Genset Equipment and Accessories 2012

Genset equipment components

Installation kits
Installation accessories
Optional accessories
Service kits

Fischer Panda®

Power wherever you are TM

PREAMBLE

Thank you for your interest in our products. This catalogue will provide you with a selection of our comprehensive accessory programme.

The catalogue consists in two parts:

In Part 1, you will find various equipment components for your genset that can be ordered in addition to the standard equipment set. Please note that equipment components, unless stated otherwise, must be included in your order when purchasing the genset. The subsequent refitting is possible only if Fischer Panda has the pertinent upgrade kits available in their programme.

Part 2 contains our accessory programme. Fischer Panda offers complete kits for installation and service tasks. All parts may also be ordered separately. All parts from the accessory programme can also be installed subsequently, i.e., after purchasing a genset.

1. Genset equipment components

2. Accessory programme

2.1 INSTALLATON KITS - Marine

2.2 INSTALLATION ACCESSORIES - Marine and Vehicle

2.4 ATTACHMENT SYSTEM - Marine and Vehicle

2.5 OPTIONAL ACCESSORIES - Marine and Vehicle

2.6 SERVICE KITS - Marine and Vehicle

2.6 SERVICE KITS - Marine and Vehicle

1. Genset equipment components

Part 1

- Sound insulation
- Expanded generator functions
- Remote control
- Current distribution and switching

Capsule material

- **glass fibre reinforced plastic (GFRP)**
- **stainless steel (MPL)**

Sound insulation materials

- **3D (thickness 25 mm)**
- **4DS (thickness 40 mm)**
- **6DS (thickness 60 mm)**

Sound insulation / coatings

The super low-noise sound insulation system

Capsule designs

The Panda marine gensets up to 25 kW and all Panda vehicle gensets up to 12 kW are fitted with a sound insulation capsule made from glass fibre reinforced plastic (GFRP) as a standard.

Starting with the 30 kW (Marine) version or the 15 kW (vehicle) version, the capsule supplied is made from stainless steel (MPL).

Sound insulation materials

The thickness of the sound insulation material is approx. 25 mm (3D) for the marine gensets and approx. 40 mm (4DS) for the vehicle gensets. For a surcharge, the sound insulation capsules can also be supplied with a thicker sound insulation of up to 60 mm (6 DS).

Sound insulation capsule variations

The Fischer Panda sound insulation capsules are available for order either in the standard design or as a higher quality version. The following upgrade options are available:

Sound insulation capsule variations		
Standard	Upgrade options	Upgrade
GFRP 3D	GFRP 4DS	Insulation thickness 40 mm instead of 30 mm
GFRP 3D	MPL 4DS	Insulation thickness 40 mm instead of 30 mm, plus stainless steel capsule instead of glass fibre reinforced plastic capsule
GFRP 3D	MPL 6DS	Insulation thickness 60 mm instead of 30 mm, plus stainless steel capsule instead of glass fibre reinforced plastic capsule
GFRP 4DS	MPL 4DS	Stainless steel capsule instead of glass fibre reinforced plastic capsule
GFRP 4DS	MPL 6DS	Insulation thickness 60 mm instead of 40 mm, plus stainless steel capsule instead of glass fibre reinforced plastic capsule
MPL 4DS	MPL 6DS	Insulation thickness 60 mm instead of 40 mm

GFRP sound insulation capsule

MPL sound insulation capsule

Coatings

All metal capsules (MPL) can also be supplied with a paint coating. Please inquire about details if desired.

Genset with white paint job
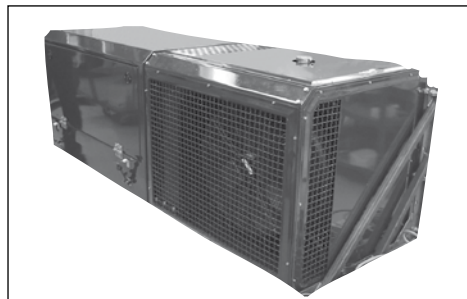
Genset with black paint job
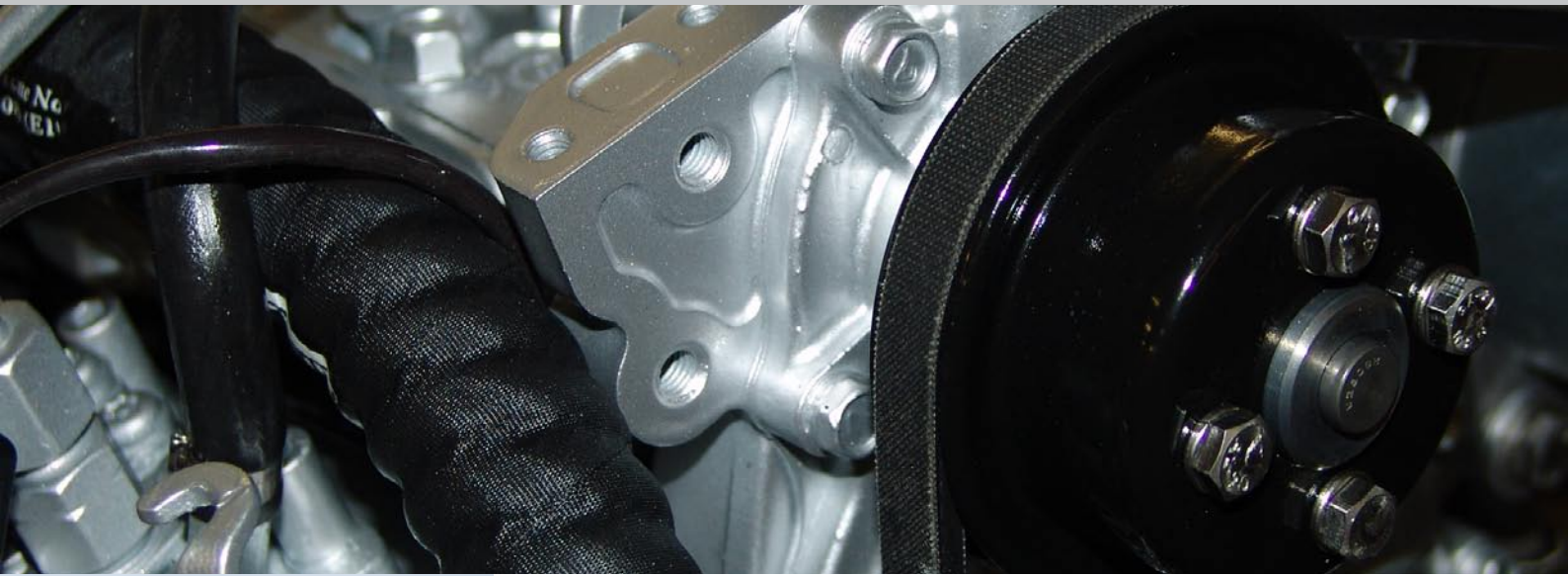
Expanded functions

- 24 V starter system
- 2-pole installation
- Hydraulic coupling
- Display kit
- General Signal Interface
- Electronic
  voltage control
  ("Mini VCS")

Expanded generator functions

The functions of all Fischer Panda gensets can be expanded. For this purpose, Fischer Panda offers various equipment components that can be ordered along with the genset when it is purchased.

24 V starter system

With this starter system, all required components are designed for 24 V.
Many special applications require a 24 V starter system instead of the standard 12 V starter system, which is then connected to a 24 V battery.

The system consists in a 24 V electric starter, glow plugs, and a 24 V alternator. The internal control system of the gensets, however, still runs on 12 V.

i-gensets with variable RPM

24 V starter system	
Panda 5000i	24 V electric starter, glow plug(s)
Panda 8000i - Panda 10000i	24 V electric starter, alternator, glow plug(s) *)
Panda 10000i	24 V electric starter, alternator, glow plug(s)
Panda 15000i	24 V electric starter, alternator, glow plug(s)
Panda 25i	24 V electric starter, alternator, glow plug(s)
Panda 45i	24 V electric starter, alternator, glow plug(s)

3000 RPM / 50 Hz gensets

24 V starter system	
Panda 4,5 - Pnada 10000	24 V electric starter, alternator, glow plug(s)
Panda 12000 - Panda 18	24 V electric starter, alternator, glow plug(s)
Panda 24 - Panda 30 IC	24 V electric starter, alternator, glow plug(s)
Panda 40 - Panda 100	24 V electric starter, alternator, glow plug(s)

*) Note: Not available as an upgrade kit!
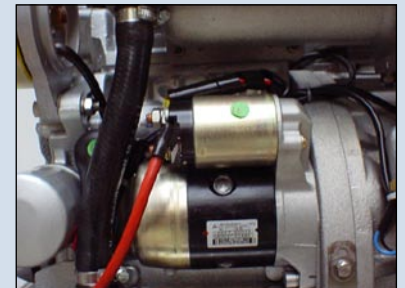
1500 RPM / 50 Hz gensets
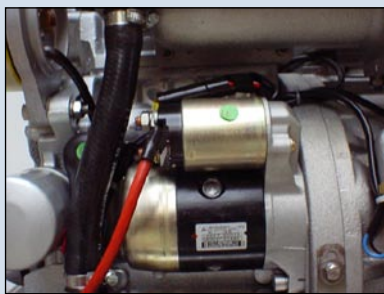
24 V starter system	
Panda 7,5-4 Panda 9-4	24 V electric starter, alternator, glow plug(s)
Panda 12-4 - Panda 22-4	24 V electric starter, alternator, glow plug(s)
Panda 30-4 - Panda 100-4	24 V electric starter, alternator, glow plug(s)

3600 RPM / 60 Hz gensets

24 V starter system	
Panda 6500 - Pnada 10 Mini	24 V electric starter, alternator, glow plug(s)
Panda 12 Mini Panda 16	24 V electric starter, alternator, glow plug(s)
Panda 22	24 V electric starter, alternator, glow plug(s)

1800 RPM / 60 Hz gensets

24 V starter system	
Panda 7,5-4 Panda 9-4	24 V electric starter, alternator, glow plug(s)
Panda 12-4 - Panda 22-4	24 V electric starter, alternator, glow plug(s)
Panda 30-4 - Panda 200-4	24 V electric starter, alternator, glow plug(s)

AGT DC gensets

24 V starter system	
AGT-DC 4000	24 V electric starter, alternator, glow plug(s)
AGT-DC 5000 AGT-DC 6000	24 V electric starter, alternator, glow plug(s)
AGT-DC 8000 - AGT-DC 16000	24 V electric starter, alternator, glow plug(s)
AGT-DC 18000 - AGT-DC 28000	24 V electric starter, alternator, glow plug(s)

2-pole installation

With 2-pole or floating ground installations, the earth connection is established between engine starter system (electric starter, glow plugs, and alternator) and the battery when the diesel engine is started up. After the start-up process, this connection is automatically disconnected, and the system is operated as an isolated circuit. The kit consists in an insulated continuous duty relay incl. cable set and is either pre-installed on the genset or can be purchased as an upgrade kit.

i-gensets with variable RPM

2-pole intallation i-gensets		
21.03.03.057S	Panda 4800i Panda 5000i Panda 8000i Panda 10000i Panda 15000i Panda 25i	battery negative isolator Kit with cable
21.03.03.057S	Panda 45i	battery negative isolator Kit with cable

3000 RPM / 50 Hz gensets

2-pole installation 3000 RPM / 50 Hz		
21.03.03.057S	Panda 4000s Panda 8000- Panda 24	battery negative isolator Kit with cable
21.03.03.057S	Panda 30 - Panda 100	battery negative isolator Kit with cable

1500 RPM / 50 Hz gensets

2-pole installtion 1500 RPM / 50 Hz		
21.03.03.057S	Panda 7,5-4 HD - Panda 22-4 HD	battery negative isolator Kit with cable
21.03.03.057S	from Panda 30-4 HD upwards	battery negative isolator Kit with cable

Cole Hersee insulated

Kissling power relay

3600 RPM / 60 Hz gensets

2-pole installation 3600 RPM / 60 Hz		
21.03.03.057S	Panda 4200 SC Panda 6500 - Panda 22	battery negative isolator Kit with cabl

1800 RPM / 60 Hz gensets

2-pole installation 1800 RPM / 60 Hz		
21.03.03.057S	Panda 7,5-4 - Panda 17-4	battery negative isolator Kit with cabl
21.03.03.057S	Panda 22-4 - Panda 200-4	battery negative isolator Kit with cabl

DC gensets

2-pole installation DC Generatoren		
21.03.03.057S	AGT-DC 5000 - AGT-DC 18000	battery negative isolator Kit with cabl
21.03.03.057S	ab AGT-DC 22000	battery negative isolator Kit with cabl

Automatic start-up

With the automatic start-up function, the generator can be started with an external signal. The automatic starting procedure consists of pre-heating (heat) and operating the electric starter (start).

The automatic start-up consists in an automatic module on the remote control panel, a re-start protection, and a speed sensor.

It is possible to refit an existing remote control panel with an automatic module (see "Remote control panel").
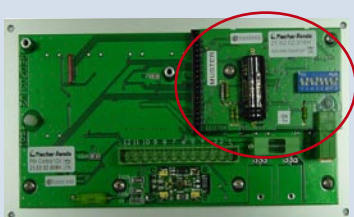
Automatic start-up		
Series equipment	Panda 4800i - Panda 45i	incl. re-start protection, speed sensor, automatic module on remote control panel
21.02.02.120P	Panda 6500 - Panda 12000	incl. re-start protection, speed sensor, automatic module on remote control panel
21.02.02.121P	Panda 15000 - Panda 75 Panda 7,5-4/ AGT-DC 5000 and up	incl. re-start protection, speed sensor, automatic module on remote control panel

Hydraulic coupling

for operating a pump

The electromagnetic clutch coupling in a separate housing makes it possible to connect a hydraulic pump to various Fischer Panda gensets.

3000 RPM / 50 Hz resp.. 3.600 / 60 Hz gensets

Hydraulic pump option with electromagnetic coupling				
Generator type	Voltage	Gearing	Output	Transmissible torque
Panda 8000 - Panda 15000	12 or 24 V	9 teeth (SAE A) or 13 teeth (SAE B)	20,4 kW	65 Nm
Panda 18 bis Panda 30 IC	12 oder 24 Volt	9 teeth (SAE A) or 13 teeth (SAE B)	39 kW	125 Nm

Hydraulic coupling

1500 RPM / 50 Hz resp. 1800 UpM / 60 Hz gensets

Hydraulic pump option with electromagnetic coupling				
Generator type	Voltage	Gearing	Output	Transmissible torque
Panda 7,5-4	12 or 24 V	9 teeth (SAE A) or 13 teeth (SAE B)	20,4 kW	65 Nm
Panda 9-4 Panda 12-4	12 or 24 V	9 teeth (SAE A) or 13 teeth (SAE B)	39 kW	125 Nm
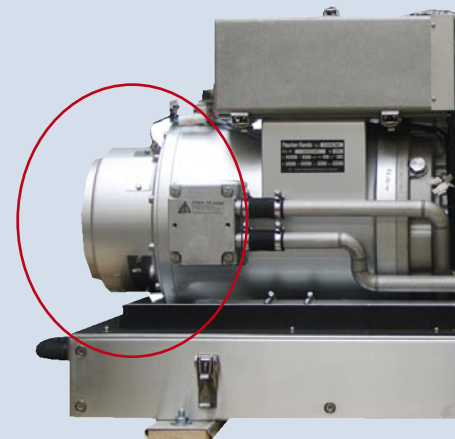
options available for larger gensets upon inquiry

Sample installation of display kit

Display kit

The display kit consists in an oil pressure gauge and a cooling water temperature gauge and sensors on the genset. The gauges are supplied as detail parts and can e.g. be installed in the control cabinet. The contact lines are routed out of the genset. Additional gauges are available upon request. Supplied without a control cabinet!

■ for all gensets

VDO display kit - for all generators	
21.03.06.001S	VDO 12V display kit incl. VDO sensors on generator for oil pressure and cooling water temperature incl. VDO gauges for oil pressure and cooling water temperature

Oil pressure gauge

(Figure similar)

Cooling water temperature gauge

(Figure similar)

Generator Signal Interface GSI

The Generator Signal Interface (GSI) controller module converts the generator signals to potential-free signals and thereby makes it possible to connect the genset to other equipment, e.g. a programmable logic controller (PLC), that can be used to control and monitor the genset.
The Generator Signal Interface is included with the genset as a detail part.

■ for all AC gensets starting with Panda 8000 (3,000 RPM)
■ for all AC gensets starting with Panda 6500 (3600 UpM)
■ for all AC gensets starting with Panda 7.5-4 (1,500 RPM)
■ for all DC gensets starting with Panda AGT-DC 5000

General Signal Interface

General Signal Interface (ready for connection)	
31.41.70.023H	Generator Signal Interface box

Mini-VCS electronic voltage controller for retrofitting*)

The upgrade with a Mini-VCS converts an unregulated generator into a regulated generator. The voltage of the genset is regulated with a tolerance of +/- 3 V. This voltage stability helps protect particularly sensitive equipment (e.g. laptops, measuring instruments, navigation units, satellite).

The auto-boost function makes it possible to start up equipment with a high starter current such as electric motors, air conditioning units, and compressors without a voltage drop.

