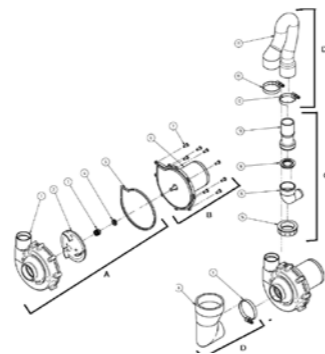
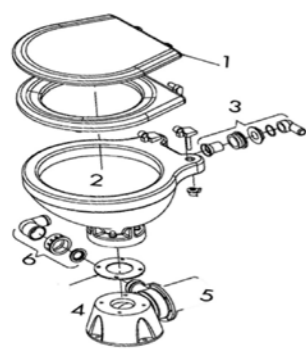


## Spare parts



Common spares	
APM part #	Description
07-99-064	4 Base Group
07-99-040	5 Motor Group Silent El. 12V.
07-99-041	5 Motor Group Silent El. 24V.
07-99-064	6 Outlet Elbow
07-99-060	3 Intake Elbow
07-99-069	A Inlet Pump Group Design / Premium
07-92-048	B Motor Premium/Design Silent 12V
07-92-049	B Motor Premium/Design Silent 24V
07-99-075	Intake Elbow Design/Premium
07-99-084	C Outlet Elbow Kit For Design Silent/Premium
07-99-085	D Inlet House Kit For Design Silent
07-99-068	Complete Gasket Kit Design/Premium

## Troubleshooting

### 1 No rinse/flush water :

- check the fuse
- press the "before use" button to check that power is being supplied to the control panel and the flush pump (single system) or the solenoid valve (in case of centralized systems)

### 2 Discharge pump not working :

- check the fuse
- turn to a minimum the trimmer shaft on the control panel back side and then press the "after use" button, to check that power is being supplied to the control panel and the discharge pump
- after verifying the previous points, inspect the discharge pump located under the bowl in this way :
  - disconnect the main supply from the bowl
  - remove both floor locking screws from the bowl (the two screws located on the rear side of the bowl)
  - by using a screwdriver or a pipe wrench loosen the metal clamp and remove the rubber coupling sleeve between bowl and pump
  - check that the impeller may freely turn and no objects are trapped inside the pump
  - re-assemble the coupling sleeve, tighten the clamp and fix the bowl to the floor again

### 3 In case of repeated breakage of the fuse :

- follow the same instructions as Point 2

## Technical specifications

Voltage :	12/24 Volt DC
Flush pump consumption (single) :	9 A / 4.5 A
Solenoid consumption (centralized) :	1 A / 0.5 A
Discharge pump consumption :	18 A / 10 A
Flush pump :	1.2m (4') self-priming, capacity 8 – 12, MAX 18 lt./min (2 – 3, MAX 5 USGPM).
Discharge pump :	centrifugal, capacity 200 lt./min (53 USGPM).
Inlet pipe :	rubber pipe minimum internal dia. 19 mm (¾")
Discharging head :	5 meters upright (16')
Discharge pipe :	rubber pipe minimum internal dia. 25 mm (1") RECOMMENDED 38 mm (1½").

## Warranty

Two year limited warranty.

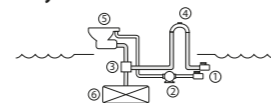
<b>Silent Electric</b>	
Compact 12V • 17 A	07-03-010
Compact 24V • 8 A	07-03-011
Comfort 12V • 17 A	07-03-012
Comfort 24V • 8 A	07-03-013

<b>Design Silent Electric</b>	
Design 12V • 19 A	07-03-045
Design 24V • 10 A	07-03-046

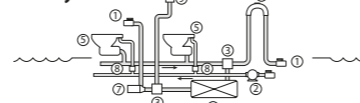
<b>Premium</b>	
Electric Silent 12V • 30 A	07-04-014
Electric Silent 24V • 16 A	07-04-015
Electric Silent Low 12V • 30 A	07-04-016
Electric Silent Low 24V • 16 A	07-04-017

