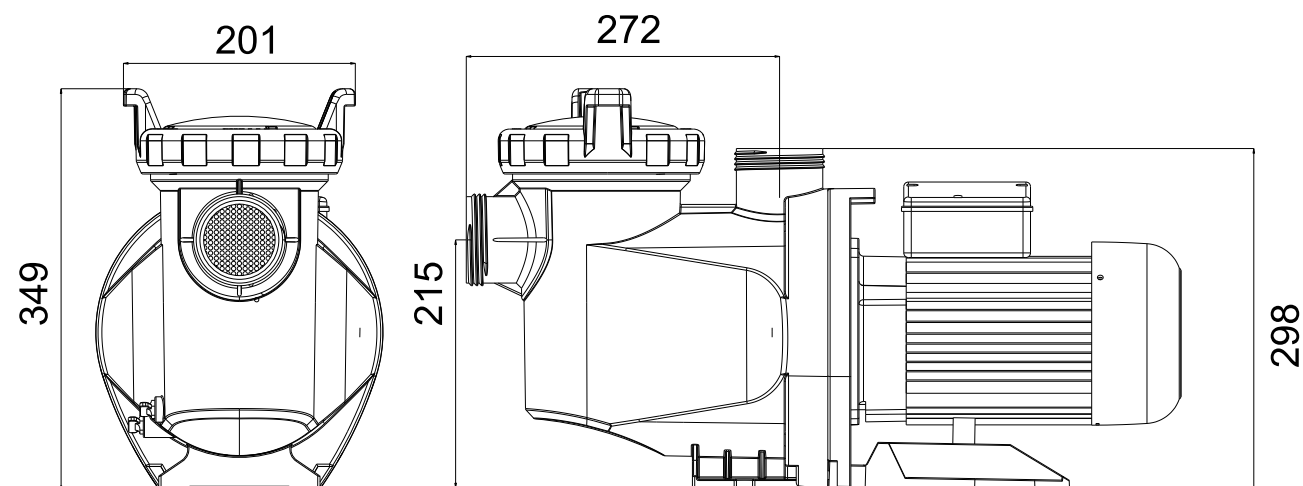
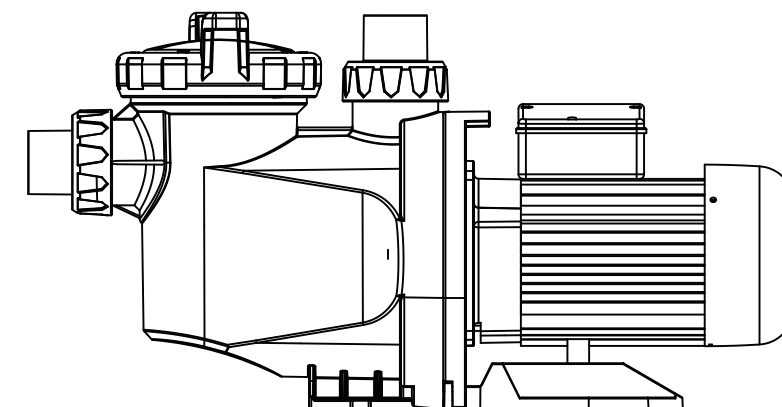


Correct disposal of this product	
	This symbol on the product, or in its packaging, indicates that this product may not be treated as household waste. Instead, it should be taken to the appropriate waste collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by the inappropriate waste handling of this product. For more detailed information about the recycling of this product, please contact your local council, your household waste disposal service, or the shop where you purchased the product.



Code	Model	Connection Size	Power	Input Power kW [HP]	Capacitance (A)	Weight (kg)
9024601	ECF075	1.5" or 50mm 2" or 63mm	220V-240V, 50Hz	0.75 [0.75]	20 µF	14.5 Kg
9024602	ECF100	1.5" or 50mm 2" or 63mm	220V-240V, 50Hz	1.1 [1.0]	25 µF	14.5 Kg
9024603	ECF150	1.5" or 50mm 2" or 63mm	220V-240V, 50Hz	1.5 [1.5]	25 µF	15Kg
9024604	ECF200	1.5" or 50mm 2" or 63mm	220V-240V, 50Hz	1.8 [2.0]	30 µF	15.2 Kg
9024605	ECF300	1.5" or 50mm 2" or 63mm	220V-240V, 50Hz	2.2 [3.0]	35 µF	15.7 Kg

MODEL: ECF



Before installation, be sure to read all instructions and warnings carefully.
Refer to product data plate(s) for additional operating instruction and specifications.