Mini-VCS with boost

for Panda gensets

- 5000 LPE
- 6000
- 8000
- 9000
- 10000
- 12000
- 14000
- 15000

Mini-VCS for voltage control with auto-boost function
21.02.01.041H   Mini-VCS 12V/230V with auto-boost

for Panda gensets

- 18 NE
- 24 NE
- 30 NE
- 32
- 50
- 65
- all xx/4 models (e.g. 15/4)

Mini-VCS for voltage control without auto-boost function

*) for ND gensets or as a spare part for gensets that with a year of manufacture older than 1997 (inquire for more information)
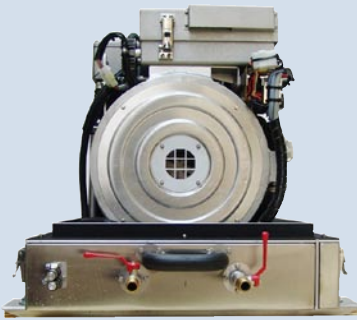
Generator with hot-water
connection (sample image)

Hot-water connection

The genset can be fitted with two extra connections for an external
hot-water circuit. The hot water can be used e.g. for heating rooms. Water infeed
(cold) and water outlet (hot) are fitted with a ball valve.

A thermostat valve is required and must be installed by the customer.

for Panda gensets

- for all AC gensets starting with Panda 8000 (3,000 RPM)
- for all AC gensets starting with Panda 6500 (3.600 UpM)
- for all AC gensets starting with Panda 7.5-4 (1,500 RPM)
- for all DC gensets starting with Panda AGT-DC 5000

Hot-water connection	
upon request	Hot-water connection incl. two ball valves and non-return valve

Water outlet (hot side) Water infeed (cold side)
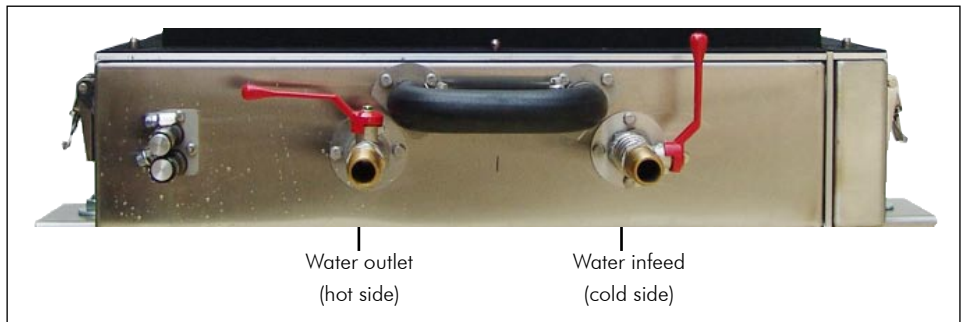
Sample representation - The connections can also be fitted on another side, depending on the genset
model.

Battery monitor

The battery monitor is used to monitor rechargeable batteries and battery banks. The
battery monitor can be employed for three different voltage levels (12 V, 24 V, 48 V).
For information about higher voltages, please inquire.

The battery monitor is fitted with a top-hat rail housing. The cut-in and cut-off voltage
of the genset can be programmed individually.

Battery monitor	
21.02.05.004H	Battery monitor RE0724 12V/24V/48V standard
Upon request	Battery monitor RE0724 72V/80V/96V/128V/144V DC

Re-start protection

The re-start protection prevents the genset from (re-)starting while it is in use. The re-start protection thus serves to protect the electric starter from damage.

To operate an automatic system add-on for the remote control panel, it is mandatory to install a re-start protection.

The kit consists in an electronic starter monitor with bracket, a cable set, and a speed sensor.

### for Panda gensets

- for AC gensets Panda 4000 - 12000 (3,500 RPM)
- for all AC gensets starting with Panda 6500 (3.600 UpM)
- for all AC gensets starting with Panda 7.5-4 (1,500 RPM)
- for all DC gensets starting with Panda AGT-DC 5000

Re-start protection	
21.03.03.063S	Re-start protection kit Panda 4500,5000 LPE - 14000 NE composed of automatic start protection with bracket, cable set, speed sensor

for Panda gensets

- for AC gensets Panda 15000 - 30 (3,500 RPM)

Re-start protection	
21.03.03.064S	Re-start protection kit Panda 18NE- 30NE (formerly Panda 15-25) consists of electronic re-start protection with bracket, wiring harness, and speed sensor

Re-start protection

Monitoring of *)

- ■ Engine cooling water temp.
- ■ Winding temperature
- ■ Engine oil pressure
- ■ Battery charge
- ■ 230 V AC current
- ■ Cooling water leakage (optional)*

*) in the standard version starting with Panda 6000

Remote control panels

for controlling and monitoring the Panda genset

Simple operation

The genset can be operated conveniently from the cabin with the Fischer Panda panels. It is even possible to switch multiple panels in parallel, or to operate them with a slave panel. This enables the user to operate the genset from different locations with great flexibility. One panel may be installed e.g. in the cabin and the other on the fly bridge, the trailer, or in the engine room.

Functions

The remote control panel in its standard version for Panda 5000 and up monitors six functions: engine cooling water temperature, winding temperature, engine oil pressure, battery charge, 230 V AC circuit, cooling water leakage (optional).

If any of these functions show an abnormal status, the genset will shut down. The remote control panel can be upgraded with an automatic add-on to a "fully automatic panel". That way, the genset can be started and stopped externally by contact with an external device (e.g. timer).

Standard panels for Panda 4000 gensets

Panda 4000 AC gensets

Panda P4 Control

Function: Starting and stopping the generators
Indication of: Operating hours, "Override" status (temperature error masked)
Monitoring of: Engine temperature, exhaust gas temperature, and oil pressure (warning LED).
In case of a malfunction, the panel will shut down the genset.

for Panda 4000 asynchronous generators

- 4500 FCB
- 4500 SCB
- 4500 SCE
- 4.5 ND

Panda P4 Control for Panda 4000 asynchronous generators	
21.02.02.032H	Panel P4 Control remote control

Note: One remote control panel is already included in the genset scope of delivery

for Panda 4000 synchronous generators

- 4000s

Panda P4 Control for Panda 4000 synchronous generators	
21.02.02.048P	P4 Control remote control, fully configured for P4000 series

Note: One remote control panel is already included in the genset scope of delivery

Panda AGT 4000 DC gensets

Panda AGT Panel

Function: Starting and stopping the generators
Indication of: Operating hours of the genset, charge indicator, operating status
Monitoring of: Exhaust gas temperature, cooling water temperature,
oil pressure (automatic shut-down for values outside normal range).

for Panda genset

- AGT-DC 4000

Panda AGT Panel	
21.02.02.013H	Remote control panel card for Panda AGT 2500/4000 Rev. 6.0

Note: One remote control panel is already included in the genset scope of delivery

Panda 4 Control
Panda P4 Control

Panda AGT Panel

Standard panels for Panda 5000 gensets and up

Standard panels for asynchronous and AGT-DC gensets

Panda P6 Plus Control

Panda P6 Plus

Function: Starting and stopping the generators
Indication of: Operating hours of the genset, charge indicator,
AC control indicator
Monitoring of: Cooling water temperature, winding temperature, oil pressure, AC voltage, cooling water leakage. Automatic shut-down for values outside normal range.

for Panda gensets

- 5000 LPE
- 6000
- 8000
- 10000
- 12000
- 14000
- 15000

Panda P6 Plus	
21.02.02.102H	Remote control panel P6 Plus "Symbol" 12V Type 1 configured (main panel: 21.02.02.046H)

Note: One remote control panel is already included in the genset scope of delivery

for Panda gensets

- 18
- 24
- 30
- 32
- 50
- 65
- all /4 models (e.g. 15/4)
- all AGT-DC starting with

Panda P6 Plus	
21.02.02.103H	Remote control panel P6 Plus "Symbol" 12V Type 2 configured (main panel: 21.02.02.046H)
21.02.02.047H	Remote control panel P6 Plus "Symbol" 24V

*) For generators with 24 V starting system

Note: One remote control panel is already included in the genset scope of delivery

Standard panels for Panda i-series gensets

Panda iControl Panel 1 - Digital (for Panda 4000i, 6000i)
Indication of: electrical load in percent, engine speed, operating hours.
Monitors the functions: Engine temperature, exhaust manifold temperature, winding temperature, oil pressure. An automatic start-up function is integrated

for Panda gensets

- 4000i
- 6000i

Panda iControl panel 1 for i-series gensets	
21.02.02.020H	Panda iControl1 panel with ATMEGA 168 (THT), with black panel foil, for iControl1 controller

Note: One remote control panel is already included in the genset scope of delivery

Panda iControl Panel 2 (for Panda 4800i, 5000i, 8000i, 15000i, 25i, 45i) - Digital
On the default display screen, you will find information on the battery voltage, operating hours of the generator, temperatures of cylinder head, exhaust manifold, and winding, RPM, and the oil pressure status. Also, a bar graph display at the right hand edge of the display shows the utilisation of the generator in percent. Warnings and error messages are also displayed.
The Panda iControl2 panel is equipped with an automatic start-up function.

for Panda gensets

- 4800i
- 5000i
- 8000i
- 10000i
- 15000i
- 25i
- 45i

Panda iControl panel 2 (digital) for i-series gensets	
21.02.02.118H	Panda iControl2 panel with MB96315rs, with black panel foil, for iControl2 controller

Note: One remote control panel is already included in the genset scope of delivery

iControl panel for i-series

iControl panel II for i-series

AGT control panel

Custom panels

for asynchronous and AGT-DC gensets

Panel with LCD display for increased functionality

The AGT control panel is fitted with a graphic display. The display serves to indicate a variety of warning and shut-down functions, which improves safety and convenience compared to a standard remote control panel.

The warning and shut-down functions can be adjusted individually. By default, the system is set so that the maximum operating safety and reliability are ensured. This means that the genset will cut off immediately if an oil pressure or temperature error is found.

for Panda gensets

- 18 NE
- 5000 LPE
- 6000
- 8000
- 10000

- 12000
- 14000
- 15000
- 18

- 24
- 30
- 32
- 50
- 65

- all /4 models (e.g. 15/4)
- all AGT-DC from 5000 and up

AGT control	
21.02.02.017H	Remote control panel AGT Control (RE0612) 12V/24V, with graphic display black front panel 145x100 basic panel Upgrade to master with FP No. (21.02.02.031H)

Note: One remote control panel is already included in the genset scope of delivery

Add-on modules for panel P6 Plus

Automatic system add-on module

The standard P6 Plus remote control panel can be upgraded with an automatic add-on to a "fully automatic panel". That way, the genset can be started and stopped externally with an external device (e.g. timer). The automatic starting procedure consists of pre-heating (heat) and operating the electric starter (start). The times for "heat", "start" and "stop" are individually adjustable. To operate an automatic system add-on, it is necessary to install a re-start protection.

- for Panda P6 Plus remote control panel

Automatic system add-on for panel P6+

Automatic add-on module	
21.02.02.016H	Automatic board for remote control panel P6+ (RE0703)

Master/slave combinations

A master/slave combination makes it possible to operate the genset with two remote control panels. For example, the genset can be started up with one remote control panel and stopped with the other. Connecting a second remote control panel affords better control options, which will increase safety.
The main panel acts as the "master panel" to which the genset is connected. The second remote control panel - the so-called "slave panel" - works in parallel with the main (master) panel, i.e., the genset can be operated with either the main panel or the slave panel.

Panda iControl 2 remote control panel as a master/slave combination

Panel iControl 2 - iControl 2 panel configuration

Up to three slave panels can be operated together with one iControl master panel.

An iControl master/slave combination consists in:
- 1 x Panda iControl remote control panel
- 1 - 3 Panda iControl slave panels

NOTE: One remote control panel is already included in the genset scope of delivery. You merely have to order the desired quantity of slave panels the plus cables (12–core).

iControl 2 panel
Master panel

Master/slave combination

Remote control panel is already included in the scope of delivery

Panda iControl slave panel
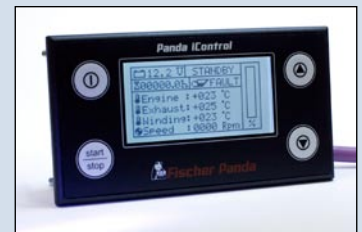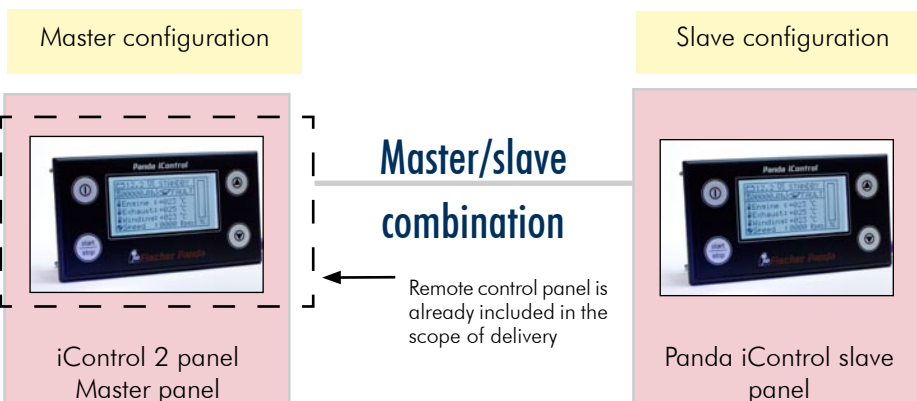
iControl 2 panel
Master panel

Panda iControl
Slave panel

Panel iControl 2 - iControl 2 panel configuration

iControl 2 remote control panel - see page 21	
iControl 2 slave panel	
21.02.02.132P	iControl 2 slave panel
12-core connection cable	
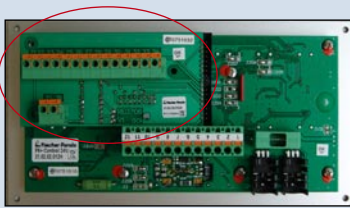
P6 Plus panel

Master/slave adapter

Panda P6 Plus remote control panel as a master/slave combina-

Panel P6 Plus - P6 Plus panel configuration

A master/slave combination consists in:
- 2 x Panda P6 Plus remote control panels and
- 2 x slave panel adapters.

NOTE: One remote control panel is already included in the genset scope of delivery.

Items you need to order for a master/slave combination:
- 1 x Panda P6 Plus remote control panel
- 2 x slave panel adapters (1 x for existing panel + 1 x for additional panel)
- 12-core cable for connecting the two panels

Master configuration	Slave configuration

Master/slave combination

P6 Plus panel
+
Slave panel adapter

One remote control panel is already included in the scope of

P6 Plus panel
+
Slave panel adapter
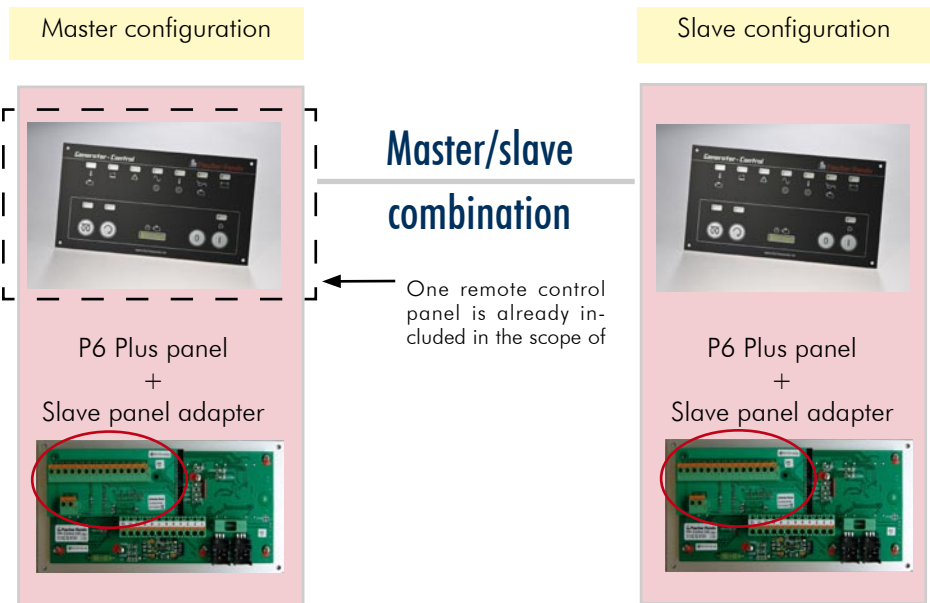
Panel P6 Plus - P6 Plus panel configuration

P6 Plus remote control panel - see page 20

P6 Plus panel master/slave adapter with P6 Plus panel	
21.02.02.015H	Master/slave adapter type RE0703 for connection between slave panel and the Panda 6+ panel

12-core connection cable

Current distribution / switching

Fischer Panda offers intelligent solutions for a safe and reliable power supply and power distribution. It is possible to expand an existing installation or to combine it with the control system
of the ship or vehicle (see also our system brochure).
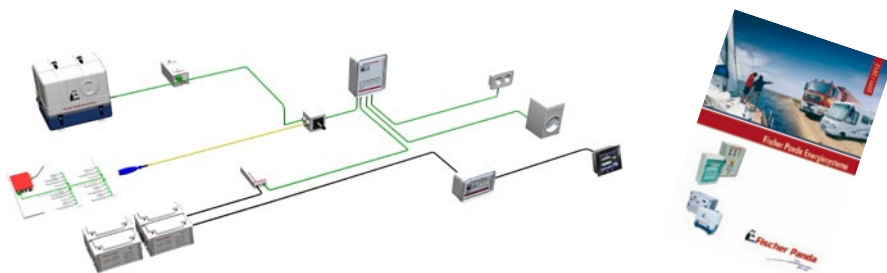
Current distribution and switching

- ■ Alternating current
  current distribution
- ■ Automatic
  shore-side power/genset
  switching
- ■ Parallel
  service connection
- ■ Automatic
  on-board monitoring

AC power circuit distribution

AC circuit distribution

Ensuring a safe and reliable on-board power distribution is vital. This applies to the power supply via shore-side power, genset, and battery as well as to the distribution to on-board loads including their protection. The current distributor and its variable inputs and outputs represents the central current distribution system for your on-board power network.