APM part #	Description
07-03-010	<b>Silent Electric Compact 12V</b>
07-99-035	Compact Seat
07-92-021	Silent Electric Conversion Kit 12V
07-99-054	Bowl Compact
07-03-011	<b>Silent Electric Compact 24V</b>
07-99-035	Compact Seat
07-92-022	Silent Electric Conversion Kit 24V
07-99-054	Bowl Compact
07-03-012	<b>Standard Electric Evo Comfort 12V</b>
07-99-036	Comfort Seat
07-92-021	Silent Electric Conversion Kit 12V
07-99-056	Bowl Comfort
07-02-013	<b>Standard Electric Evo Comfort 24V</b>
07-99-036	Comfort Seat
07-92-022	Silent Electric Conversion Kit 24V
07-99-056	Bowl Comfort
07-02-045	<b>Design Marine Toilet Standard Silent 12V</b>
07-99-035	Compact Seat
07-93-076	Design Silent Electric Conversion Kit 12V
07-99-67	Bowl Design Toilet
07-02-046	<b>Design Marine Toilet Standard Silent 24V</b>
07-99-035	Compact Seat
07-93-077	Design Silent Electric Conversion Kit 24V
07-99-67	Bowl Design Toilet
07-04-014	<b>Marine Toilet Silent Premium 12V</b>
07-99-037	Premium Seat SC
07-94-078	Bowl Premium Toilet
07-94-079	Complete Pump Kit Premium 12V
07-04-015	<b>Marine Toilet Silent Premium 24V</b>
07-99-037	Premium Seat SC
07-94-078	Bowl Premium Toilet
07-94-080	Complete Pump Kit Premium 24V
07-04-016	<b>Marine Toilet Silent Premium Low 12V</b>
07-99-037	Premium Seat SC
07-94-081	Bowl Premium Low Toilet
07-94-079	Complete Pump Kit Premium 12V
07-04-017	<b>Marine Toilet Silent Premium Low 24V</b>
07-99-037	Premium Seat SC
07-94-081	Bowl Premium Low Toilet
07-94-080	Complete Pump Kit Premium 24V

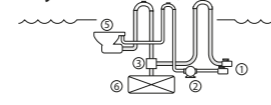
Above waterline single toilet system



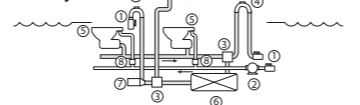
Above waterline centralized toilet system



Below waterline single toilet system



Below waterline centralized toilet system



1. Seacocks
2. Automatic pressure system or flush pump
3. Y-valve
4. Vented loop 19 mm (¾") water inlet, 38 mm (1½") discharge
5. Toilet
6. Holding tank
7. Macerator pump
8. Inlet solenoid valve
9. Discharge to approved disposal station

## Instructions for Silent Electric toilets and Design Silent Electric toilets with Control Panel Rocket Switch (07-66-025) and Instructions for Silent Premium toilets with Digital Control Panel (07-66-024).

- Silent operation and low water consumption
- Separated flushing and waste disposal cycle
- Rocker switch control panel (Silent Electric and Design) with 1 single function button and 1 dual function button or Electronic control panel with 3 separate buttons (Premium)
- High performance discharge pump

- Complete toilet & conversion kit are interchangeable with Jabsco, Johnson and TMC
- Spray nozzle elbow for efficient flushing
- All corrosion resistant material for use in a Marine environment
- Rinse/flush with separate flush pump or existing pressurized system via solenoid valve – neither of which are included

## General Installation

Your Albin Pump Marine toilet may be installed either above or below the waterline, for discharge of the waste overboard (abide by your National and International regulations) or into an onboard holding tank for treatment at an onshore processing facility. You may employ the use of a separate flush pump or an existing pressurized system (2.5 – 3.5 bar) (11 liters / min (2.9 USGPM)) for flushing. **For either of these cases, special attention must be given to the method of running the pipework for your own personal safety and the safety of your boat.**

A macerator discharge pump is incorporated into the toilet. For flushing you will need a flush pump (Albin Pump Marine part no. 07-66-032 (12V), 07-66-033 (24V)), or if using a pressurized central system you will need a solenoid valve (Albin Pump Marine part no. 07-66-030 (12V), 07-66-031 (24V))

## Through-hull fittings

For overboard waste disposal and/or the use of raw water for flushing, you will need through-hull fittings.

- 19 mm (¾") bore seacock for the flushing water inlet
- 25 mm (1") or 38 mm (1½") bore seacock for the waste outlet.

