



2015



## Genset Equipment and Accessories

### Genset equipment components



- Installation kits
- Installation accessories
- Optional accessories
- Service kits



Part 1

Part 2

## 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.



# TABLE OF CONTENTS

# Part 1



## 1. Genset equipment components

1.1 SOUND INSULATION / COATINGS.....	6
■ The super low-noise sound insulation system .....	6
■ Sound insulation capsule variations .....	7
■ Coatings .....	7
1.2 EXPANDED GENERATOR FUNCTIONS.....	8
■ 24 V starter system.....	9
■ 2-pole installation.....	9
■ Automatic start-up.....	9
■ Hydraulic coupling.....	10
■ Display kit .....	11
■ Generator Signal Interface GSI .....	11
■ Mini-VCS electronic voltage controller for retrofitting*).....	12
■ Hot-water connection .....	13
■ Battery monitor .....	13
■ Re-start protection.....	14
1.3 REMOTE CONTROL.....	15
■ Automatic system add-on module for asynchronous gensets .....	16
1.4 CURRENT DISTRIBUTION AND SWITCHING .....	20
■ AC circuit distribution .....	21
■ Parallel Switching Box.....	22
■ Automatic shore-side/generator power switch.....	23
■ Digital on-board power management (system control board) .....	24



# TABLE OF CONTENTS

# Part 2



## 2. Accessory programme

### 2.1 INSTALLATION KITS Marine applications

■ Marine installation kits.....	26
---------------------------------	----

### INSTALLATION ACCESSORIES Marine and vehicle applications

■ Marine cooling system.....	33
■ Vehicle cooling and exhaust system .....	39
■ Marine and vehicle fuel systems .....	43

### 2.4 ATTACHMENT SYSTEM Marine and vehicle applications

■ Shock-mount, captive.....	47
■ Shock-mount, non-captive .....	48
■ Shock-mount, captive, with safety rope .....	48

### 2.5 OPTIONAL ACCESSORIES Marine and vehicle applications

■ Hose clamps .....	50
■ Hose connection.....	52
■ Hose connector 90° .....	54
■ Hose connector, straight .....	54
■ Hose connector, straight, reduced .....	55
■ T-pieces .....	56
■ Threaded fitting .....	58
■ Oilmaster electrical oil change pump .....	59

### 2.6 SERVICE KITS Marine and vehicle applications

■ Service Kits Plus .....	61
---------------------------	----

### 2.6 SERVICE KITS Marine and vehicle applications

■ Standard Service Kits .....	62
■ Service Kits Plus .....	68

### Reference tables for service and installation kits .....

### 83

### Hose diameter .....

### 88



## 1. Genset equipment components

Operation, monitoring, controls



Part

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

# 1.1 SOUND INSULATION / COATINGS



## 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).

# 1.1 SOUND INSULATION / COATINGS

## 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	MPL 4DS	Insulation thickness 40 mm instead of 30 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



## 1.2 EXPANDED GENERATOR FUNCTIONS



### 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.

## 1.2 EXPANDED GENERATOR FUNCTIONS

### 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.

On demand, we will be pleased to advise you regarding a suitable 24 volt system for your generator.



24 V Starter System

### 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 2-pole installation i.g. helps to avoid galvanic corrosion.

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.



insulated continuous duty relay

### 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 system add-on for panel P6+

Automatikstart		
Serien-ausstattung	Panda 4800i bis Panda 45i	inkl. Anlasswiederholsperre, Drehzahlsensor, Automatikmodul auf Fernbedienpanel
21.02.02.120	Panda 6500 bis Panda 12000	inkl. Anlasswiederholsperre, Drehzahlsensor, Automatikmodul auf Fernbedienpanel
21.02.02.121	Panda 15000 bis Panda 75 ab Panda 7,5-4/ AGT-DC 5000	inkl. Anlasswiederholsperre, Drehzahlsensor, Automatikmodul auf Fernbedienpanel