AC distribution box	
21.50.10.008S	AC distribution box APD 3-6, 3 inputs / 6 outputs 230V incl. FI switch (GFCI)

- Water-proof IP 65
- GFCI
- Automatic safety switches
- 3 inputs
- 12 outputs

Shore-side power

Inverter

Fischer Panda AC generator
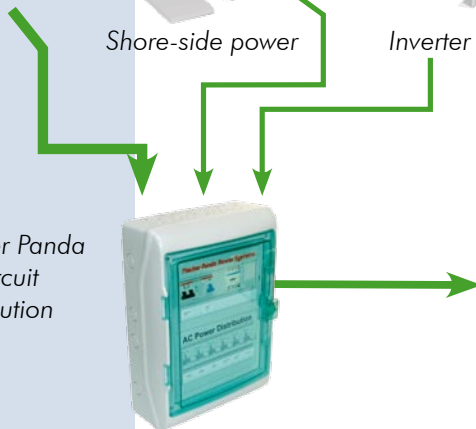
Fischer Panda AC circuit distribution

230 V AC current

Air conditioning unit   *Household equipment*   *Refrigerators*

Parallel Switching Box

The parallel switching box was designed to operate two Fischer Panda AC gensets in parallel. The unit is used to synchronise the two gensets and to switch the load from one genset to the other without interrupting the power supply. Both gensets can also run in parallel to supply twice the power. This can serve to provision a very high peak load.

Parallel switching box
closed

Parallel switching box	
21.50.10.015H	Parallel switching box for 2 Panda PMS 4500 FCB
upon request	Parallel cabinet 3.8 kW - 15.3 kW 1ph generators
21.02.09.017P	Parallel cabinet 6.5 kW - 20.4 kW for 3ph generators
upon request	Parallel cabinet 25.5 - 4.0 kW 3ph generators
21.02.09.003H	Parallel cabinet for 42.5kW - 55.2kW 3ph generators

Panel   *Panel*

Fischer Panda AC generator   *Fischer Panda AC generator*

Parallel service connection unit
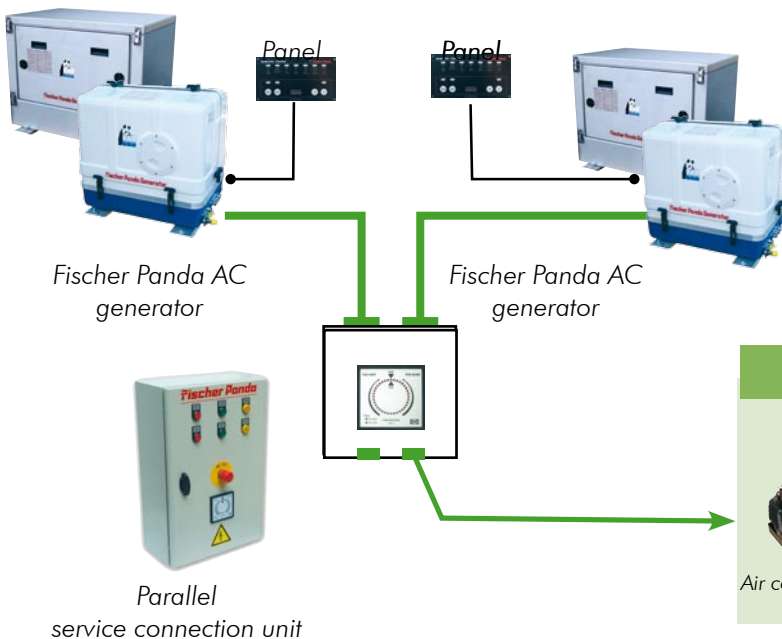
Combinable with automatic 230 V switching unit in a single housing

Shore-side power circuit

Air conditioning units   *Diving compressor microwaves*   *Refrigerators*

Automatic shore-side/generator
switching unit

Automatic shore-side/generator power switch

The shore-side/genset switching unit serves to control the shore-side power in combination with a genset. The switching unit monitors the connection to the shore-side power supply. The AC genset is started up automatically when the shore-side power is not available. Once the shore-side power supply is available again, the switching unit can, if so desired, switch back so that the shore-side power is again used as the main power source.

Automatic shore-side/generator power switch	
21.02.09.043H	Automatic Changeover Unit 230/50/1PH/ Generator max 10,2kW / Onshore Power Supply max. 1ph 6kW
21.02.09.040H	Automatic Changeover Unit 400/50/3PH/ Generator max 24 KW / Onshore Power supply max 3ph 17kW
upon request	Automatic Changeover Unit 400/50/3PH/ Generator max 40 KW
upon request	Automatic Changeover Unit 400/50/3PH/ Generator max 55,2 KW

Shore-side power
connection

Fischer Panda AC genset

Monitoring in
case of shore-side
power outage

Remote control
panel

230 V AC current

Air conditioning unit   Household equipment   Refrigerators

Genset automatic start-up

Shore-side/generator
power switching unit
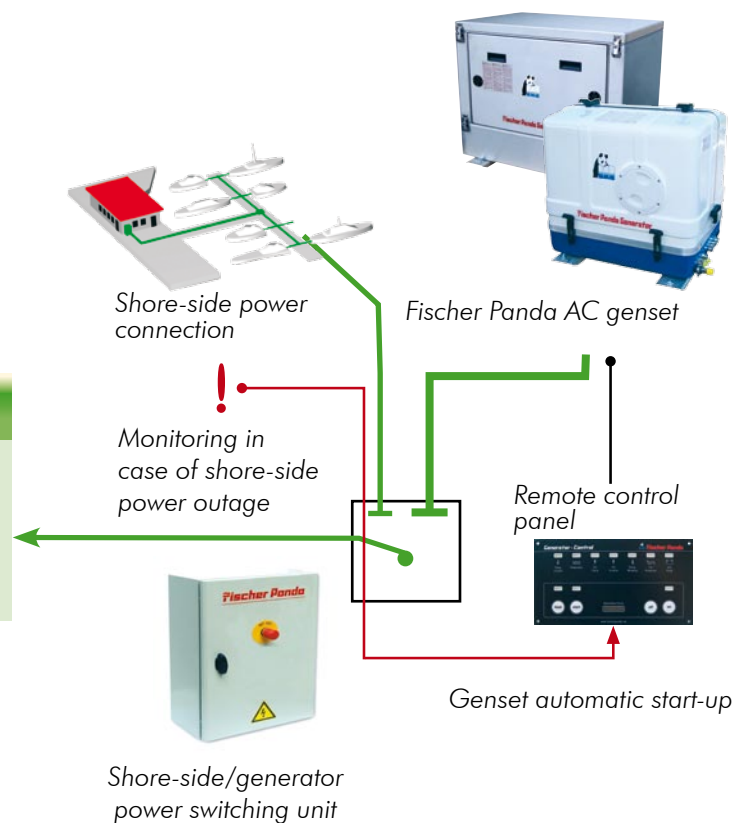
Digital on-board power management (system control board)

With the digital system control board, you will discover a new dimension of digital on-board system monitoring. Modern technology is available to you at a touch with the 8.4" TFT display to switch the desired functions.

All load information such as battery capacity, current, voltage, and fuel levels are digitally displayed on the screen in the form of bar charts. Devices can be controlled with the panel, and the time indication can be adjusted to the respective time zone. Even without a display, all circuits can be controlled manually with the on-board control unit.

The basic version is fitted with 32 DC circuits, start-stop controls for the genset, and visual information on the generator status such as "AC-OK", temperature, or oil pressure faults. An upgraded version allows for camera monitoring. The operating system can be easily adapted to any ship systems and languages. With the new skipper identification system (RFID), you can protect your ship from use by unauthorised persons (optional).
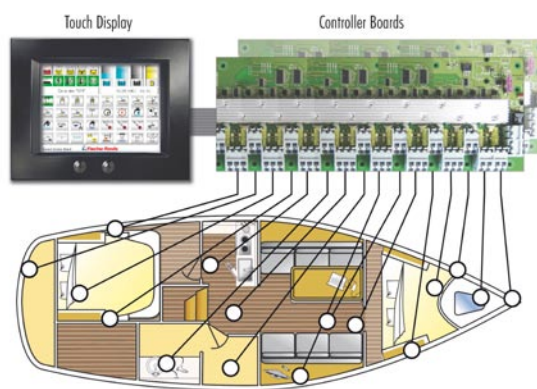
System control board

Digital on-board power management	
21.02.02.019S	System control board SCB 32 V1.0 complete system consisting of: Display V2.0 Power board 1 V08C/16 ports Power board 2 V08C/16 ports Sensor board V05.0 Digibox V01.0 Shunt 100A/60mV Wire set 1 (connection for display, power board, sensor board) Current impulse switch 16A 1 contact closer 12VDC series 20.21 ATTENTION ! Please provide the system voltage (12V or 24V) and the necessary symbols / sensors before delivery / order !

2. Accessory programme

Part 2

- Marine installation kits
- Installation accessories
- Optional accessories
- Standard service kits
- Plus service kits

Installation kits

- Basic version
- Premium version

Complete installation kits

To keep the installation as simple as possible, Fischer Panda offers complete installation kits. The kits comprise all components that are needed for the complete installation of the cooling water, exhaust gas, and fuel systems of the genset.

Marine installation kits

The installation kits by Fischer Panda are available in two versions:

Basic version

The basic version contains all components required for a standard installation

Premium version

The premium version additionally contains an exhaust gas/water separator unit for greater demands concerning noise reduction. The exhaust gas/water separator unit strongly reduces the exhaust noise. The "water splash" in particular is eliminated. Additionally, the exhaust gas/water separator unit functions as an exhaust gas goose neck, which prevents the water from flowing back into the generator.
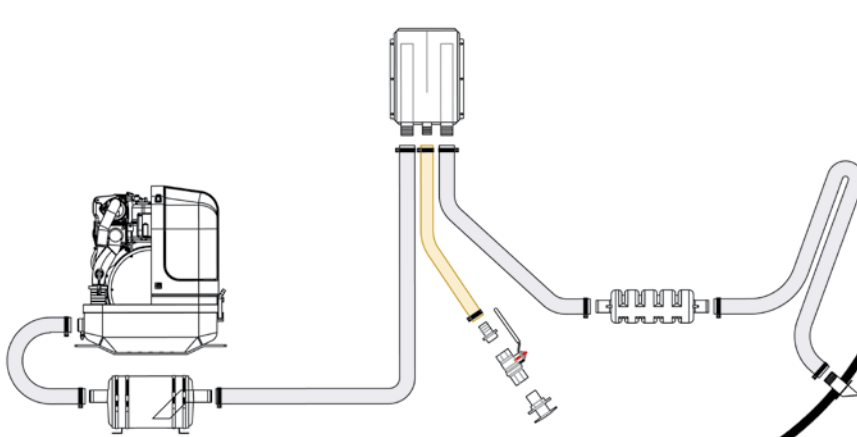
Example exhaust system installation

The basic version of the installation kit contains the following components for the cooling water, exhaust gas, and fuel installations:

Cooling water installation

- Through-hull with filter
- Seacock
- Hose connection
- Sea water filter
- Hose clamps
- Coolant hose (4m)
- Ventilation valve

Exhaust installation

- Water collector
- Hull outlet
- Hose connection
- Hose bush
- Hose clamps
- Exhaust hose (5m)
- Silencer

Fuel installation

- Fuel hose
- Hose clamps
- Non-return valve
- Fuel filter with water separator

Cooling water installation

Exhaust installation
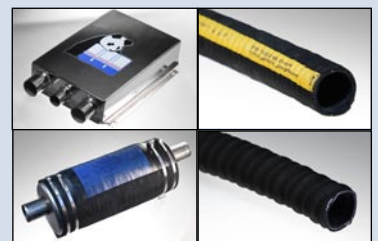
Fuel installation

Installation kit
Basic version

Basic version installation kits

The basic version installation kits contains the following components:

Cooling water installation

- Through-hull with filter
- Seacock
- Hose connection
- Sea water filter
- Hose clamps
- Coolant hose (4m)
- Ventilation valve

Exhaust installation

- Water collector
- Hull outlet
- Hose connection
- Hose bush
- Hose clamps
- Exhaust hose (5m)
- Silencer

Fuel installation

- Fuel hose
- Hose clamps
- Non-return valve
- Fuel filter with water separator
- Fuel quick-release fasteners

Basic version installation kit without exhaust/water separator	
21.03.04.046S	Panda 4500 installation kit without exhaust/water separator
21.03.04.080S	Panda 5000 installation kit LPE - 15000 NE / AGT 4000 - 14000 PMS without exhaust/water separator version 1
21.03.04.080S	Panda 5000 installation kit LPE - 15000 NE / AGT 4000 - 14000 PMS without exhaust/water separator version 1
21.03.04.018S	Panda 50 YA PMS installation kit without exhaust/water separator
21.03.04.016S	Panda 30 NE / AGT 25000 PMS installation kit without exhaust/water separator
21.03.04.029S	Panda 60/4 PMS installation kit without separator

Premium version installation kits

All components of the basic version plus exhaust/water separator to reduce exhaust

Installation kit
Premium version

Premium version installation kit	
21.03.04.056S	Panda 4500 installation kit with exhaust/water separator
21.03.04.057S	Panda 5000 installation kit LPE - 15000 NE / AGT 4000 - 14000 PMS with exhaust/water separator
21.03.04.067S	Panda 18 NE -24 NE / AGT 15000 -16000 PMS installation kit with exhaust/water separator version 2
21.03.04.017S	Panda 30 NE / AGT 25000 PMS installation kit with exhaust/water separator
21.03.04.019S	Panda 50 YA PMS installation kit with exhaust/water separator
21.03.04.021S	Panda 60/4 PMS installation kit with exhaust/water separator
21.03.04.028S	Panda 50 YA PMS installation kit with exhaust/water separator

Installation accessories individual components

for marine and vehicle gensets

Aside from the installation kits, the Fischer Panda installation accessories can also be ordered as individual components.

The installation accessories are available for:

- Cooling water system
- Exhaust installation
- Fuel installation
- Attachment system

Installation accessories individual components

Cooling system for marine gensets

1 Through-hull with filter

2 Seacock / ball cock

3 Hose connection

4 Seawater filter

5 Hose clamps

6 Coolant hose

7 Ventilation valve
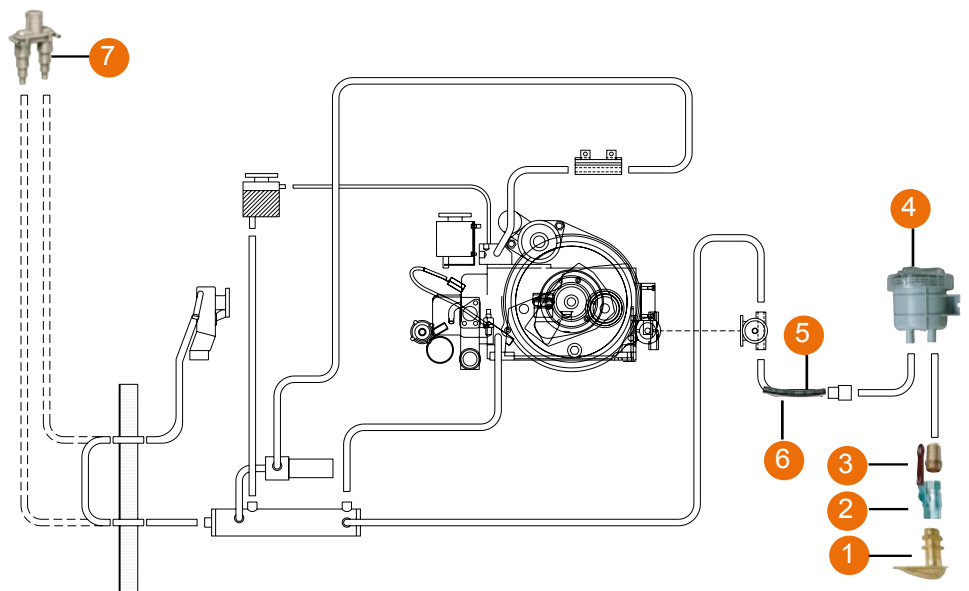
① Through-hull with filter

Threaded coupling connected to the cooling water hose in combination with a ball valve or a hose nozzle.
Materials: brass

Through-hull with filter

Through-hull with filter	
21.08.01.005H	Grated water intake, brass 1/2" external thread
21.08.01.006H	Grated water intake, brass 3/4" external thread
21.08.01.004H	Grated water intake, brass 1" external thread
21.08.01.025H	Grated water intake, brass 1 1/4" external thread
21.08.01.003H	Grated water intake, brass 1 1/2" external thread
21.08.01.024H	Grated water intake, brass 2" external thread
21.08.01.002H	Grated water intake, brass 2 1/2" external thread

② Sea valve / ball valve

brass, 2 x internal thread. Suitable for water and diesel.

Sea valve / ball valve

Sea valve / ball valve	
F6AS9002501	Ball valve, hot-pressed brass up to 40 bar 1/4
F6AS9002502	Ball valve, hot-pressed brass up to 40 bar 3/8
F6AS9002503	Ball valve, hot-pressed brass up to 40 bar 1/2
F6AS9002504	Ball valve, hot-pressed brass up to 40 bar 3/4
F6AS9002505	Ball valve, hot-pressed brass up to 40 bar 1
F6AS9002506	Ball valve, hot-pressed brass up to 40 bar 1 1/4
F6AS9002631	Ball valve, hot-pressed brass up to 40 bar 1 1/2
32.10.12.002H	Ball valve up to 40 bar 2" internal thread
32.10.12.003H	Ball valve up to 40 bar 2 1/2" internal thread

Hose connection

③ Hose connection

see "Optional accessories" page 50

Seawater filter

④ Seawater filter

Seawater filter with transparent cover allowing for inspection of the filter without unscrewing the cover. Fast filter cleaning. Rarely requires cleaning.