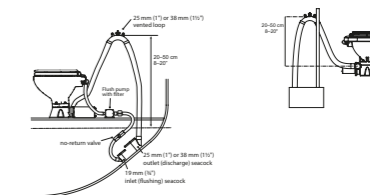
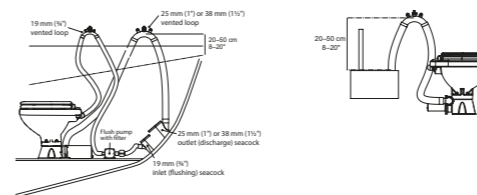
- 19 mm (¾") (Albin Pump Marine part no. 07-66-027) and 25 mm (1") (Albin Pump Marine part no. 07-66-028) or 38 mm (1½") (Albin Pump Marine part no. 07-66-029) vented loops

## Follow the seacock manufacturer's instructions concerning materials and methods of installation.

Make sure that the inlet seacock is positioned where it will be below the waterline at all times when the boat is under way and also that any outlet seacock is both aft of, and higher than the inlet seacock.

## Pipework: general instructions

- Spiral reinforced smooth bore flexible hose for both the 19 mm (¾") internal diameter inlet and the 25 mm (1") or 38 mm (1½") internal diameter outlet hose
- Stainless steel hose clips for the hoses
- Secure the hose runs so that the hoses cannot move, nor exert any leverage action on the hose tail fittings to which they are connected, as this may cause adjacent joints to leak



## Pipework: Toilet below waterline or below holding tank

If the toilet is connected to any through-hull fitting and if the rim of the bowl falls below the waterline, for example during heavy seas, there is the risk of water flooding in, causing the boat to sink, which may result in loss of life. Therefore, if the rim of the toilet is less than 20 cm (8") above the waterline when the craft is at rest, or if there is any possibility that the rim of the bowl may be below the waterline at ANY time, a **vented loop MUST** be fitted in any pipework connected to a through-hull fitting, irrespective of whether inlet or discharge. The loop must be vented to avoid the siphoning of water back into the boat through the toilet.

### Inlet: 19 mm (¾") Vented Loop fitting

- The vented loop must be positioned in a way that its highest point is 20 – 50 cm (8 – 20") above the highest possible waterline
- Run the inlet hose by the most direct way from the inlet seacock, via the flush pump to the vented loop; or, the most direct way from the pressurized water pipe in a centralized system.
- Run the inlet hose by the most direct way from the vented loop to toilet flushing pump inlet connection.

### Discharge: 25 mm (1") or 38 mm (1½") Vented Loop fitting Mounting

- Arrange the discharge hose, so that its highest point is at least 20 cm (8") above the waterline or holding tank, and fit the vented loop at the highest point.
- Run the discharge hose from the toilet to the vented loop
- Run the discharge hose from the vented loop to the seacock or holding tank

## Mounting

Before starting the assembly, read the complete mounting instruction first. **You need the following:**

- **Stainless steel bolts:** 3 pcs, 8 mm (5/16") diameter of length to suit the thickness of the mounting surface.
- **Stainless steel nuts:** 3 pcs preferably self-locking. If you do not use self-locking nuts you need to add locking compound on the screws-/ nuts.
- **Stainless steel washers:** 3 pcs.
- **Drill:** Diameter 9 mm.
- **Silicone sealant,** white.
- If you do not use self-locking nuts, you will need some **nutlocking compound.**

- Avoid sharp bends in the hoses since this might cause them to become kinked
- Keep all pipework lengths as short as possible while you are carrying out these operations. Unnecessary inlet or outlet hose lengths just make the toilet harder to pump.

## Pipework: Toilet above waterline or above holding tank

### Inlet: 19 mm hose

- Run the inlet hose by the most direct route from the inlet seacock to a non-return valve; or, the most direct way from the pressurized water pipe in a centralized system..
- Run the inlet hose from the non-return valve to the flush pump and then to the flushing pump inlet connection.
- For convenience of use, install an in-line non-return valve next to the inlet seacock which will ensure that the pump stays primed in between usages.

### Discharge: 25 mm (1") or 38 mm (1½") hose

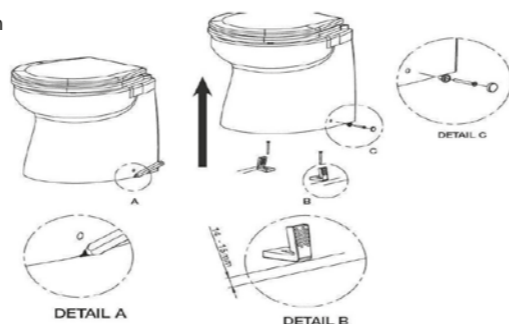
- Arrange the discharge hose, so that its highest point is 20 – 50 cm (8 – 20") above the waterline or holding tank, and fit the vented loop at the highest point.
- Run the discharge hose from the toilet to the vented loop
- Run the discharge hose from the vented loop to the seacock or holding tank.