## 1.2 EXPANDED GENERATOR FUNCTIONS

### 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.



Hydraulic coupling

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

#### Hydraulikpumpenoption mit elektromagnetischer Kupplung

Generatortyp	Spannung*)	Verzahnung	Leistung	Übertragbares Drehmoment
Panda 8000 bis Panda 15000	12 oder 24 Volt	9 Zähne (SAE A) oder 13 Zähne (SAE B)	20,4 kW	65 Nm
Panda 18 bis Panda 30 IC	12 oder 24 Volt	9 Zähne (SAE A) oder 13 Zähne (SAE B)	39 kW	125 Nm

\*) The voltage must be supplied by the customer

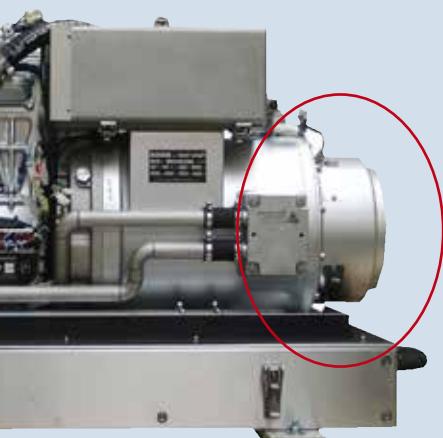
1500 RPM / 50 Hz resp. 1800 UpM / 60 Hz gensets

#### Hydraulikpumpenoption mit elektromagnetischer Kupplung

Generatortyp	Spannung*)	Verzahnung	Leistung	Übertragbares Drehmoment
Panda 7,5-4	12 oder 24 Volt	9 Zähne (SAE A) oder 13 Zähne (SAE B)	20,4 kW	65 Nm
Panda 9-4 Panda 12-4	12 oder 24 Volt	9 Zähne (SAE A) oder 13 Zähne (SAE B)	39 kW	125 Nm

\*) The voltage must be supplied by the customer

options available for larger gensets upon inquiry



## 1.2 EXPANDED GENERATOR FUNCTIONS

### 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



#### Anzeige-Kit VDO - für alle Generatoren

21.03.06.001	Instrumentenkit VDO 12V inkl. VDO-Sensoren am Generator für Öldruck und Kühlwassertemperatur inkl. VDO-Anzeigen, rund für Öldruck und Kühlwassertemperatur
--------------	--

Sample installation of display kit



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. It can be used only with the remote control panel Panda P6plus

- 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 (anschlussfertig)

31.41.70.023	Generator Signal Interfacebox kplt.
--------------	-------------------------------------

## 1.2 EXPANDED GENERATOR FUNCTIONS



Mini-VCS with boost

### 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.

#### for Panda gensets

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

#### Mini-VCS zur Spannungsregelung mit Auto-Boost Funktion

21.02.01.041 Mini VCS 12V/230V mit Auto Boost

#### for Panda gensets

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

#### Mini-VCS zur Spannungsregelung ohne Auto-Boost-Funktion

21.02.31.023 Mini VCS 12V/230V RE0913

\*) for ND gensets or as a spare part for gensets that with a year of manufacture older than 1997 (inquire for more information)

## 1.2 EXPANDED GENERATOR FUNCTIONS

### 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

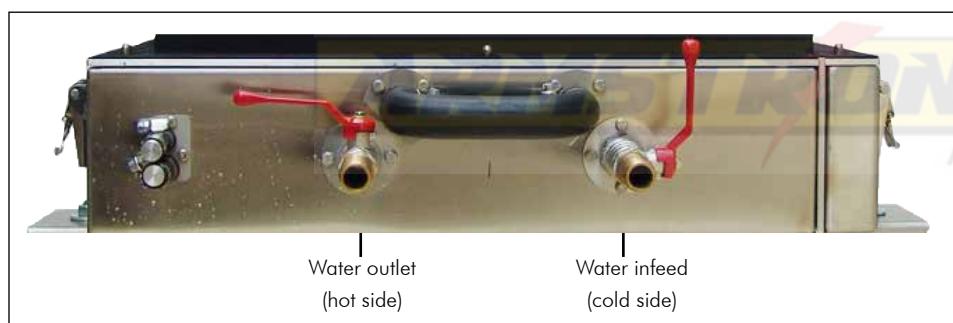
- for all AC gensets starting with Panda 8000 (3,000 RPM)
- for all AC gensets starting with Panda 6500 (3,600 UpM)
- for all AC gensets starting with Panda 7.5-4 (1,500 RPM)
- for all DC gensets starting with Panda AGT-DC 5000