Materials:
Housing = polypropylene
Filter insert = polyamide
Cover = polycarbonate

Seawater filter	
21.08.03.002H	Coolant filter 12.7mm / 1/2" FTR140/13
21.08.03.003H	Coolant filter 19.1mm / 3/4" FTR140/19
21.08.03.004H	Coolant filter 15.9mm / 1/2" FTR140/16
21.08.03.007H	Seawater filter FTR330-13 (1/2")
21.08.03.008H	Seawater filter FTR330-19 (3/4")
21.08.03.009H	Seawater filter FTR330-25 (1")
21.08.03.010H	Seawater filter FTR330-32 (1-1/4")
21.08.03.011H	Seawater filter FTR330-38 (1-1/2")

Hose clamps

⑤ Hose clamps

see "Optional accessories" page 48

6 **Cooling water hose with inner wire spiral, transparent**

Made from transparent PVC with steel worm helix insert.
Suitable for water and waste water (suction and pressure)

Cooling water hose	
F9DWHOSE12	Water hose, clear, Vetus with worm helix DWHOSE dia. 12 mm
33.04.05.017H	Water hose clear with worm helix dia.16mm
F9DWHOSE20	Water hose, clear, Vetus with worm helix DWHOSE dia. 19 mm
F9DWHOSE25	Water hose, clear, Vetus with worm helix DWHOSE dia. 25 mm
33.04.05.015H	Water hose clear worm helix DWHOSE dia. 30mm
33.04.05.016H	Water hose clear with worm DWHOSE helix dia.38mm

Cooling water hose

7 **Ventilation valve (plastic)**

To avoid water ingress to the engine after it is switched off, if the genset cannot be

Ventilation valve	
F9AIRVENTV	Breather valve Airvent V (up to Panda 30)
21.08.03.001H	Breather with valve 38mm (up to Panda 30)
F9AIRVENTH	Breather valve Airvent H with valve and hose

Ventilation valve

Installation accessories individual components

Exhaust system for marine gensets

1. Water lock
2. Exhaust/water separator
3. Cooling water hose / exhaust hose
4. Hose clamps
5. Threaded coupling with hose connection
6. Sea valve / ball valve
7. Through-hull
8. Silencer
9. Rubber through-hull for exhaust outlet
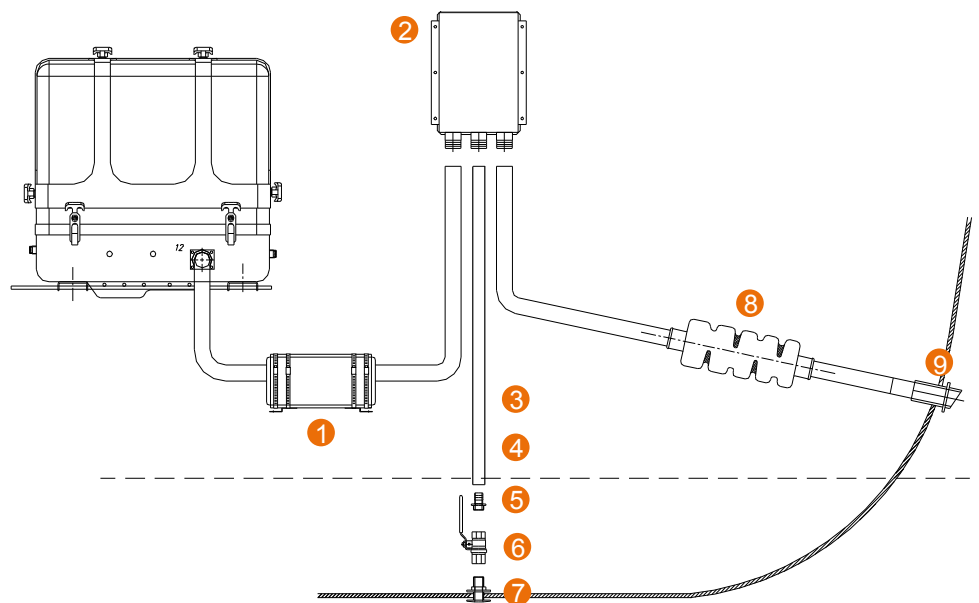
1   Water lock / silencer

Material: made from stainless steel and sheathed in rubber.
Installation: The water lock is fitted with attachment tabs and is thus very easy to install. It is installed at the lowest point of the exhaust system.
The water lock also provides particularly good noise reduction.

Water lock

Water lock / silencer	
21.08.02.012H	Water lock type Fischer Panda 160/40 connection dia.40mm
21.08.02.013H	Water lock type Fischer Panda 160/50 connection dia.50mm
21.08.02.014H	Water lock type Fischer Panda 160/60 connection dia.60mm

2   OPTIONAL: Active water lock

(Item is not included in installation kit, can be ordered as optional item.)

For difficult installation situations and/or if the genset is used with severe inclination, the use of the active water lock in combination with a follow-up control and a pump ensures the reliable emptying of the water lock, which minimises the risk of the engine being flooded.

Active water lock

Active water lock	
21.08.02.002H	Active water lock Fischer Panda 40-40-18

Backlash control for water collector	
31.42.02.018P	Backlash control for water collector

Electrical circulation pump	
40.07.02.009P	Electrical circulation pump type CM30P7-1 12V / 16mm connectors with DT 04-2P

Exhaust/water separator
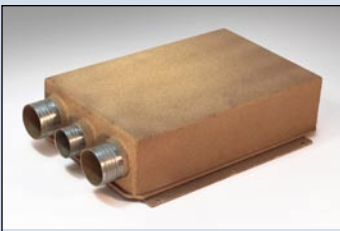
Exhaust/water separator
with noise reduction coating

2   **Exhaust/water separator**

Material: stainless steel
The exhaust/water separator by Fischer Panda allows for the physical separation of exhaust and seawater and acts as a goose neck at the same time. Exhaust and water are evacuated separately with almost no pressure. The exhaust noises emanating from the exterior of the yacht are strongly diminished. The "water splash" in particular is eliminated. The noise reduction coating can further reduce the exhaust noise.

Exhaust/water separator	
31.50.01.006H	Exhaust/water separator FP dia. 40-25-40mm
31.50.01.002H	Exhaust/water separator FP dia. 40-25-40mm, soundproof
31.50.01.005H	Exhaust/water separator FP dia. 40-30-40mm
31.50.01.009H	Exhaust/water separator FP dia. 40-30-40mm, soundproof
31.50.01.010H	Exhaust/water separator FP dia. 50-40-50mm
31.50.01.011H	Exhaust/water separator FP dia. 50-40-50mm, soundproof
31.50.01.012H	Exhaust/water separator FP dia. 60-50-60mm
31.50.01.013H	Exhaust/water separator FP dia. 60-50-60mm, soundproof

Exhaust hose

3   **Exhaust hose with wire helix inside**

Materials: woven rubber with wire inner helix
The exhaust hose is extremely lightweight and flexible. Bends with a radius of 2 x the hose diameter can be routed.

Exhaust hose with wire inner helix	
33.04.08.003H	Exhaust hose, black with wire helix inside dia. 20mm
33.04.08.004H	Exhaust hose, black with wire helix inside dia. 25mm
33.04.08.005H	Exhaust hose, black with wire helix inside Ø 30mm
33.04.08.006H	Exhaust hose, black with wire helix inside Ø 40mm
33.04.08.007H	Exhaust hose, black with wire helix inside Ø 51mm
33.04.08.008H	Exhaust hose, black with wire helix inside Ø 60mm

3   **OPTIONAL:** Low-noise type exhaust hose

(Item is not included in installation kit, can be ordered as optional item.)

Materials: woven rubber with wire inner helix
Low noise: noise reduction by up to 7 dBA

Low-noise type exhaust hose	
33.04.08.014H	Low noise type exhaust hose, Fischer Panda, black with wire helix inside dia. 40mm

"Super Silent" exhaust hose

4   Hose clamps

see "Optional accessories" page 48

Hose clamps

5   Hose connection

see "Optional accessories" page 50

Hose connection

6   Sea valve / ball valve

brass, 2 x internal thread

Sea valve / ball valve	
F6AS9002501	Ball valve, hot-pressed brass up to 40 bar 1/4
F6AS9002502	Ball valve, hot-pressed brass up to 40 bar 3/8
F6AS9002503	Ball valve, hot-pressed brass up to 40 bar 1/2
F6AS9002504	Ball valve, hot-pressed brass up to 40 bar 3/4
F6AS9002505	Ball valve, hot-pressed brass up to 40 bar 1
F6AS9002506	Ball valve, hot-pressed brass up to 40 bar 1 1/4
F6AS9002631	Ball valve, hot-pressed brass up to 40 bar 1 1/2
32.10.12.002H	Ball valve up to 40 bar 2" internal thread
32.10.12.003H	Ball valve up to 40 bar 2 1/2" internal thread

Sea valve / ball valve

Brass through-hull

7   Brass through-hull for exhaust outlet

Brass threaded coupling connected to the cooling water hose or exhaust hose in combination with a ball valve or a hose nozzle.

Brass through-hull	
21.08.01.005H	Grated water intake, brass 1/2" external thread
21.08.01.006H	Grated water intake, brass 3/4" external thread
21.08.01.004H	Grated water intake, brass 1" external thread
21.08.01.025H	Grated water intake, brass 1 1/4" external thread
21.08.01.003H	Grated water intake, brass 1 1/2" external thread
21.08.01.024H	Grated water intake, brass 2" external thread
21.08.01.002H	Grated water intake, brass 2 1/2" external thread
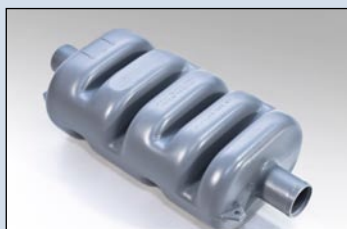
Marine silencer

8   **OPTIONAL:** Silencer

(Item is not included in installation kit, can be ordered as optional item.)

see "Optional accessories" page 47

Rubber through-hull

9   **OPTIONAL:** Rubber through-hull with external mirror for exhaust outlet

(Item is not included in installation kit, can be ordered as optional item.)

Simple and flexible installation. The element can also be adjusted to the curved ship's side wall. From the outside, the through-hull is covered with a stainless steel rosette. For the installation of the exhaust hose, a hose connection is required (for hose connector, see "Optional accessories" on page 54).

Through-hull external mirror	
21.08.01.014H	Exhaust through-hull fitting, rubber, dia. 40mm
21.08.01.018H	Exhaust through-hull fitting, rubber, dia. 40mm
21.08.01.015H	Exhaust through-hull fitting, rubber, dia. 50mm
21.08.01.016H	Exhaust through-hull fitting, rubber, dia. 60mm

Installation accessories individual components

Cooling and exhaust system for vehicle gensets

Gradual fan controller with temperature sensor and hose connector

① Stepless fan controller for all AC fans

for gradual speed control

Characteristics
- Main switch with bypass function and manual/automatic toggle
- Speed specification or setpoint specification on the equipment front face
- Operation indication integrated in setpoint potentiometer
- Speed (nmin/nmax) manually adjustable under the equipment cover

Gradual fan control with temperature sensor and hose connector	
21.02.04.013H	Electronic fan controller, 3-phase, 400V
21.02.04.014H	Electronic fan controller, single-phase, 230V/50Hz
21.02.04.002H	Electronic fan controller, single-phase, 230V/50Hz

Exhaust pipe elbow

② Exhaust pipe elbow 90°

Exhaust pipe elbow set with silicone end pieces for connecting the exhaust system to the genset. The pipe elbow is mounted directly to the exhaust port of the genset and makes it possible to route the exhaust gas in any direction. Simultaneously, vibrations are being compensated for.

Exhaust pipe elbow	
21.03.02.034S	Silicone hose and exhaust fittings 90° NW 40

Roof lead-through fitting

③ Cooling water/exhaust lead-through with one pipe

Cooling water roof lead-through, consisting in a V2A duct with 90° elbow. Square connection plate for sealing the roof. Also suitable for exhaust gas lead-throughs.

Cooling water roof lead-through	
31.20.04.054H	Coolant through-roof fitting NW 50 mm 1x V2A tube NW 50mm with 90° elbow VA connection plate for roof sealing
31.20.04.053H	Coolant through-roof fitting NW 40 mm 1x V2A tube NW 40mm with 90° elbow VA connection plate for roof sealing

④ Cooling water lead-through with 2 pipes

Cooling water roof lead-through, two ducts for feed and return line consisting of two V2A pipes with 90° elbow. Square connection plate for sealing the roof.

Cooling water roof lead-through	
31.20.04.050H	Coolant through-roof fitting NW 20 mm 2x V2A tube NW 20mm with 90° elbow VA connection plate for roof sealing
31.20.04.051H	Coolant through-roof fitting NW 25 mm 2x V2A tube NW 25mm with 90° elbow VA connection plate for roof sealing
31.20.04.052H	Coolant through-roof fitting NW 30 mm 2x V2A tube NW 30mm with 90° elbow VA connection plate for roof sealing
31.20.04.055H	Coolant through-roof fitting NW 50 mm 2x V2A tube NW 50mm with 90° elbow VA connection plate for roof sealing

Roof lead-through fitting

⑤ Exhaust hose

Corrugated exhaust tubes by HYDRA, made from stainless steel, fully leak-proof

HYDRA exhaust hose	
33.04.08.001H	Exhaust hose, stainless steel 1.4301 DN40
33.04.08.002H	Exhaust hose, type HYDRA FA330S stainless steel 1.4301 DN30
33.04.08.010H	Exhaust hose, type Hydra FA330S stainless steel 1.4301 dia.75mm
33.04.08.011H	Exhaust hose, Hydra FA330S DN50
33.04.08.013H	Exhaust hose, Hydra type FA330S stainless steel 1.4301 DN60

HYDRA exhaust hose

Cooling water hose

8 Cooling water hose

Rubber radiator hose, resistant to anti-freeze (e.g. glycols). Synthetic woven inlay. Temperature range: -40 °C to +100 °C continuous operation

Cooling water hose	
33.04.05.004H	Coolant water hose type DIN 73411 NW dia. 8mm
33.04.05.005H	Coolant water hose type DIN 73411 NW dia. 10mm
33.04.05.006H	Coolant water hose type DIN 73411 NW dia. 12mm
33.04.05.007H	Coolant water hose type DIN 73411 NW dia. 13mm
33.04.05.008H	Coolant water hose type DIN 73411 NW dia. 16mm
33.04.05.009H	Coolant water hose type DIN 73411 NW dia. 18mm
33.04.05.010H	Coolant water hose type DIN 73411 NW dia.19mm
33.04.05.011H	Coolant water hose type DIN 73411 NW dia. 20mm
33.04.05.012H	Coolant water hose type DIN 73411 NW dia. 25mm
33.04.05.013H	Coolant water hose type DIN 73411 NW dia. 30mm
33.04.05.014H	Coolant water hose type DIN 73411 NW dia. 40mm

Hose clamps

9 Hose clamps

Silicone hose

10 Silicone exhaust hose

The silicone hose is flexible, low-noise, temperature resistant to 280 °C, and heat-insulated. Vibration noise is being compensated for.