### Silent Electric

- Put the toilet in the selected position.
- Using the holes in the base as a guide, mark the positions for the 3 bolt holes on the mounting surface.
- Remove the toilet and drill 3 vertical holes, with a diameter of 9 mm, through the mounting surface.
- Apply the white silicone sealant to the outer rim of the bottom base.
- Put the toilet on its place and tighten the fastenings securely. If you are not using self-locking nuts, use nutlocking compound.
- Use the sealant around the base, towards the floor.

### Silent Premium & Design Silent Electric

- Put the toilet in the selected position.
- Using the two holes in the toilet and the outer edge of the toilet base as guide, mark the location of the holes and trace a bit of the outer edge of the base
- Remove the bowl.
- Re-draw a new parallel line approximately 14–15 mm in from the line you drew in step 2.
- Put the assembly bracket on the floor, with the slot horizontal.
- Mark the middle position of the slot and drill a Ø 5 mm hole for each bracket.
- Tighten the bracket by using the enclosed Ø 6,2 mm screws. (Ensure that they are not too long for your installation)
- Put the toilet back in the selected place.
- Put the one plastic sleeve in each assembly hole on the toilet.
- Secure the toilet by using the Ø 4,7 mm screws. As the bracket has a lot of small holes, you can make a small final position adjustment.
- Put the screw cover on the screw head.
- Use the sealant around the base, towards the floor.



### Operating instructions

Correct operation of the toilet is essential for the safety and comfort of your crew and boat.

**Note** that the Silent Electric, Design Silent Electric and Silent Premium toilets are designed to have the bowl empty when not in use. Before operation ensure that the inlet and discharge valves (full-bore, handle-operated sea cocks) are open.

### Silent Electric toilets and Design Silent Electric toilets with Control Panel Rocket Switch (07-66-025)

#### Control panel

The panel controls the rinse and the discharge, by two buttons.

- Button 1, One function, discharge and rinse.
- Button 2, Two functions, Rinse toilet OR discharge toilet.



#### First use

Open inlet and outlet seacocks (and secondary valves if fitted)

- Use control panel as described above.
- Do not put anything in the toilet unless it has not pasted through your body, except toilet paper.

### Silent Premium toilets with Digital Control Panel (07-66-024)

#### Control panel

3 function control panel; Before use – after use – short use and trimmer to regulate the flow

#### Short Use Button

- The Short Use button is intended mainly for only liquid waste, where there is no risk of solid waste sticking to the toilet bowl
- Pressing the Short Use button switch will automatically both rinse and flush the toilet, leaving the bowl empty.

#### Before Use Button

- The Before Use function will fill the toilet bowl with water prior to use, wetting the sides so that solids will not soil the sides of the bowl or toilet paper becomes compacted at the bottom of the bowl.

#### Normal Use

Open inlet and outlet seacocks (and secondary valves if fitted).

- Before use, ensure that there is enough water in the bowl to prevent the toilet paper becoming compacted at the bottom of the bowl.
- If the bowl is empty, flush the toilet with button 2 "Flush".
- Use good quality soft household toilet paper, but do not use more than necessary.
- After use, flush the toilet with button 1.
- Afterwards, discharge the toilet with button 2 "Discharge" until the bowl is empty. Always leave the bowl empty to minimize odour and spillage

#### After use:

- Shut both seacocks**

- Activating the Before Use button fills the bowl with water, prior to use. Important! For optimum operation, the water level should be about 5 cm (2") above the discharge hole. The amount of water can be adjusted by truning the trimming shafts at the back of the control panel. A clockwise turn on the trimmer shaft will increase the flow of water and a counter-clockwise turn will *reduce* the flow of water.



#### After Use Button:

- The After Use function discharges the contents of the bowl, leaving the bowl empty.

**Important! For safety, always shut both seacocks after use!**



### Hazard Risk

If the toilet is connected to **ANY** through-hull fittings that are below the waterline at any time, and if the toilet or pipework is damaged, water may flood in, causing the boat to sink, which may result in loss of life.

- After every usage; both seacocks (or secondary valves) **MUST** be shut.
- Whenever your craft is unattended, even if only for a very short period of time, both seacocks (even if secondary valves are fitted) **MUST** be shut.