INSPECTION

Examine the equipment when received. Notify your dealer or carrier of any damage or missing parts. Verify that equipment is of size and model specified.

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

- 1) READ AND FOLLOW ALL INSTRUCTIONS.
- 2) WARNING - To reduce risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- 3) WARNING - (For cord & plug connected units) risk of electric shock. Connect only to a grounding type receptacle protected by a ground-fault circuit-interrupter(GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.
- 4) WARNING - (For cord & plug connected units). To reduce the risk of electric shock, replace damaged cord immediately.
- 5) WARNING - (For cord & plug connected units). To reduce the risk of electric shock do not use an extension cord to connect unit to electric supply; Provide a properly located outlet.
- 6) WARNING - (For hot tub and spa pumps). Do not install within an outer enclosure or beneath the skirt of the hot tub or spa, unless so marked.
- 7) SAVE THESE INSTRUCTIONS

INSTALLATION LOCATION

Locate pump as close to pool/spa as possible, preferably in a dry, well ventilated area away from direct sunlight. It should be on a hard, level surface. Give consideration to:

- 1) Drainage -away from pump
- 2) Ventilation of pump motor
- 3) Access for future servicing and winterizing
- 4) Protection from the elements

Pumps without strainer bodies are designed for flooded suction (all suction fittings and suction piping below water level) and will not self-prime. Consequently, the pump must be installed at an elevation that is below water level when pool or spa is filled.

GENERAL PLUMBING

FOR SOLVENT WELD CONNECTION

Rigid or flexible PVC pipe can be used. Pipe ends should be clean and free of any flash caused by the cutting operation. Be sure that the proper solvent is used on type of pipe specified.

Caution: We recommend that consider climatic conditions when applying adhesives, make the adhesive action of certain glues less effective. Check the manufacturer's instructions.

PUMP PLUMBING

Suction pipe should be as large or large than discharge pipe avoid using a suction pipe smaller than pump connection.

Keep the piping as straight and short as possible, and of suitable size. Avoid connecting an elbow directly into the pump inlet(use a length of straight pipe to allow a proper entry for the water).arrange horizontal runs to slope upward to the pump to prevent high spots that could form air pockets. Support the piping independently so that it places no strain on the pump. Keep as much of the suction line as possible below the water level to reduce priming time.

ELECTRICAL DATA

Refer to information on motor nameplate for electrical service data. All motors should have fused disconnect switch or circuit breaker. Be sure wire size is sufficient for pump hp and distance from power source. Wiring should be done in accordance with applicable codes by a competent electrician.

PUMP START UP

Do not operate pump until it has been primed as water acts to cool and lubricate the seal. For pumps without strainer bodies and located above water, close suction line valve and fill pump with water in order to prime. If no flow is observed in five minutes, stop the motor and re-prime. If the pump fails to operate, check for air leaks. Refer to trouble shooting section.

PUMP MAINTENANCE

- 1) Motors are self-lubricating no lubrication required.
- 2) Shaft seals may become worn and must be replaced if leakage is observed.

SERVICE & REPAIR PARTS

Refer all service to your local dealer as his knowledge of your equipment makes him the vest qualified source of information. Order all repair parts through your dealer. Give the following information when ordering repair parts:

- 1) Unit nameplate data.
- 2) Description of part.

TROUBLE SHOOTING

Motor does not start

- 1) Disconnect switch or circuit breaker in off position
- 2) Fuses blown or thermal overload open
- 3) Locked motor shaft
- 4) Motor windings burned out
- 5) Defective starting switch inside sing phase motor
- 6) Disconnected or defective wiring
- 7) Low voltage

Noisy pump and motor

- 1) Worn motor bearings
- 2) Suction line partly plugged

Motor overheats

- 1) Low voltage
- 2) Inadequate ventilation

Air bubbles at inlet fittings

- 1) Leakage of air into suction line at connections or valve stem
- 2) Low water level in drain of bath

Low pump capacity

- 1) Suction or discharge line partly plugged
- 2) Suction or discharge line too small
- 3) Pump running at reduced speed
- 4) Impeller clogged

High pump pressure

Return lines too small

Pump does not reach full speed

- 1) Low voltage.
- 2) Pump connected for wrong voltage.

Pump delivers no water

- 1) Pump is not primed
- 2) Leakage or air into suction system
- 3) Impeller clogged

Leakage of water at shaft

Shaft seal requires replacement

NOTE: If the recommendations in the trouble shooting portion of this manual do not solve your particular problem(s), please contact your local dealer for service.