Silicone hose	
33.04.03.005H	Silicone web hose, inside diameter 40 mm, max temperature 280°C
33.04.03.012H	Silicone web hose, inside diameter 30 mm, max temperature 280°C
33.04.03.014H	Silicone web hose, inside diameter 50mm

Installation accessories individual components

Marine and vehicle fuel systems
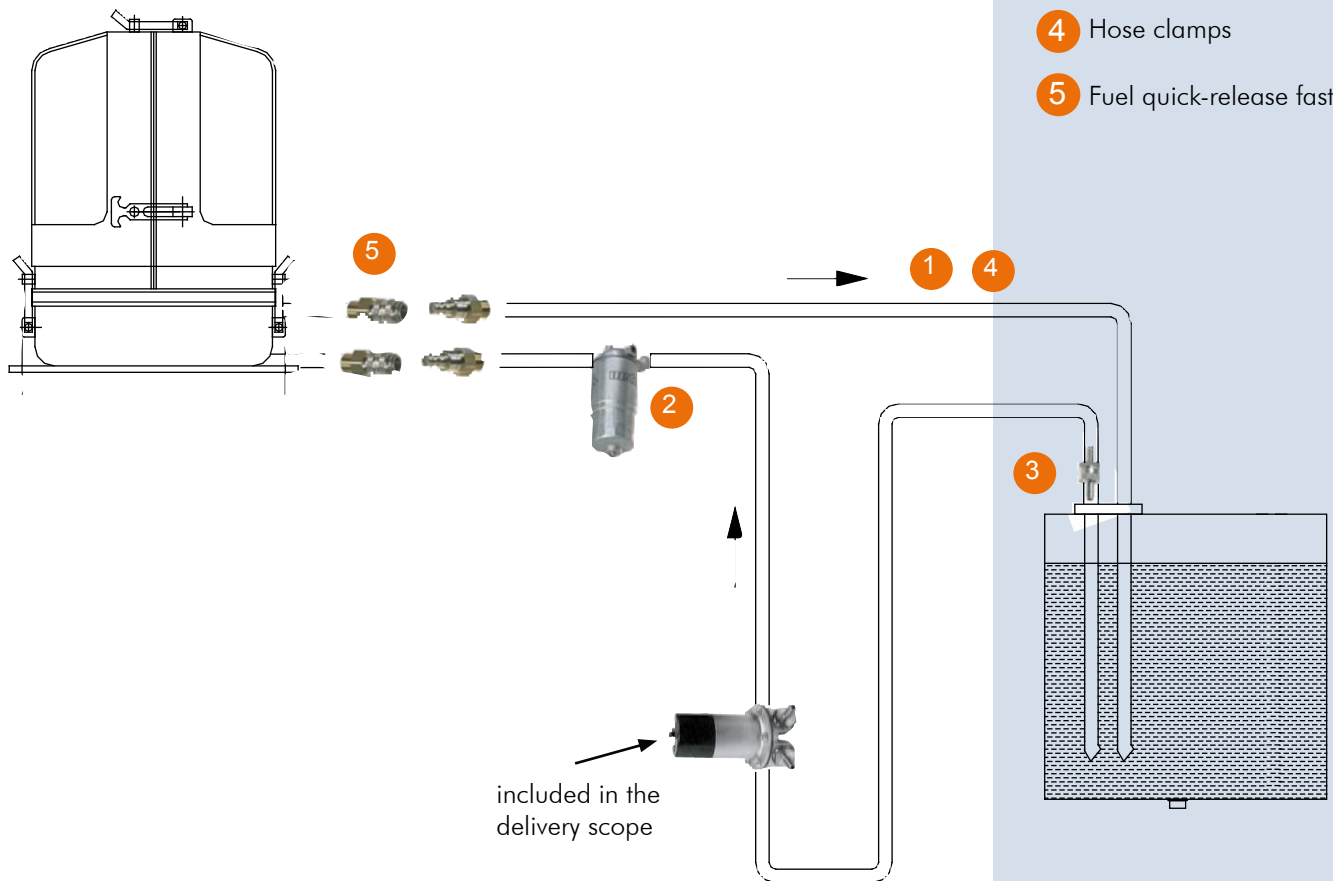
1 Fuel hose

2 Fuel filter with water separator

3 Non-return valve

4 Hose clamps

5 Fuel quick-release fasteners

included in the
delivery scope

Fuel hose

1 Fuel hose

Material: oil-resistant rubber compound. With synthetic woven inlay.
Temperature range: -30 °C to +100 °C continuous operation

Fuel hose	
33.04.07.003H	Fuel hose ISO 7840 A1 dia. 5mm

Fuel filter with
water separator

2 Fuel filter with water separator

Fuel filter with water separator	
36.01.02.020H	Vetus WS 180

Replacement element	
36.01.02.021H	Plastic bowl, clear, for fuel filter type RACOR 120A

Non-return valve

3 Non-return valve

If the fuel tank is to be installed above the level of the generator, then a non-return valve must be installed in the fuel return line to ensure that no fuel is fed into the injection pump via the return line.

Non-return valve	
21.09.02.007H	Non-return valve, aluminium, inner dia. 6mm
21.09.02.005H	Non-return valve, aluminium, for hose dia. 8mm
21.09.02.008H	Non-return valve, plastic, inner dia. 8mm

4 Hose clamps

see "Optional accessories" page 52

5 **OPTIONAL:** Fuel quick-release fasteners

Allows to disconnect hoses easily. Aside from the coupling and the nipple, hose adapters and copper rings are required for attachment to the fuel hoses.

Fuel quick-release fasteners	
32.21.20.003H	Self-sealing coupling, female type brass, with external thread 1/4"
32.21.20.004H	Self-sealing coupling, male type brass, with external thread 1/4"

Hose adapter	
31.20.03.016H	Hose adapter with internal thread 1/4" d 5.5 D 8mm

Copper ring	
32.02.02.021H	Sealing washer 13x18x1.5 DIN 7603 copper, massive

Hose clips

Nipple quick-release fastener

Coupling quick-release fastener

Attachment system

for marine and vehicle gensets

- Shock-mount, captive
- Shock-mount, non-captive
- Shock-mount, captive

Shock-mount, captive

The captive shock-mounts are suitable for marine and vehicle gensets. They absorb the vibrations of the generator, thereby minimising the noise, and the generator is secured against slipping or breaking off.
For item numbers for the corresponding gensets, please refer to the reference table.

Shock mount

Shock-mount, captive	
32.30.01.011H	Rubber mounts type FPB 110/50
32.30.01.012H	Rubber mounts type FPB 110/60
32.30.01.013H	Rubber mounts type FPB 150/40
32.30.01.015H	Rubber mounts type FPB 150/60
32.30.01.001H	Rubber mounts type BRB 180 M20 SH40
32.30.01.002H	Rubber mounts type FPB 60/40
32.30.01.014H	Rubber mounts type FPB 60/50
32.30.01.004H	Rubber mounts type FPB 60/60
32.30.01.005H	Rubber mounts type FPB 70/40
32.30.01.006H	Rubber mounts type FPB 70/60
32.30.01.007H	Rubber mounts type FPB 80/40
32.30.01.008H	Rubber mounts type FPB 80/50
32.30.01.009H	Rubber mounts type FPB 80/60

Shock-mount

Shock-mount, non-captive

The non-captive shock-mounts are suitable for marine gensets, only. For item numbers for the corresponding gensets, please refer to the reference table.

Shock-mounts, non-captive	
32.30.02.011H	Rubber mounts type "C" 30x40mm with double sided internal thread M8, SH 55° with screwed mounting plate and 1 locked stud bolt M8x22
32.30.02.017H	rubber mounts type „C" 40x40mm with double side internal thread M8, SH 55° with screwed mounting plate
32.30.02.020H	rubber mounts type „C" 50x50mm with double side internal thread M10, SH55° with srewed mounting plate and 1 locked stud bolt M10x20
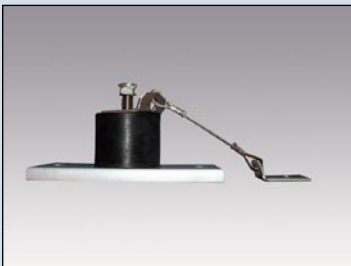
Shock-mount

Shock-mount, captive

Shock-mount, captive	
21.03.04.001P	rubber mounts Kit Ferretti consist of : - 2 x rubber mounts 50x40mm with safety rope and mounting plate - 2 x rubber mounts 50x40mm and mounting plate
21.03.04.002P	rubber mounts Kit Ferretti consist of : - 2 x rubber mounts 50x50mm with safety rope and mounting plate - 2 x rubber mounts 50x50mm and mounting plate
21.03.04.020S	rubber mounts Kit Ferretti consist of : - 2 x rubber mounts 75x40mm with safety rope and mounting plate - 2 x rubber mounts 75x40mm and mounting plate

Optional accessories

for marine and vehicle gensets

Silencer for marine generators	
F9DEMPMP040	Exhaust silencer, Vetus MP40
F9DEMPMP045	Exhaust silencer, Vetus MP45
F9DEMPMP050	Exhaust silencer, Vetus MP50
F9DEMPMP060	Exhaust silencer, Vetus MP60
F9DEMPMP075	Exhaust silencer, Vetus MP75
F9DEMPMP090	Exhaust silencer, Vetus MP90
F9DEMPMP100	Exhaust silencer, Vetus MP100

Marine silencer

OPTIONAL: Muffler for vehicle gensets	
31.06.02.022H	exhaust muffler Ø40mm, dry and oval with bracke

Vehicle muffler

Hose clamp

Hose clamps

Worm gear SX hose clamp

The SX clamp with a 9 mm wide strap as per DIN 3017 The clamp is supplied in its standard version with a 7 mm hexagon screw head, WAF 7. Standard diameters range from 8 mm to 110 mm. The clamping space ranges up to 20 mm.

Hose clamps	
32.03.01.002H	Hose clamp with worm helix DIN 3017 dia. 8-16mm, width 9mm
32.03.01.004H	Hose clamp with worm helix DIN 3017 dia. 12-22mm, width 9mm
32.03.01.005H	Hose clamp with worm helix DIN 3017 dia. 16-27mm, width 9mm
32.03.01.006H	Hose clamp with worm helix DIN 3017 dia. 20-32mm, width 9mm
32.03.01.007H	Hose clamp with worm helix DIN 3017 dia. 25-40mm, width 9mm
32.03.01.008H	Hose clamp with worm helix DIN 3017 dia. 32-50 mm, width 9mm
32.03.01.009H	Hose clamp with worm helix DIN 3017 dia. 40-60mm, width 9mm
32.03.01.010H	Hose clamp with worm helix DIN 3017 dia. 60-80mm, width 9mm
32.03.01.011H	Hose clamp with worm helix DIN 3017 dia. 90-110mm, width 9mm
32.03.01.020H	Hose clamp with worm helix DIN 3017 dia. 20-32mm, width 12mm
32.03.01.021H	Hose clamp with worm helix DIN 3017 dia. 25-40mm, width 12mm
32.03.01.022H	Hose clamp with worm helix DIN 3017 dia. 32-50 mm, width 12mm
32.03.01.023H	Hose clamp with worm helix DIN 3017 dia. 40-60mm, width 12mm
32.03.01.024H	Hose clamp with worm helix DIN 3017 dia. 50-70mm, width 12mm
32.03.01.025H	Hose clamp with worm helix DIN 3017 dia. 60-80mm, width 12mm

Hose clamps	
32.03.01.026H	Hose clamp with worm helix DIN 3017 dia. 80-100mm, width 12mm
32.03.01.027H	Hose clamp with worm helix DIN 3017 dia. 90-110mm, width 12mm
32.03.01.028H	Hose clamp with worm helix DIN 3017 dia. 110-130mm, width 12mm
32.03.01.029H	Hose clamp with worm helix DIN 3017 dia. 120-140mm, width 12mm

Hose clamp

Jointed bolt clamps as per DIN 3017

are characterised by their extremely high clamping forces. The jointed bolt clamp installs effortlessly with manual, pneumatic, or electric standard tools.
Materials: strap: stainless steel 1.4510 / clamp head parts: galvanised steel up to 20 mm

Hose clamps	
32.03.03.001H	Jointed bolt hose clamp W2 dia.27-15m
32.03.03.002H	Jointed bolt hose clamp W2 dia.34-15m
32.03.03.003H	Jointed bolt hose clamp W2 dia.39-18mm
32.03.03.004H	Jointed bolt hose clamp W2 dia.42-15mm
32.03.03.005H	Jointed bolt hose clamp W2 dia.45-20mm
32.03.03.006H	Jointed bolt hose clamp W2 dia.50-20mm
32.03.03.007H	Jointed bolt hose clamp W2 dia.53-20mm
32.03.03.008H	Jointed bolt hose clamp W2 dia.54-20mm
32.03.03.009H	Jointed bolt hose clamp W1 dia.58-20mm
32.03.03.010H	Jointed bolt hose clamp W2 dia.58-20mm
32.03.03.011H	Jointed bolt hose clamp W2 dia.62-20mm
32.03.03.012H	Jointed bolt hose clamp W2 dia.66-20mm
32.03.03.013H	Jointed bolt hose clamp W2 dia.70-20mm
32.03.03.014H	Jointed bolt hose clamp W1 dia.76-25mm
32.03.03.015H	Jointed bolt hose clamp W2 dia.82-25mm
32.03.03.016H	Jointed bolt hose clamp W2 dia.101-25mm

Hose clamp

Hose connection

Hose connection

Material: brass

Hose connection	
32.20.02.004H	Threaded feed pipe, brass, hexagonal 1/8" external thread x 6mm hose connector
32.20.02.005H	Threaded feed pipe, brass, hexagonal 1/8" external thread x 8mm hose connector
32.20.02.006H	Threaded feed pipe, brass, hexagonal 1/4" external thread x 6mm hose connector
32.20.02.007H	Threaded feed pipe, brass, hexagonal 1/4" external thread x 8mm hose connector
32.20.02.008H	Threaded feed pipe, brass, hexagonal 1/4" external thread x 10mm hose connector
32.20.02.009H	Threaded feed pipe, brass, hexagonal 1/4" external thread x 13mm hose connector
32.20.02.011H	Threaded feed pipe, brass, hexagonal 3/8" external thread x 8mm hose connector
32.20.02.012H	Threaded feed pipe, brass, hexagonal 3/8" external thread x 10mm hose connector
32.20.02.013H	Threaded feed pipe, brass, hexagonal 3/8" external thread x 13mm hose connector
32.20.02.014H	Threaded feed pipe, brass, hexagonal 3/8" external thread x 16mm hose connector
32.20.02.016H	Threaded feed pipe, brass, hexagonal 1/2" external thread x 8mm hose connector
32.20.02.017H	Threaded feed pipe, brass, hexagonal 1/2" external thread x 10mm hose connector
32.20.02.008H	Threaded feed pipe, brass, hexagonal 1/2" external thread x 13mm hose connector
32.20.02.019H	Threaded feed pipe, brass, hexagonal 1/2" external thread x 16mm hose connector
32.20.02.020H	Threaded feed pipe, brass, hexagonal 1/2" external thread x 19mm hose connector
32.20.02.002H	Threaded feed pipe, brass, hexagonal 3/4" external thread x 13mm hose connector

Hose connection	
32.20.02.021H	Threaded feed pipe, brass, hexagonal 3/4" external thread x 19mm hose connector
32.20.02.022H	Threaded feed pipe, brass, hexagonal 3/4" external thread x 25mm hose connector
32.20.02.003H	Threaded feed pipe, brass, hexagonal 1" external thread x 20mm hose connector
32.20.02.023H	Threaded feed pipe, brass, hexagonal 1" external thread x 25mm hose connector
32.20.02.024H	Threaded feed pipe, brass, hexagonal 1" external thread x 32mm hose connector
32.20.02.030H	Hose connector, brass, hexagon 1-1/4" x 30mm hose connection
32.20.02.001H	Threaded feed pipe, brass, hexagonal 1-1/4" external thread x 32mm hose connector
32.20.02.025H	Threaded feed pipe, brass, hexagonal 1-1/4" external thread x 40mm hose connector
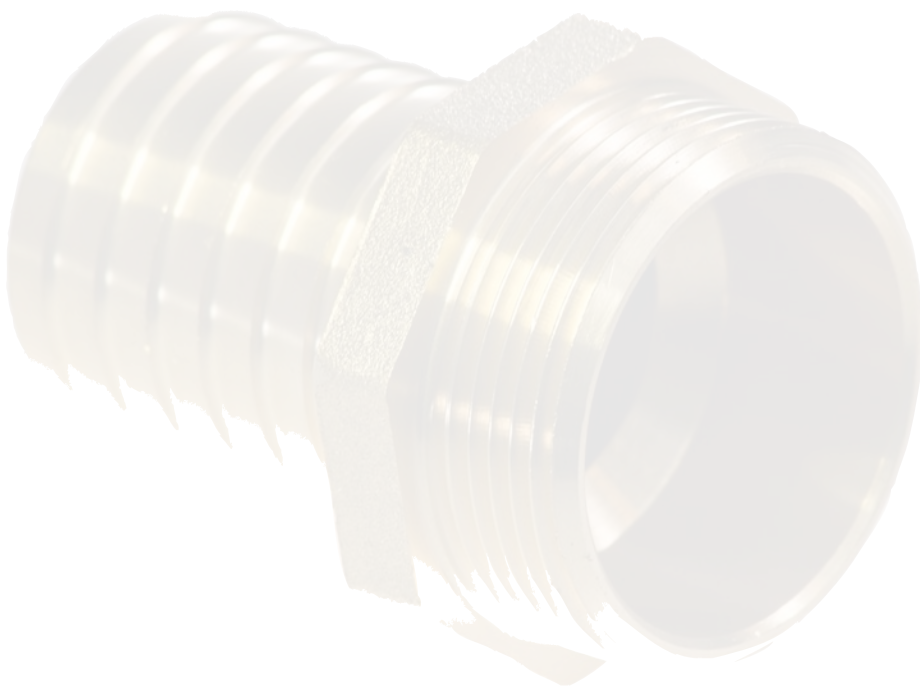
Hose connector, 90°

Hose connector 90°

Material: brass

Hose connection	
31.20.02.040H	Hose connection 90° stainless steel dia. 12/12mm
31.20.02.041H	Hose connection 90° stainless steel dia. 20/20mm
31.20.02.042H	Hose connection 90° stainless steel dia. 25/25mm
31.20.02.043H	Hose connection 90° stainless steel dia. 30/30mm
31.20.02.044H	Hose connection 90° stainless steel dia. 40/40mm
31.20.02.045H	Hose connection 90° stainless steel dia. 50/50mm
31.20.02.046H	Hose connection 90° stainless steel dia. 60/60mm
31.20.02.047H	Hose connection 90° stainless steel dia. 75/75mm

Hose connector, straight

Hose connector, straight

Material: brass

Hose connection	
31.20.02.030H	Hose connection straight stainless steel dia. 12mm
31.20.02.031H	Hose connection straight stainless steel dia. 14mm
31.20.02.032H	Hose connection straight stainless steel dia. 16mm
31.20.02.033H	Hose connection straight stainless steel dia. 20mm
31.20.02.034H	Hose connection straight stainless steel dia. 25mm
31.20.02.035H	Hose connection straight stainless steel dia. 30mm
31.20.02.036H	Hose connection straight stainless steel dia. 40mm length 60mm
31.20.02.037H	Hose connection straight stainless steel dia. 40mm length 80mm
31.20.02.038H	Hose connection straight stainless steel dia. 50mm
31.20.02.039H	Hose connection straight stainless steel dia. 60mm