### Cleaning

Regularly flushing with clean (sea)-water is one of the most effective methods to keep the toilet clean and odor-free

- To clean the bowl, use any liquid or cream ceramic cleaner
- To clean the rest of the toilet, including the seat and lid, use a nonabrasive liquid cleaner. Polish with a dry cloth only.
- To disinfect the toilet, use a liquid disinfectant diluted in accordance with the manufacturer's instructions. It is possible to apply it to all parts of the



**NOTE:** Do not put any of the following into the toilet: Sanitary Towels, Wet Strength Tissues, Cotton Wool, Cigarettes, Matches, Chewing Gum or any solid objects, Petrol, Diesel, Oil, Solvents of any kind or water that is more than hand warm.

The toilet is rated to macerate toilet paper and organic waste only. Do not put anything, other than toilet paper, in the toilet unless it has passed through your body!

### Electrical connections

The circuit for the toilet power supply must be independent and cannot be used for any other appliance. Connect the battery positive terminal to a fuse of adequate capacity load. See wiring dimensions table.

For the **Rocker Switch Control panel**, connect the wires from the discharge and rinse pump as follows:

- Panel Red to positive battery terminal (+)
- Panel Brown to Flush Pump / Solenoid Valve positive (+)
- Panel Yellow to Discharge Pump positive (brown)

Flush pump / Solenoid Valve negative (-) and discharge pump negative (-)(black) to battery negative (-)

To install the switch panel, drill two 1 3/4" (45mm) diameter holes (slightly over-lapping) through the selected switch mounting surface. Ensure the template is oriented correctly because it is not symmetrical. Also, drill four appropriate sized holes for the fasteners selected to secure the switch panel to its mounting surface.

Connect the wires from the pump to the **Digital Control panel** switch as follows:

- White wire to the battery positive (+) wire
- Brown wire to the positive (brown) (+) wire of the discharge pump
- Blue wire to the negative (blue) (-) wire of the discharge pump
- Grey wire to the battery negative (-) wire
- Black wire to the negative (-) wire of the flush pump (Alternative 1) or solenoid valve in a pressurized central system (Alternative 2)
- Red wire to the positive (+) wire of the flush pump (Alternative 1) or solenoid valve in a pressurized central system (Alternative 2)

### Level indicator

You will only need the level indicator cable in the event you intend to connect to a level indicator with probes.

Combination printed circuit colored wires	Combination colored wires/ probes
White	long probe (1) = common
Blue/Green	long probe (2) = half tank
Yellow	short probe (3) = full tank
Black	- battery
Red	+ battery

### Control panel LEDs

- Red LED = full tank
- Yellow LED = half tank
- Green LED = ON

The color indications above refer to the complete kit (control panel, wires and terminals). The standard length of the wires is 3.5 m (11.5 feet)

Warning! Do NOT short-circuit the side probes with the central one.