Generator with hot-water connection (sample image)

#### Heißwasseranschluss

auf Anfrage	Heißwasseranschluss inkl. zwei Kugelhähne und Rückschlagventil
-------------	--



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

#### Batteriewächter/-monitor

21.02.05.004	Batteriewächter RE0724 12V/24V/48V Standard
Auf Anfrage	Batteriewächter RE0724 72V/80V/96V/128V/144V DC

# 1.2 EXPANDED GENERATOR FUNCTIONS



Re-start protection

## 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

### Anlasswiederholsperre

21.03.03.063	Bausatz Anlasswiederholsperre Panda 4500,5000 LPE - 14000 NE bestehend aus elektronischer Anlasserüberwachung mit Halterung Kabelsatz Drehzahlgeber
--------------	---

### for Panda gensets

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

### Anlasswiederholsperre

21.03.03.064	Bausatz Anlasswiederholsperre Panda 18 NE -30 NE (früher Panda 15 - 25) bestehend aus elektronischer Anlasserüberwachung mit Halterung Kabelsatz Drehzahlgeber
--------------	--

## 1.3 REMOTE CONTROL



### 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).

#### 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

# 1.3 REMOTE CONTROL



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.

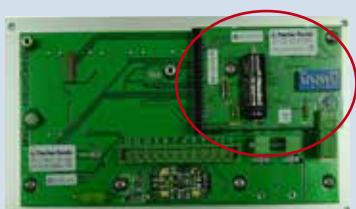
The warning and shut-down functions can be adjusted individually. By default, the system is set so that the maximum operating safety and reliability are ensured. This means that the genset will cut off immediately if an oil pressure or temperature error is found.

#### for Panda gensets

- |            |         |      |                        |
|------------|---------|------|------------------------|
| ■ 5000 LPE | ■ 12000 | ■ 24 | ■ all /4 models        |
| ■ 6000     | ■ 14000 | ■ 30 | (e.g. 15/4)            |
| ■ 8000     | ■ 15000 | ■ 32 | ■ all AGT-DC from 5000 |
| ■ 10000    | ■ 18    | ■ 50 | and up                 |
|            |         | ■ 65 |                        |

AGT Control	
21.02.02.017	Fernbedienpanel RE0612 AGT Control 145x100 Schwarz Grundpanel 12V/24V

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



Automatic system add-on for panel P6+

## Add-on modules for panel P6 Plus

### Automatic system add-on module for asynchronous gensets

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.

#### Automatikzusatz Modul

21.02.02.016	Automatik-Zusatz für P6+ Panel RE0703
--------------	---------------------------------------

## 1.3 REMOTE CONTROL

### 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

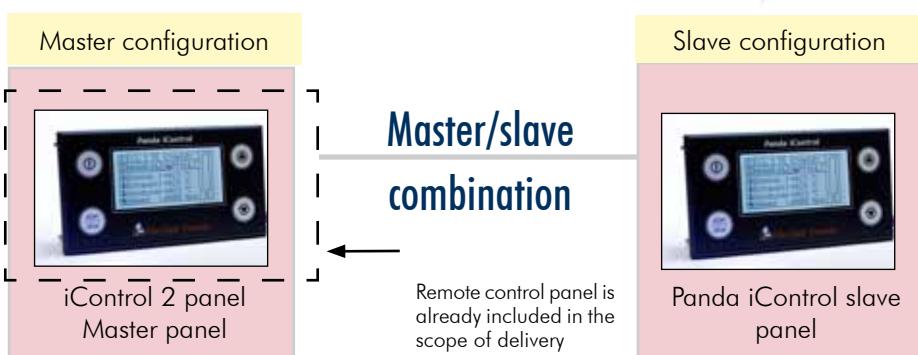
#### Panel iControl 2 - iControl 2 panel configuration

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



Panda iControl  
Slave panel

For the Master-Slave configuration the following components are required:

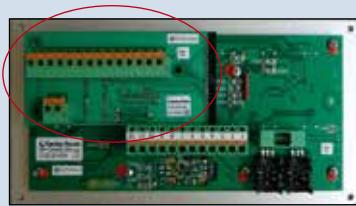
#### 1. iControl2 slave panel (up to three panels)