Hose connector, straight, reduced

Material: brass

Hose connection	
31.20.01.002H	Hose connection straight/reduced stainless steel dia. 16mm/ 14mm
31.20.01.010H	Hose connection straight/reduced stainless steel dia. 08mm/ 06mm
31.20.01.011H	Hose connection straight/reduced stainless steel dia. 12mm/06 mm
31.20.01.012H	Hose connection straight/reduced stainless steel dia. 12mm/ 08mm
31.20.01.013H	Hose connection straight/reduced stainless steel dia. 16mm/ 12mm
31.20.01.014H	Hose connection straight/reduced stainless steel dia. 16mm/ 12mm
31.20.01.015H	Hose connection straight/reduced stainless steel dia. 20mm/ 16mm
31.20.01.016H	Hose connection straight/reduced stainless steel dia. 25mm/ 20mm
31.20.01.017H	Hose connection straight/reduced stainless steel dia. 30mm/ 25mm
31.20.01.018H	Hose connection straight/reduced stainless steel dia. 40mm/ 30mm
31.20.01.019H	Hose connection straight/reduced stainless steel dia. 50mm/ 40mm
31.20.01.020H	Hose connection straight/reduced stainless steel dia. 80mm/ 60mm

Hose connection,
straight, reduced

T-piece

T-pieces

Material: stainless steel

T-piece	
31.10.02.001H	Hose connection T-piece stainless steel dia. 40/08/40mm
31.10.02.003H	Hose connector T-piece dia. 25mm - M14x1.5 - 25mm brass
32.20.02.006H	Threaded feed pipe, brass, hexagonal 1/4" external thread x 6mm hose connector
32.20.02.012H	Threaded feed pipe, brass, hexagonal 3/8" external thread x 10mm hose connector
32.20.02.013H	Threaded feed pipe, brass, hexagonal 3/8" external thread x 13mm hose connector
32.20.02.014H	Threaded feed pipe, brass, hexagonal 3/8" external thread x 16mm hose connector
32.20.02.021H	Threaded feed pipe, brass, hexagonal 3/4" external thread x 19mm hose connector
31.20.02.022H	Hose connection T-piece stainless steel dia. 20/20mm/ 3/8"
31.20.02.023H	Hose connection T-piece stainless steel dia. 50/25/50mm
31.20.02.049H	Hose connection T-piece stainless steel dia. 08/08/08mm
31.20.02.050H	Hose connection T-piece stainless steel dia. 20/16/20mm
31.20.02.051H	Hose connection T-piece stainless steel dia. 20/20/20mm
31.20.02.052H	Hose connection T-piece stainless steel dia. 20/30/20mm
31.20.02.053H	Hose connection T-piece stainless steel dia. 25/25/25mm
31.20.02.054H	Hose connection T-piece stainless steel dia. 30/30/30mm
31.20.02.055H	Hose connection T-piece stainless steel dia. 40/16/40mm
31.20.02.057H	Stainless steel T-piece 12-12-12
31.20.02.058H	Stainless steel T-piece 16-16-16
31.20.02.059H	Hose connection T-piece stainless steel dia. 20/08/20mm
31.20.02.060H	Hose connection T-piece stainless steel dia. 20/16/20mm
31.20.02.061H	Hose connection T-piece stainless steel dia. 25/10/25mm

T-piece	
31.20.02.062H	Hose connection T-piece stainless steel dia. 25/16/25mm
31.20.02.063H	Hose connection T-piece stainless steel dia. 30/08/30mm
31.20.02.064H	Hose connection T-piece stainless steel dia. 30/16/30mm
31.20.02.065H	Hose connection T-piece stainless steel dia. 50/08/50mm
31.20.02.066H	Hose connection T-piece stainless steel dia. 25/25mm/ 3/8"
31.20.02.067H	Hose connection T-piece stainless steel dia. 30/30mm/ 3/8"
31.20.02.068H	Hose connection T-piece stainless steel dia. 40/40mm/ 3/8"
31.20.02.069H	Hose connection T-piece stainless steel dia. 30/30mm/ 1xM14x1.5
31.20.02.070H	Hose connection T-piece stainless steel dia. 20/20mm/ 1xM22x1.5
31.20.02.071H	Hose connection T-piece stainless steel 20/20mm/ 2xM22x1.5
31.20.02.072H	Hose connection T-piece stainless steel dia. 25/25mm/ 1xM22x1.5
31.21.08.001H	Stainless steel T-piece 16-10-16

T-piece

Hose fitting

Hose fitting

Materials: stainless steel

Hose fitting	
32.10.06.002H	Threaded fitting, straight, brass 1/4" internal thread x 1/4" internal thread
32.10.06.004H	Threaded fitting, straight, brass 1/2" internal thread x 1/2" internal thread
32.10.06.005H	Threaded fitting, straight, brass 3/4" internal thread x 3/4" internal thread
32.10.06.006H	Threaded fitting, straight, brass 1" internal thread x 1" internal thread
32.10.06.007H	Threaded fitting, straight, brass 1-1/4" internal thread x 1-1/4" internal thread
32.10.06.008H	Threaded fitting, straight, brass 1-1/2" internal thread x 1-1/2" internal thread
32.10.06.009H	Threaded fitting, straight, brass 2" internal thread x 2" internal thread
32.10.06.001H	Hose fitting 2 1/2"

Oilmaster electrical oil change pump

Makes oil changes clean and convenient

The electrical 12 VDC Oilmaster pump can be permanently installed or used as a portable unit. As standard, the cables are fitted with alligator clips and can be connected directly to the ship/vehicle battery. The pump works bi-directionally, i.e., it can suction off the used oil and then feed in fresh oil in the opposite direction.

All Panda gensets are equipped with a connection line on the oil pan for connecting the Oilmaster pump.

It is also possible to supply several engines simultaneously. For this purpose, the suction/pressure connection of the pump can be fitted with as many branches as desired by using a distribution station.

The electric pump of the Oilmaster is self-priming and allows for a delivery head of up to 0.5 mm. The Oilmaster is thus suitable for any engine system and is ideal for yachts and vehicles with gensets where the oil connection is difficult to access.

The Oilmaster facilitates a regular oil change and helps operate the engine with consistently clean and pure engine oil.

Electrical oil change pump
(Figures shows unit with bracket and connecting line)

Oilmaster 12 V oil change pump (without bracket and connecting line)	
34.03.01.025H	Mini-Puppy 12 VDC continuous current impeller pump
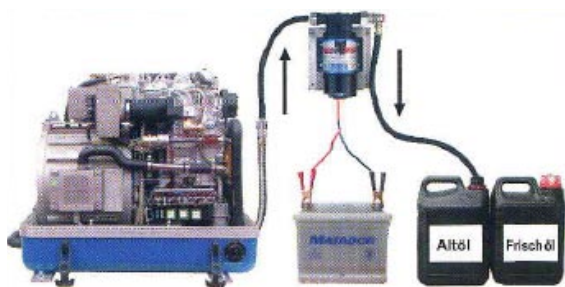
Suctioning off used oil   Refilling fresh oil
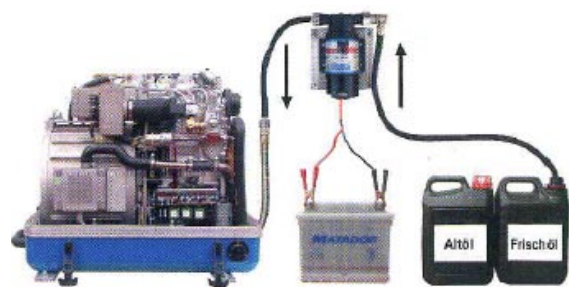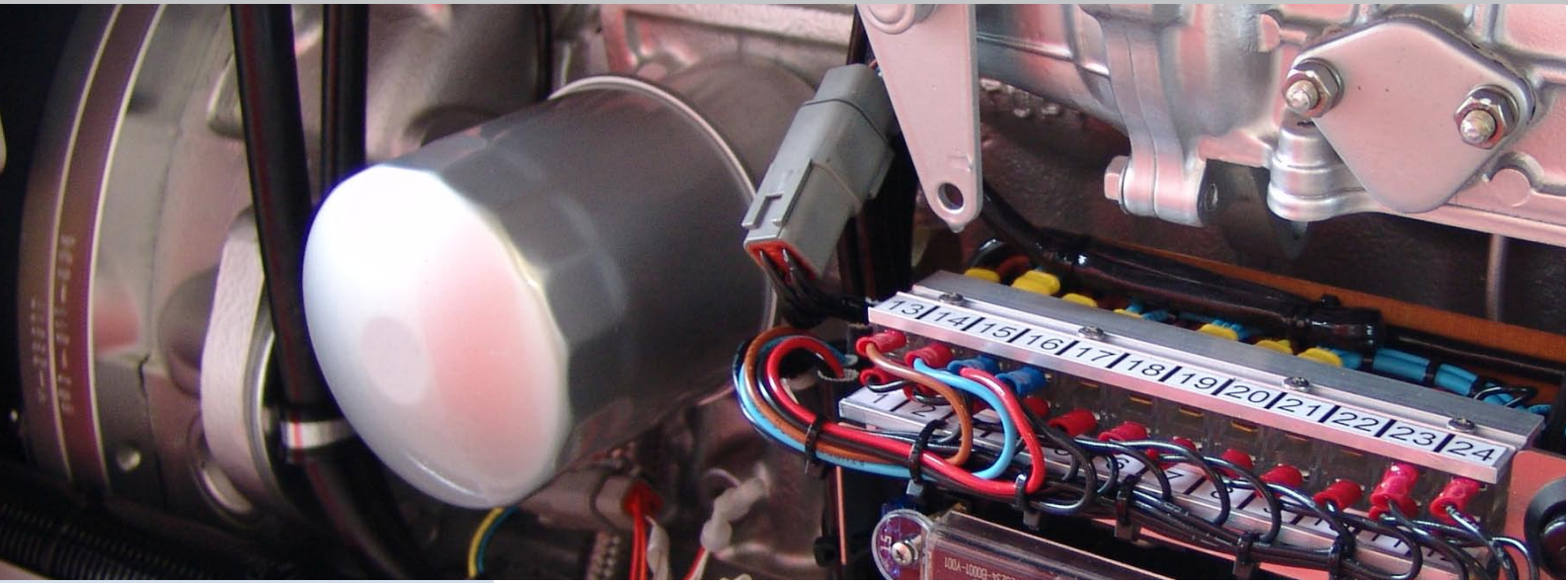
Standard service kits

■ Standard kits 1 to 10

Plus service kits

■ Plus kits 1 to 20

Service kits

Service kits - original parts only

The Fischer Panda service kits are designed for the routine service tasks.

The service tasks described in the genset manual can be performed by the operator unless highlighted differently in the manual. Additional maintenance work must be implemented by specially trained technical personnel or by authorised workshops (Fischer Panda Service Points), only. This applies in particular to valve adjustments, work on the diesel injection system, and to engine repairs.

The Fischer Panda service kits contain only original genset spare parts.

Standard service kits

Standard service kits 1 to 10

The Fischer Panda service kits contain original genset spare parts. The kits are designed for the routine service tasks.

Plus service kits

Plus service kits 1 to 20

The Fischer Panda service kits contain original genset spare parts for routine service tasks and all parts for the initial 600 h service intervals.

The Fischer Panda Plus service kits are supplied in a convenient water-proof plastic box.

Standard service kits

Standard service kits 1 to 10

The Fischer Panda service kits contain original genset spare parts. The kits are designed for the routine service tasks.

Service kit 1

Service Kit 1

Contents

1 x fuel filter
1 x filter element for air filter
1 x toothed belt (heat-proof)
1 x impeller kit (with gasket)

for Panda marine gensets

- 4000i PMS
- 5000i PMS
- 5000 LPE PMS,
- AGT 4000 PMS

Service Kit 1	
21.03.10.001P	Service Kit 1

Service kit 2

Service Kit 2

Contents

1 x fuel filter
1 x filter element for air filter
1 x toothed belt (heat-proof)
1 x impeller kit (with gasket)

for Panda marine gensets

- 4200 PMS
- 4,5 PMS
- 4500 FCB PMS
- 4500 SCB PMS
- 4500 SCE PMS

Service Kit 2	
21.03.10.002P	Service Kit 2

Service kit 3

Contents

> 1 x oil filter
> 1 x fuel filter
> 1 x filter element for air filter
> 1 x toothed belt (heat-proof)
> 1 x impeller kit (with gasket)

for Panda marine gensets

- 6000 PMS
- 8000 PMS
- 9000 PMS
- AGT 5000 PMS
- AGT 6000 PMS

Service Kit 3	
21.03.10.003P	Service Kit 3

Service Kit 3

Service kit 4

Contents

> 1 x oil filter
> 1 x fuel filter
> 1 x filter element for air filter
> 1 x toothed belt (heat-proof)
> 1 x impeller kit (with gasket)

for Panda marine gensets

- 12.000 PMS
- 14.000 PMS
- AGT 8.000 PMS

Service Kit 4	
21.03.10.004P	Service Kit 4

Service Kit 4

Service kit 5

Contents

> 1 x oil filter
> 1 x fuel filter
> 1 x filter element for air filter
> 1 x Tooth-belt (heat-proof)
> 1 x Impeller kit (with gasket)

for Panda marine gensets

- 18 PMS
- 24 PMS
- 30 PMS
- 7,5-4 PMS
- 9-4 PMS
- 12-4 PMS

Service Kit 5	
21.03.10.005P	Service Kit 5

Service Kit 5
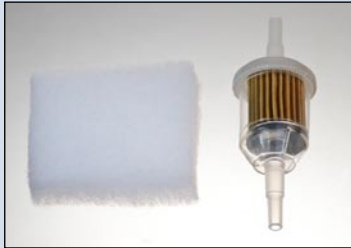
Service Kit 6

Service kit 6

Contents

1 x fuel filter
1 x filter element for air filter

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 4000i
- 5000i
- 5000 LPE
- AGT 4000

Service Kit 6	
21.03.10.006P	Service Kit 6

Service Kit 7

Service kit 7

Contents

1 x oil filter
1 x fuel filter
1 x filter element for fuel filter

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 4,5

Service Kit 7	
21.03.10.007P	Service Kit 7

Service Kit 8

Service kit 8

Contents

1 x oil filter
1 x fuel filter
1 x air filter
1 x V-belt (heat-proof)

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 6000i
- 6000
- 8000
- 8000i
- 9000
- 12.000
- 14.000
- 15.000
- 15.000i
- AGT 5000
- AGT 6000
- AGT 8000

Service Kit 8	
21.03.10.008P	Service Kit 8

Service kit 9

Contents

1 x oil filter
1 x fuel filter
1 x air filter
1 x V-belt (heat-proof)

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 18 NE
- 24 NE
- 30 NE (up to serial No. E04-011-073)
- 7.5-4
- 9-4
- 12-4 (up to serial No. E04-011-073)

Service Kit 9	
21.03.10.009P	Service Kit 9

Service Kit 9

Service kit 10

Contents

1 x oil filter
1 x fuel filter
1 x air filter
1 x V-belt (heat-proof)

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 30 (for serial No. E04-011-074 and up)
- 12-4 (for serial No. E04-011-074 and up)

Service Kit 10	
21.03.10.010P	Service Kit 10

Service Kit 10

Service kits for larger gensets are available upon request!

Service Kit 11

Contents

1 x fuel filter
1 x filter element for air filter
1 x impeller kit (with gasket)

for Panda marine gensets

- 4000s
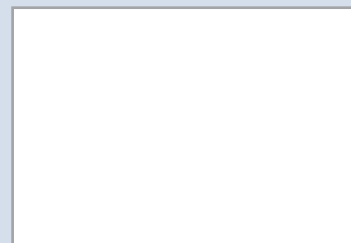
Service Kit 11	
21.03.10.043P	Service Kit 11
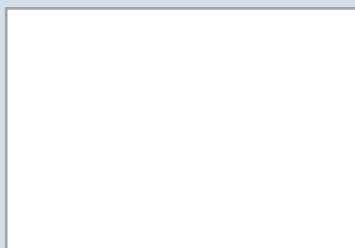
Service Kit 11

Service Kit 12

Service Kit 12

Contents

1 x fuel filter
1 x filter element for air filter
1 x impeller kit (with gasket)

for Panda marine gensets

- 4000 Eco

Service Kit 12	
21.03.10.047P	Service Kit 12
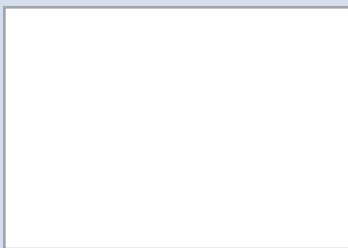
Service Kit 13

Service Kit 13

Contents

1 x oil filter
1 x fuel filter
1 x filter element for air filter
1 x toothed belt (heat-proof)
1 x impeller kit (with gasket)

for Panda marine gensets
- 8 „mini"

Service Kit 13	
21.03.10.049P	Service Kit 13
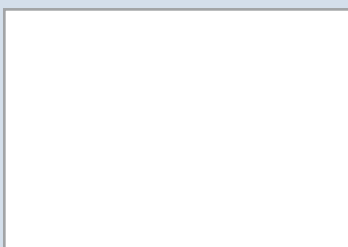
Service Kit 14

Service Kit 14

Contents

1 x oil filter
1 x fuel filter
1 x filter element for air filter
2 x toothed belt (heat-proof)
1 x impeller kit (with gasket)

for Panda marine gensets

- 10.000
- 10.000i

Service Kit 14	
21.03.10.055P	Service Kit 14

Service Kit 15

Contents

1 x oil filter
1 x fuel filter
1 x air filter
2 x toothed belt (heat-proof)

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

■ 10.000

Service Kit 15

Service Kit 15	
21.03.10.058P	Service Kit 15

Service Kit 16

Contents

1 x oil filter
1 x fuel filter
1 x air filter
1 x toothed belt (heat-proof)

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

■ 10.000i

Service Kit 15

Service Kit 16	
21.03.10.059P	Service Kit 16

Service Kit 17

Contents

1 x oil filter
1 x fuel filter
1 x filter element for air filter
1 x toothed belt (heat-proof)
1 x impeller kit (with gasket)

for Panda marine gensets

■ 12 „mini"

Service Kit 14

Service Kit 14	
21.03.10.052P	Service Kit 17
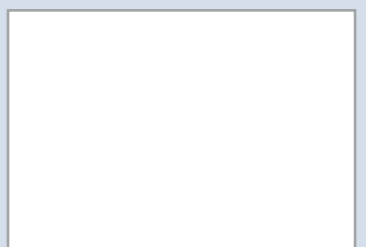
Plus service kits

Plus service kits 1 to 20

The Fischer Panda service kits contain original genset spare parts for routine service tasks and all parts for the initial 600 h service intervals.