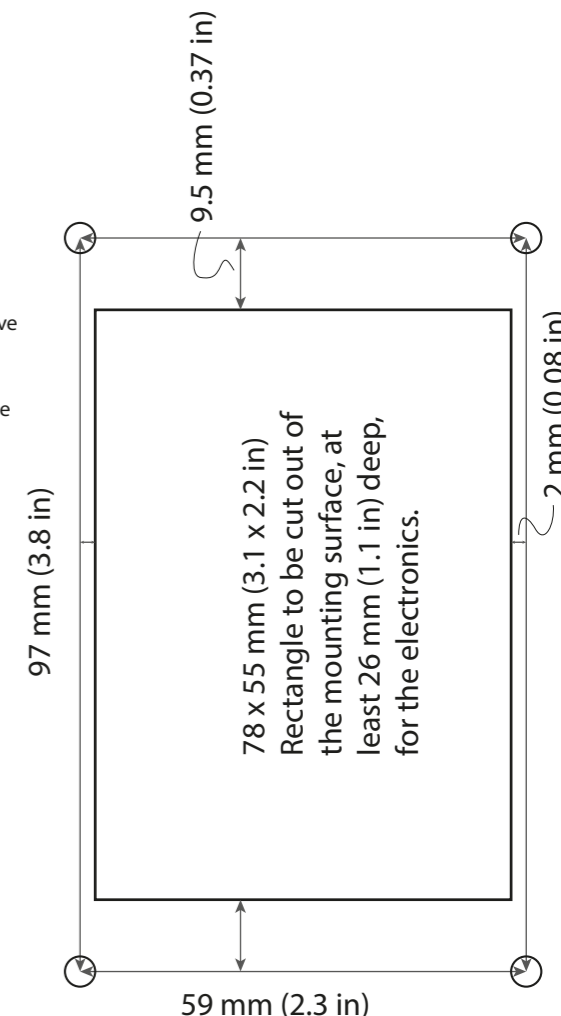
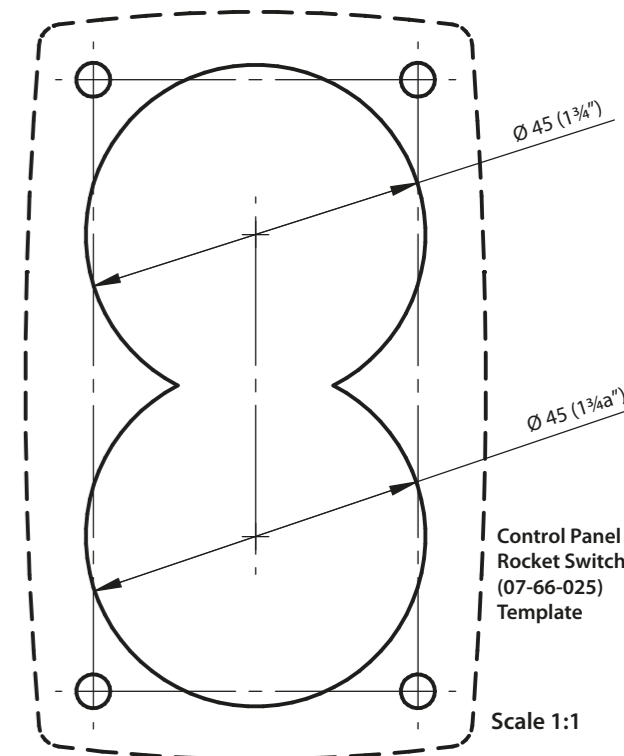
### CAUTION and SAFETY:

A correct motor polarity (red and brown wires to positive (+) and blue and black wires to negative (-)) is very important. A reverse polarity can damage the motor, thus voiding the warranty. For a correct functioning of the toilet, a full voltage to the motor is indispensable.

Do not connect any other electrical appliances to the electric line of the bowl. Do not replace the supplied connecting plugs.

		Wire size per feet and meter of run				
Voltage	Fuse size	0m – 3m (0'-10')	3m – 4.6m (10' – 15')	4.6m – 7.6m (15' – 25')	7.6m – 12.2m (25' – 40')	12.2m – 18.3m (40' – 60')
12V	25A	2.5 mm <sup>2</sup> (#14)	2.5 mm <sup>2</sup> (#14)	4 mm <sup>2</sup> (#12)	6 mm <sup>2</sup> (#10)	10 mm <sup>2</sup> (#8)
24V	20A	2.5 mm <sup>2</sup> (#14)	2.5 mm <sup>2</sup> (#14)	2.5 mm <sup>2</sup> (#14)	2.5 mm <sup>2</sup> (#14)	4 mm <sup>2</sup> (#12)

Part nr	Description	Amp	Net weight	Width x Depth x Height x Height open seat
07-03-010	Silent Electric Compact 12V	17	9.2 Kg 20 lbs	345 x 420 x 390 x 700 mm 13.6 x 16.5 x 15.4 x 27.6 inch
07-03-011	Silent Electric Compact 24V	8		
07-03-012	Silent Electric Comfort 12V	17	10.8 Kg 24 lbs	470 x 490 x 385 x 755 mm 18.5 x 25.4 x 15.2 x 29.7 inch
07-03-013	Silent Electric Comfort 24V	8		
07-04-014	Premium Electric Standard 12V	30	21 kg 46 lbs	365 x 455 x 455 x 860 mm 14.4 x 17.9 x 17.9 x 33.9 inch
07-04-015	Premium Electric Standard 24V	16		
07-04-016	Premium Electric Low 12V	30	20 kg 44 lbs	365 x 455 x 385 x 720 mm 14.4 x 17.9 x 15.2 x 27.8 inch
07-04-017	Premium Electric Low 24V	16		
07-03-045	Design Silent Electric 12V	19	18 kg 40 lbs	345 x 410 x 400 x 720 mm 13.6 x 16.1 x 15.8 x 27.8 in
07-03-046	Design Silent Electric 24V	10		



Digital Control Panel (07-66-024) Template