#### 2. Data Line

# 1.3 REMOTE CONTROL



P6 Plus panel



Master/slave adapter

## Panda P6 Plus remote control panel as a master/slave combination

### 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



### Master/slave combination

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

### Slave configuration



For a Panel P6 Plus - Panel P6 Plus configuration the following components are required:

## 1. Panda P6 Plus

for Panda gensets

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



Panel P6 Plus

### Fernbedienpanel Panda P6 Plus

21.02.02.102	Fernbedienpanel P6 Plus „Symbolik“ 12V Typ1 konfiguriert (Grundpanel : 21.02.02.046)
--------------	---

for Panda gensets

- 18 ■ 30 ■ 50 ■ all /4 models (e.g. 15/4)
- 24 ■ 32 ■ 65 ■ all AGT-DC from 5000 and up

### Panda P6 Plus

21.02.02.103	Fernbedienpanel P6 Plus „Symbolik“ 12V Typ2 konfiguriert (Grundpanel : 21.02.02.046)
21.02.02.047	Fernbedienpanel P6 Plus „Symbolik“ 24V *)

\*) For gensets with 24 volts starting system

## 2. Master-Slave Adapter

### Master-Slave Adapter Panel P6 Plus mit Panel P6 Plus

21.02.02.015	Master-Slave-Adapter Anschluß P6+Panel RE0703 (FP-Art.-Nr.: 21.02.02.009) an P6+Panel RE0703 (FP-Art.-Nr.: 21.02.02.009)
--------------	--



Master-Slave Adapter

## 3. Connection Cable

### 16-adriges Anschlusskabel

auf Anfrage	Steuerleitung
-------------	---------------

## 1.4 CURRENT DISTRIBUTION AND SWITCHING

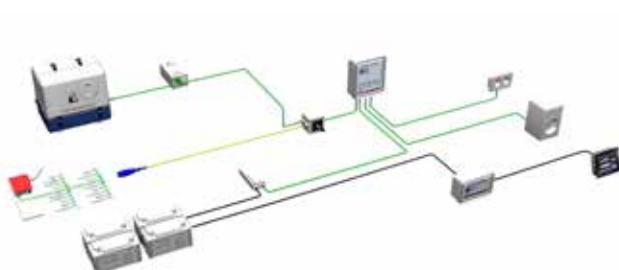


### Current distribution and switching

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

### 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).



# 1.4 CURRENT DISTRIBUTION AND SWITCHING

## AC circuit distribution

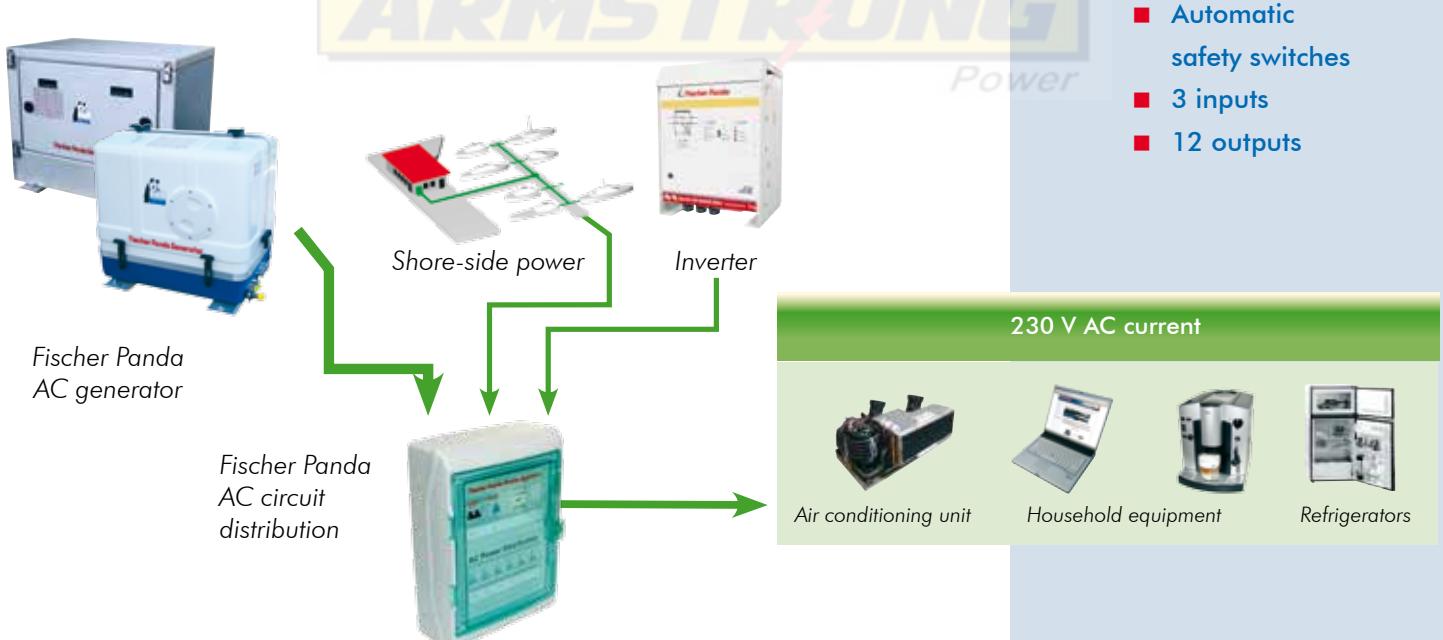
Ensuring a safe and reliable on-board power distribution is vital. This applies to the power supply via shore-side power, genset, and battery as well as to the distribution to on-board loads including their protection. The current distributor and its variable inputs and outputs represents the central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