The Fischer Panda Plus service kits are supplied in a convenient water-proof plastic box.

Plus service kit 1

Plus service kit 1

Contents

4 x fuel filter
4 x Filter element for air filter
4 x Tooth-belt (heat-proof)
2 x Impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x fuse straps
1 x fuel pre-filter element
1 x plastic bag, white

for Panda marine gensets

■ 4000i PMS
■ 5000i PMS

Plus service kit 1	
21.03.10.011P	Plus service kit 1

Plus service kit 2

Contents

4x fuel filter
4x filter element for air filter
4x toothed belt (heat-proof)
2x impeller kit (with gasket)
1x service kit
2x valve cover gasket
3x flat car relay 25A
3x car relay
1x fuel pre-filter element
1x plastic bag, white

for Panda marine gensets

- 4200 PMS
- 4,5 PMS
- 4500 SCB PMS
- 4500 FCB PMS

Plus service kit 2

Plus service kit 2	
21.03.10.012P	Plus service kit 2

Plus service kit 3

Contents

4x fuel filter
4x filter element for air filter
4x toothed belt (heat-proof)
2x impeller kit (with gasket)
1x service kit
2x valve cover gasket
3x flat car relay 14 A
3x flat car relay 25A
3x car relay
1x fuel pre-filter element
1x plastic bag, white

for Panda marine gensets

- 5000 LPE PMS
- AGT 4000 PMS

Plus service kit 3

Plus service kit 3	
21.03.10.013P	Plus service kit 3

Plus service kit 4

Plus service kit 4

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3x flat car relay 14 A
3x flat car relay 25A
3x car relay
1x fuel pre-filter element
1x plastic bag, white

for Panda marine gensets

up to serial No. C02-034-061

- 6000 PMS
- 8000 PMS
- AGT 5000 PMS
- AGT 6000 PMS

Plus service kit 4	
21.03.10.014P	Plus service kit 4

Plus service kit 5

Plus service kit 5

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3x flat car relay 14 A
3x flat car relay 25A
3x car relay
1x fuel pre-filter element
1x plastic bag, white

for Panda marine gensets

up to serial No. C02-034-062

- 6000i PMS
- 6000 PMS
- 8000i PMS
- 8000 PMS
- AGT 5000 PMS
- AGT 6000 PMS

Plus service kit 5	
21.03.10.015P	Plus service kit 5

Plus service kit 6

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3x flat car relay 14 A
3x flat car relay 25A
3x car relay
1x fuel pre-filter element
1x plastic bag, white

for Panda marine gensets

up to serial No. C04-025-094

- 9000 PMS
- 12000 PMS
- 14000 PMS
- AGT 8000 PMS

Plus service kit 6

Plus service kit 6	
21.03.10.016P	Plus service kit 6

Plus service kit 7

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3x flat car relay 14 A
3x flat car relay 25A
3x car relay
1x fuel pre-filter element
1x plastic bag, white

for Panda marine gensets

up to serial No. C04-025-095

- 9000 PMS
- 12000 PMS
- 14000 PMS
- AGT 8000 PMS

Plus service kit 7

Plus service kit 7	
21.03.10.017P	Plus service kit 7

Plus service kit 8

Plus service kit 8

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x impeller pump
2 x valve cover gasket
3 x flat car relay 14 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda marine gensets

- 18 PMS
- 7,5-4 PMS
- 9-4 PMS

Plus service kit 8	
21.03.10.018P	Plus service kit 8

Plus service kit 9

Plus service kit 9

Contents

4 x fuel filter
4 x Filter element for air filter
2 x valve cover gasket
3 x fuse straps
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 4000i
- 5000i

Plus service kit 9	
21.03.10.019P	Plus service kit 9
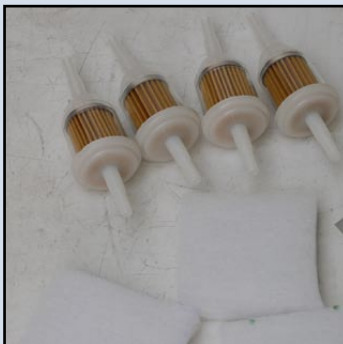
Plus service kit 10

Contents

5 x oil filter
4 x fuel filter
4 x Filter element for air filter
2 x valve cover gasket
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

■ 4,5
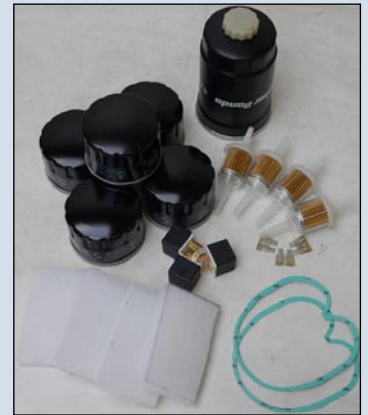
Plus service kit 10	
21.03.10.020P	Plus service kit 10

Plus service kit 10

Plus service kit 11

Contents

4 x fuel filter
4 x Filter element for air filter
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

■ 5000 LPE
■ AGT 4000

Plus service kit 11	
21.03.10.021P	Plus service kit 11

Plus service kit 11

Plus service kit 12

Plus service kit 12

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x air filter
4 x V-belt (heat-proof)
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

up to serial No. C02-034-061

■ 6000
■ 8000
■ AGT 5000
■ AGT 6000

Plus service kit 12	
21.03.10.022P	Plus service kit 12

Plus service kit 13

Plus service kit 13

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x air filter
4 x V-belt (heat-proof)
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

■ 6000i
■ 8000i

up to serial No. C02-034-062

■ 6000
■ 8000
■ AGT 5000
■ AGT 6000

Plus service kit 13	
21.03.10.023P	Plus service kit 13

Plus service kit 14

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x air filter
4 x V-belt (heat-proof)
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

up to serial No. C04-025-094

- 9000
- 12000
- 14000
- AGT 8000

Plus service kit 14

Plus service kit 14	
21.03.10.024P	Plus service kit 14

Plus service kit 15

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x air filter
4 x V-belt (heat-proof)
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

for serial No. C04-025-095 and up

- 9000
- 12000
- 14000
- AGT 8000

Plus service kit 15

Plus service kit 15	
21.03.10.025P	Plus service kit 15

Plus service kit 16

Plus service kit 16

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x air filter
4 x V-belt (heat-proof)
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 18
- 7,5-4
- 9-4

Plus service kit 16	
21.03.10.026P	Plus service kit 16

Plus service kit 17

Plus service kit 17

Contents

5 x oil filter
4 x fuel filter (in metal case)
4 x air filter
4 x V-belt (heat-proof)
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x fuel pre-filter element
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

- 24

up to serial No. E04-011-073

- 30
- 12-4

Plus service kit 17	
21.03.10.027P	Plus service kit 17:

Plus service kit 18

Contents

- 5 x oil filter
- 4 x fuel filter (in metal case)
- 4 x air filter
- 4 x V-belt (heat-proof)
- 2 x valve cover gasket
- 3 x flat car relay 15 A
- 3 x flat car relay 25 A
- 3 x car relay
- 1 x fuel pre-filter element
- 1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

for serial No. E04-011-074 and up

- 30
- 12-4

Plus service kit 18

Plus service kit 18	
21.03.10.028P	Plus service kit 18

Plus service kit 19

Contents

- 5 x oil filter
- 4 x fuel filter (in metal case)
- 4 x filter element for fuel filter
- 4 x V-belt (heat-proof)
- 2 x impeller kit (with gasket)
- 1 x impeller pump
- 2 x valve cover gasket
- 3 x flat car relay 15 A
- 3 x flat car relay 25 A
- 3 x car relay
- 1 x fuel pre-filter element
- 1 x plastic bag, white

for Panda marine gensets

- 24
- 30
- 12-4

Plus service kit 19

Plus service kit 19	
21.03.10.029P	Plus service kit 19:
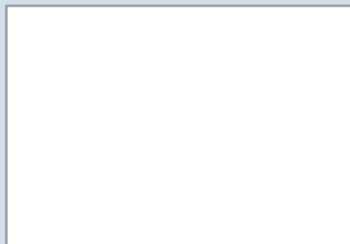
Plus service kit 20

Plus service kit 20

Contents

4 x fuel filter
4 x filter element for fuel filter
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x flat car relay 15 A
3 x car relay
1 x plastic bag, white

for Panda marine gensets

■ 4000s

Plus service kit 20	
21.03.10.046P	Plus Service Kit 20
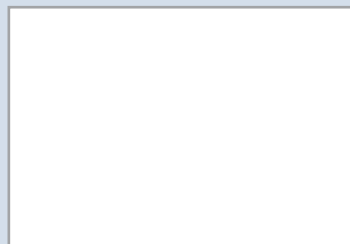
Plus service kit 21

Plus service kit 21

Contents

4 x fuel filter
4 x filter element for fuel filter
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x flat car relay 15 A
3 x car relay
1 x plastic bag, white

for Panda marine gensets

■ 4000 Eco

Plus service kit 21	
21.03.10.048P	Plus Service Kit 21

Plus service kit 22

Contents

5 x oil filter
4 x filter element for fuel filter
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x plastic bag, white

for Panda marine gensets

up to serial No. C02-034-061

■ 8 „mini"

Plus service kit 22

Plus service kit 22	
21.03.10.050P	Plus Service Kit 22

Plus service kit 23

Contents

5 x oil filter
4 x filter element for fuel filter
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x plastic bag, white

for Panda marine gensets

**for serial No. C02-034-062
and up**

■ 8 „mini"

Plus service kit 23

Plus service kit 23	
21.03.10.051P	Plus Service Kit 23

Plus Service Kit 24

Plus Service Kit 24

Contens

5 x oil filter
4 x fuel filter
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x plastic bag, white

for Panda marine gensets

■ 10.000

Plus service kit 24	
21.03.10.056P	Plus Service Kit 24

Plus Service Kit 25

Plus Service Kit 25

Contens

5 x oil filter
4 x fuel filter
4 x filter element for air filter
8 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x fuse strip
2 x plastic bag, white

for Panda marine gensets

■ 10.000i

Plus service kit 25	
21.03.10.057P	Plus Service Kit 25

Plus Service Kit 26

Contens

5 x oil filter
4 x fuel filter
4 x air filter
8 x V-belt (heat-proof)
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

■ 10.000

Plus Service Kit 26

Plus service kit 26	
21.03.10.060P	Plus Service Kit 26

Plus Service Kit 27

Contens

5 x oil filter
4 x fuel filter
4 x air filter
4 x V-belt (heat-proof)
2 x valve cover gasket
3 x fuse strip
2 x plastic bag, white

for Panda vehicle gensets
(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

■ 10.000i

Plus Service Kit 27

Plus service kit 27	
21.03.10.061P	Plus Service Kit 61

Plus Service Kit 28
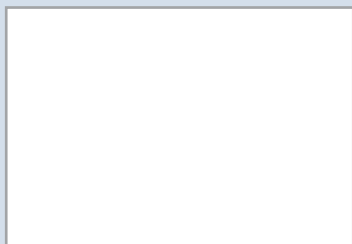
Plus Service Kit 28

Contens

5 x oil filter
4 x filter element for fuel filter
4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x plastic bag, white

for Panda marine gensets

up to serial No. C04-025-094

■ 12 „mini"

Plus service kit 28	
21.03.10.053P	Plus Service Kit 28
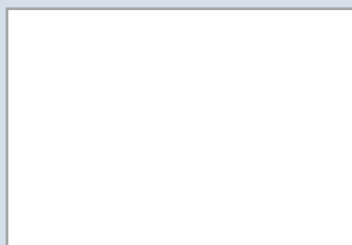
Plus Service Kit 29

Plus Service Kit 29

Contents

5 x oil filter
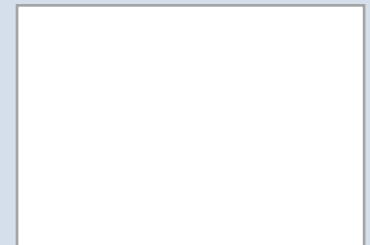4 x filter element for fuel filter
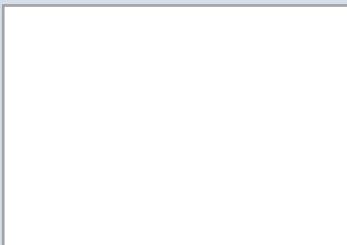4 x filter element for air filter
4 x V-belt (heat-proof)
2 x impeller kit (with gasket)
1 x service kit
2 x valve cover gasket
3 x flat car relay 15 A
3 x flat car relay 25 A
3 x car relay
1 x plastic bag, white

for Panda marine gensets

from serial No. C04-025-095 and up

■ 12 „mini"

Plus service kit 29	
21.03.10.053P	Plus Service Kit 29

Reference tables for service and installation kits

Panda marine AC gensets (PMS)

| Generator type	Service kit	Plus service kit	Installation kit without exhaust/water separator	Installation kit with exhaust/water separator	Shock-mount, captive	Shock-mount, non-captive
i series with variable R.P.M.						
Panda PMS 4000i / 5000i	21.03.10.001P	21.03.10.011P	21.03.04.080S	21.03.04.057S	32.30.01.002H	32.30.02.014H
Panda PMS 4800i	21.03.10.044P	21.03.10.045P	21.03.04.080S	21.03.04.057S	32.30.01.002H	32.30.02.014H
Panda PMS 6000i / 8000i	21.03.10.003P	21.03.10.015P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 10000i	21.03.10.055P	21.03.10.057P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 15000i	upon request	21.03.10.042P	21.03.04.080S	21.03.04.057S	32.30.01.008H	32.30.02.020H
Panda PMS 25i	21.03.10.005P	21.03.10.029P	21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 45i	upon request	upon request	upon request	upon request	upon request	upon request
with Mini-VCS voltage regulation						
Panda PMS 6500	21.03.10.049P	21.03.10.051P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 9 Mini	upon request	upon request	upon request	upon request	upon request	upon request
3000 / 3600 R.P.M.						
Panda PMS 3,8 ND	21.03.10.002P	21.03.10.012P	21.03.04.046S	21.03.04.056S	32.30.01.002H	32.30.02.014H
Panda PSM 4000s	21.03.10.043P	21.03.10.046P	21.03.04.080S	21.03.04.057S	32.30.01.002H	32.30.02.014H
Panda PMS 4000 Eco	21.03.10.047P	21.03.10.048P	21.03.04.080S	21.03.04.057S	32.30.01.002H	32.30.02.014H
Panda PMS 4200	21.03.10.002P	21.03.10.012P	21.03.04.046S	21.03.04.056S	32.30.01.002H	32.30.02.014H
Panda PMS 4,5	21.03.10.002P	21.03.10.012P	21.03.04.046S	21.03.04.056S	32.30.01.002H	32.30.02.014H
Panda PMS 4500 SC/FC	21.03.10.002P	21.03.10.012P	21.03.04.046S	21.03.04.056S	32.30.01.002H	32.30.02.014H
Panda PMS 5000 LPE	21.03.10.001P	21.03.10.013P	21.03.04.080S	21.03.04.057S	32.30.01.002H	32.30.02.020H
Panda PMS 6000 <= C02-034-061	21.03.10.003P	21.03.10.014P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 6000 >= C02-034-062	21.03.10.003P	21.03.10.015P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 8 mini <= C02-034-061	21.03.10.049P	21.03.10.050P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 8 mini >= C02-034-062	21.03.10.049P	21.03.10.051P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 8000 <= C02-034-061	21.03.10.003P	21.03.10.014P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 8000 >= C02-034-062	21.03.10.003P	21.03.10.015P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 9000 <= C04-025-094	21.03.10.003P	21.03.10.016P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 9000 >= C04-025-095	21.03.10.003P	21.03.10.017P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 10 mini	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS 10000	21.03.10.055P	21.03.10.056P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 12 mini <= C04-025-094	21.03.10.052P	21.03.10.053P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 12 mini >= C04-025-095	21.03.10.052P	21.03.10.054P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 12000 <= C04-025-094	21.03.10.004P	21.03.10.016P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 12000 >= C04-025-095	21.03.10.004P	21.03.10.017P	21.03.04.080S	21.03.04.057S	32.30.01.004H	32.30.02.020H
Panda PMS 13 mini	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS 14000 <= C05-014-005	21.03.10.004P	21.03.10.016P	21.03.04.080S	21.03.04.057S	32.30.01.008H	32.30.02.020H

Generator type	Service kit	Plus service kit	Installation kit without exhaust/water separator	Installation kit with exhaust/water separator	Shock-mount, captive	Shock-mount, non-captive
Panda PMS 14000 >= C05-014-006	21.03.10.004P	21.03.10.017P	21.03.04.080S	21.03.04.057S	32.30.01.008H	32.30.02.020H
Panda PMS 15000	upon request	upon request	21.03.04.080S	21.03.04.057S	32.30.01.008H	32.30.02.020H
Panda PMS 16 / PMS 16 digital	upon request	upon request	21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 18	21.03.10.005P	21.03.10.018P	21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 22 / PMS 22 digital			21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 24	21.03.10.005P	21.03.10.029P	21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 30	21.03.10.005P	21.03.10.029P	21.03.04.016S	21.03.04.017S	32.30.01.009H	32.30.02.020H
Panda PMS 30 IC	21.03.10.005P	21.03.10.029P	21.03.04.016S	21.03.04.017S	32.30.01.009H	32.30.02.020H
Panda PMS 32	-	-	21.03.04.016S	21.03.04.017S	upon request	-
Panda PMS 45	-	-	-	-	upon request	-
Panda PMS 50	-	-	21.03.04.018S	21.03.04.019S	upon request	-
Panda PMS 65	-	-	-	21.03.04.028S	upon request	-
Panda PMS 75	-	-	-	-	upon request	-
1500 / 1800 R.P.M.						
Panda PMS 7,5-4	21.03.10.005P	21.03.10.018P	21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 9-4	21.03.10.005P	21.03.10.018P	21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 12-4	21.03.10.005P	21.03.10.029P	21.03.04.055S	21.03.04.057S	32.30.01.009H	32.30.02.020H
Panda PMS 17-4	-	-	-	-	upon request	-
Panda PMS 22-4	-	-	-	-	upon request	-
Panda PMS 30-4	-	-	-	-	upon request	-
Panda PMS 40-4	-	-	-	-	upon request	-
Panda PMS 50-4	-	-	-	-	upon request	-
Panda PMS 60-4	-	-	21.03.04.029S	21.03.04.021S	upon request	-
Panda PMS 70-4	-	-	-	-	upon request	-
Panda PMS 85-4	-	-	-	-	upon request	-
Panda PMS 110-4	-	-	-	-	upon request	-
Panda PMS 130-4	-	-	-	-	upon request	-
Panda PMS 200-4	-	-	-	-	upon request	-

Panda marine DC gensets AGT (PMS)

Generator type	Service kit	Plus service kit	Installation kit without exhaust/water separator	Installation kit with exhaust/water separator	Shock-mount, captive	Shock-mount, non-captive
Panda PMS AGT 4000-12V	21.03.10.001P	21.03.10.013P	21.03.04.080S	F2IKV02.P06	32.30.01.002H	32.30.02.014H
Panda PMS AGT 4000-24V	21.03.10.001P	21.03.10.013P	21.03.04.080S	F2IKV02.P06	32.30.01.002H	32.30.02.014H
Panda PMS AGT 5000-12V <= C02-034-061	21.03.10.003P	21.03.10.014P	21.03.04.080S	F2IKV02.P06	32.30.01.004H	32.30.02.020H
Panda PMS AGT 5000-12V >= C02-034-062	21.03.10.003P	21.03.10.015P	21.03.04.080S	F2IKV02.P06	32.30.01.004H	32.30.02.020H
Panda PMS AGT 6000-24V <= C02-034-061	21.03.10.003P	21.03.10.014P	21.03.04.080S	F2IKV02.P06	32.30.01.004H	32.30.02.020H
Panda PMS AGT 6000-24V >= C02-034-062	21.03.10.003P	21.03.10.015P	21.03.04.080S	F2IKV02.P06	32.30.01.004H	32.30.02.020H
Panda PMS AGT 8000-24V <= C04-025-094	21.03.10.004P	21.03.10.016P	21.03.04.080S	F2IKV02.P06	32.30.01.004H	32.30.02.020H
Panda PMS AGT 8000-24V >= C04-025-095	21.03.10.004P	21.03.10.017P	21.03.04.080S	F2IKV02.P06	32.30.01.004H	32.30.02.020H
Panda PMS AGT 10000-48V	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 11000-48V	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 13000	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 15000	upon request	upon request	21.03.04.055S	upon request	upon request	upon request
Panda PMS AGT 18000	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 22000	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 25000	upon request	upon request	21.03.04.016S	21.03.04.017S	upon request	upon request
Panda PMS AGT 30000	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 36000	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 38000	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 44000	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS AGT 48000	upon request	upon request	upon request	upon request	upon request	upon request

Panda vehicle AC gensets (PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

Generator type	Service kit	Plus service kit	Installation kit without exhaust/water separator	Installation kit with exhaust/water separator	Shock-mount, captive	Shock-mount, non-captive
i series with variable R.P.M.						
Panda 4000i	21.03.10.006P	21.03.10.019P	-	-	32.30.01.004H	-
Panda 5000i	21.03.10.006P	21.03.10.019P	-	-	32.30.01.004H	-
Panda 6000i	21.03.10.008P	21.03.10.023P	-	-	32.30.01.007H	-
Panda 8000i	21.03.10.008P	21.03.10.023P	-	-	32.30.01.007H	-
Panda 10000i	21.03.10.059P	21.03.10.061P				
Panda 15000i	21.03.10.008P	-	-	-	32.30.01.008H	-
3000 / 3600 R.P.M.						
Panda 4,5	21.03.10.007P	21.03.10.020P	-	-	32.30.01.004H	-
Panda 5000 LPE	21.03.10.006P	21.03.10.021P	-	-	32.30.01.004H	-
Panda 6000 SNo<= C02-034-061	21.03.10.008P	21.03.10.022P	-	-	32.30.01.007H	-
Panda 6000 SNo>= C02-034-062	21.03.10.008P	21.03.10.023P	-	-	32.30.01.007H	-
Panda 6500						
Panda 8000 SNo<= C02-034-061	21.03.10.008P	21.03.10.022P	-	-	32.30.01.007H	-
Panda 8000 SNo>= C02-034-062	21.03.10.008P	21.03.10.023P	-	-	32.30.01.007H	-
Panda 8 „mini"						
Panda 9000 SNo<= C04-025-094	21.03.10.008P	21.03.10.024P	-	-	32.30.01.007H	-
Panda 9000 SNo>= C04-025-095	21.03.10.008P	21.03.10.025P	-	-	32.30.01.007H	-
Panda 10000	21.03.10.058P	21.03.10.60P				
Panda 10 „mini"	upon request	upon request	-	-	upon request	-
Panda 12000 SNo<= C04-025-094	21.03.10.008P	21.03.10.024P	-	-	32.30.01.007H	-
Panda 12000 NE SNo>= C04-025-095	21.03.10.008P	21.03.10.025P	-	-	32.30.01.007H	-
Panda 12 „mini"						
Panda 14000 NE SNo<= C05-014-005	21.03.10.008P	21.03.10.024P	-	-	32.30.01.008H	-
Panda 14000 NE SNo>= C05-014-006	21.03.10.008P	21.03.10.025P	-	-	32.30.01.008H	-
Panda 15000	21.03.10.008P	-	-	-	32.30.01.008H	-
Panda 16						
Panda 18	21.03.10.009P	21.03.10.026P	-	-	32.30.01.009H	-
Panda 22						
Panda 24	21.03.10.009P	21.03.10.027P	-	-	32.30.01.009H	-
Panda 30 SNo<=E04-011-073	21.03.10.009P	21.03.10.027P	-	-	32.30.01.009H	-
Panda 30 SNo>=E04-011-074	21.03.10.010P	21.03.10.028P	-	-	32.30.01.009H	-
Panda 35	-	-	-	-	32.30.01.009H	-
Panda 40	-	-	-	-		-
Panda 47	-	-	-	-	32.30.01.010H	-
Panda 60	-	-	-	-		-

Generator type	Service kit	Plus service kit	Installation kit without exhaust/water separator	Installation kit with exhaust/water separator	Shock-mount, captive	Shock-mount, non-captive
Panda 65	-	-	-	-	32.30.01.012H	-
Panda 75	-	-	-	-	32.30.01.012H	-
Panda 100	-	-	-	-	32.30.01.012H	-
1500 / 1800 R.P.M						
Panda 7,5-4	21.03.10.009P	21.03.10.026P	-	-	32.30.01.009H	-
Panda 9-4	21.03.10.009P	21.03.10.026P	-	-	32.30.01.009H	-
Panda 12-4 SNo<=E04-011-073	21.03.10.009P	21.03.10.027P	-	-	32.30.01.009H	-
Panda 12-4 SNo>=E04-011-074	21.03.10.010P	21.03.10.028P	-	-	32.30.01.009H	-
Panda 17-4	-	-	-	-	32.30.01.009H	-
Panda 22-4	-	-	-	-	32.30.01.010H	-
Panda 30-4	-	-	-	-	32.30.01.010H	-
Panda 40-4	-	-	-	-	32.30.01.010H	-
Panda 50-4	-	-	-	-		-
Panda 60-4	-	-	-	-	32.30.01.012H	-
Panda 70-4	-	-	-	-	upon request	-
Panda 85-4	-	-	-	-	upon request	-
Panda 110-4	-	-	-	-	upon request	-
Panda 130-4	-	-	-	-	upon request	-
Panda 200-4	-	-	-	-	upon request	-

Panda vehicle DC gensets (PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

Generator type	Service kit	Plus service kit	Installation kit without exhaust/water separator	Installation kit with exhaust/water separator	Shock-mount, captive	Shock-mount, non-captive
Panda AGT 4000-12V	21.03.10.006P	21.03.10.021P	-	-	32.30.01.004H	-
Panda AGT 4000-24V	21.03.10.006P	21.03.10.021P	-	-	32.30.01.004H	-
Panda 5000-12V <= C02-034-061	21.03.10.008P	21.03.10.022P	-	-	32.30.01.007H	-
Panda 5000-12V >= C02-034-062	21.03.10.008P	21.03.10.023P	-	-	32.30.01.007H	-
Panda 6000-24V <= C02-034-061	21.03.10.008P	21.03.10.022P	-	-	32.30.01.007H	-
Panda 6000-24V >= C02-034-062	21.03.10.008P	21.03.10.023P	-	-	32.30.01.007H	-
Panda 8000-24V <= C04-025-094	21.03.10.008P	21.03.10.024P	-	-	32.30.01.007H	-
Panda 8000-24V >= C04-025-095	21.03.10.008P	21.03.10.025P	-	-	32.30.01.007H	-
Panda AGT 12000	upon request	upon request	-	-	upon request	-
Panda AGT 14000	upon request	upon request	-	-	upon request	-
Panda AGT 16000	upon request	upon request	-	-	upon request	-
Panda AGT 25000	upon request	upon request	-	-	upon request	-
Panda AGT 28000	upon request	upon request	-	-	upon request	-

Hose diameter

Cooling water hose, exhaust hose, fuel hose

Panda marine AC gensets (PMS)

Generator type	Cooling water hose dia.		Exhaust hose dia. [mm]	Fuel hose dia.	
	Fresh water [mm]	Sea water [mm]		Feed [mm]	Return (bleed oil) [mm]
i-series with variable R.P.M.					
Panda PMS 4000i / 5000i	request	request	request	request	request
Panda PMS 4800i	12	20	40	8	8
Panda PMS 6000i / 8000i	20	20	40	8	8
Panda PMS 10000i	20	20	40	8	8
Panda PMS 25i	25	25	50	8	8
Panda PMS 45i	30	30	60	8	8
with mini VCS voltage regulation					
Panda PMS 6500	20	20	40	8	8
Panda PMS 9 Mini	20	20	40	8	8
3000 / 3600 R.P.M.					
Panda 3,8 ND	12	12	30	8	8
Panda PMS 4000s FC	12	20	40	8	8
Panda PMS 4200 FC	12	20	40	1/4" NPT	1/4" NPT
Panda PMS 4,5 ND SC/FC	12	12	30	8	8
Panda PMS 4500 SCB	12	12	30	8	8
Panda PMS 5000 SCE	12	12	30	8	8
Panda PMS 4500 FCB	12	12	30	8	8
Panda PMS 5000 LPE	16	16	30	8	8
Panda PMS 6000	20	20	40	8	8
Panda PMS 8000	20	20	40	8	8
Panda PMS 9000	20	20	40	8	8
Panda PMS 10000	20	20	40	8	8
Panda PMS 12 mini	20	20	40	8	8
Panda PMS 12000	20	20	40	8	8
Panda PMS 13 mini	20	20	40	8	8
Panda PMS 14000	20	20	40	8	8
Panda PMS 15000	20	20	40	8	8
Panda PMS 16	25	25	50	8	8
Panda PMS 18	25	20	50	8	8
Panda PMS 22	25	20	50	8	8
Panda PMS 24	25	20	50	8	8
Panda PMS 30	25	20	50	8	8
Panda PMS 30 IC	25	20	50	8	8
Panda PMS 33 KU	30	25	50	8	8
Panda PMS 42 KU	30	30	50	8	8
Panda PMS 32 YA	30	30	50	8	8
Panda PMS 50 YA	30	30	60	8	8

Generator type	Cooling water hose dia.		Exhaust hose dia. [mm]	Fuel hose dia.	
	Fresh water [mm]	Sea water [mm]		Feed [mm]	Return (bleed oil) [mm]
Panda PMS 60 YA	request	request	60	8	8
Panda PMS 50 MB	40	30	60	8	8
Panda PMS 60	40	40	60	8	8
Panda PMS 65	request	request	request	request	request
Panda PMS 75	40	30	60	8	8
Drehzahl 1500 / 1800 UpM					
Panda PMS-HD 7,5-4	25	20	40	8	8
Panda PMS-HD 09-4	25	20	50	8	8
Panda PMS-HD 12-4	25	20	50	8	8
Panda PMS-HD 17-4	25	25	60	8	8
Panda PMS-HD 22-4	30	30	60	8	8
Panda PMS-HD 30-4	30	30	60	8	8
Panda PMS-HD 40-4	30	30	60	8	8
Panda PMS-HD 60-4 DZ	request	request	request	request	request
Panda PMS-HD 70-4 DZ	request	request	request	request	request
Panda PMS-HD 85-4 DZ	request	request	request	request	request
Panda PMS-HD 110-4 DZ	request	request	request	request	request
Panda PMS-HD 130-4 DZ	request	request	request	request	request

Panda marine DC gensets (AGT)

Generator type	Cooling water hose dia.		Exhaust hose dia. [mm]	Fuel hose dia.	
	Fresh water [mm]	Sea water [mm]		Feed [mm]	Return (bleed oil) [mm]
Panda PMS AGT 4000-12V	request	request	request	request	request
Panda PMS AGT 4000-24V	request	request	request	request	request
Panda PMS AGT 5000-12V	request	request	request	request	request
Panda PMS AGT 6000-24V	request	request	request	request	request
Panda PMS AGT 8000-24V	request	request	request	request	request
Panda PMS AGT 10000-48V	request	request	request	request	request
Panda PMS AGT 11000-48V	request	request	request	request	request
Panda PMS AGT 13000	request	request	request	request	request
Panda PMS AGT 15000	request	request	request	request	request
Panda PMS AGT 18000	request	request	request	request	request
Panda PMS AGT 22000	request	request	request	request	request
Panda PMS AGT 25000	request	request	request	request	request
Panda PMS AGT 30000	request	request	request	request	request
Panda PMS AGT 36000	request	request	request	request	request
Panda PMS AGT 38000	request	request	request	request	request
Panda PMS AGT 44000	request	request	request	request	request

Notes: Certain gensets listed in the table are no longer being manufactured.

Panda vehicle AC gensets (PVMV-N, PVM-NE, PVM-H PVK-U, PVK-UK)

Generator type	Cooling water	Exhaust	Fuel	
			Feed	Return
i-series gensets with variable R.P.M.				
Panda 4000i/5000i	25	40	8	8
Panda 6000i/8000i/ 10000i	25	40	8	8
Panda 15000i	25	40	8	8
Panda 25i	request	request	request	request
Panda 45i	request	request	request	request
3000 / 3600 R.P.M.				
Panda 4,5 ND	20	40	8	8
Panda 5000 LPE	20	40	8	8
Panda 6000	25	40	8	8
Panda 8000	25	40	8	8
Panda 8 „mini"	25	40	8	8
Panda 9000	25	40	8	8
Panda 10000	25	40	8	8
Panda 10 „mini"	25	40	8	8
Panda 12000	25	40	8	8
Panda 12 „mini"	25	40	8	8
Panda 14000	25	40	8	8
Panda 15000	25	40	8	8
Panda 16	25	40	8	8
Panda 18	25	40	8	8
Panda 22	25	40	8	8
Panda 24	25	40	8	8
Panda 30	25	40	8	8
Panda 35	30	50	8	8
Panda 40	request	request	request	request
Panda 47	30	60	8	8
Panda 60	request	request	request	request
Panda 65	request	request	request	request
Panda 75	request	request	request	request
Panda 100	request	request	request	request
1500 / 1800 R.P.M.				
Panda 7,5-4	request	request	request	request
Panda 9-4	request	request	request	request
Panda 12-4	request	request	request	request
Panda 17-4	request	request	request	request
Panda 22-4	request	request	request	request
Panda 30-4	request	request	request	request
Panda 40-4	request	request	request	request
Panda 50-4	request	request	request	request
Panda 60-4	request	request	request	request
Panda 70-4	request	request	request	request
Panda 85-4	request	request	request	request
Panda 110-4	request	request	request	request
Panda 130-4	request	request	request	request
Panda 200-4	request	request	request	request

Notes: Certain gensets listed in the table are no longer being manufactured.

Panda vehicle DC gensets AGT (PVMV-N, PVM-NE, PVM-H PVK-U, PVK-UK)

Generator type	Cooling water	Exhaust	Fuel	
			Feed	Return
Panda AGT 4000-12V	request	request	request	request
Panda AGT 4000-24V	request	request	request	request
Panda 5000-12V	request	request	request	request
Panda 6000-24V	request	request	request	request
Panda 8000-24V	request	request	request	request
Panda AGT 12000	request	request	request	request
Panda AGT 14000	request	request	request	request
Panda AGT 16000	request	request	request	request
Panda AGT 25000	request	request	request	request
Panda AGT 28000	request	request	request	request

Fischer Panda®

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weight, material specifications, etc. shall only
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it can only be in accordance with the current technical
standards.