### Wechselstrom-Stromkreisverteilung

auf Anfrage	AC-Distributionbox APD 3-6, 3 Eingänge /6 Ausgänge 230V incl. FI Schalter
-------------	--

AC power circuit distribution  
(sample picture)



# 1.4 CURRENT DISTRIBUTION AND SWITCHING



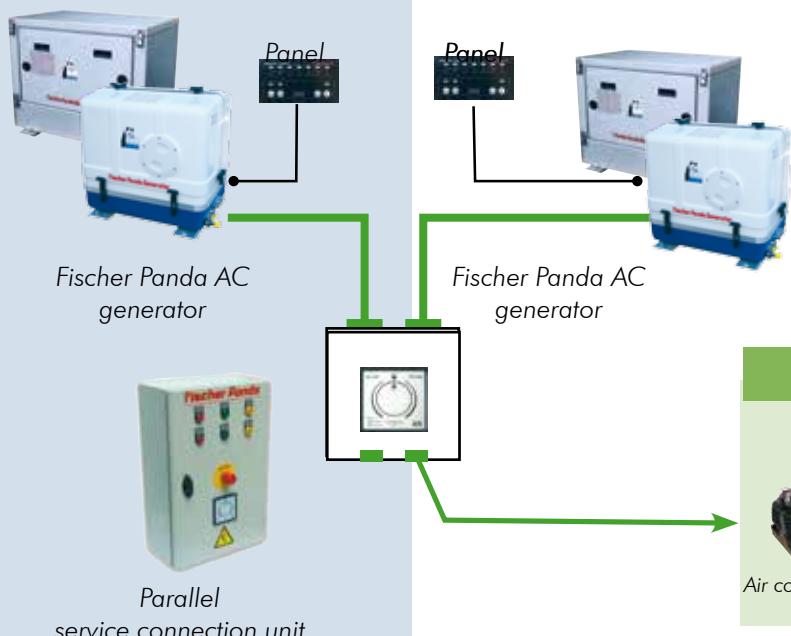
Parallel switching box closed

## 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.

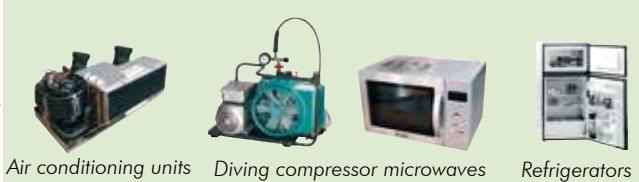
### Parallelschaltbox

auf Anfrage	Parallelschaltbox Panda 4500 FCB
auf Anfrage	Parallel Schaltbox 3,8 kW - 15,3 kW 1ph Generatoren
auf Anfrage	Parallel Schaltbox 6,5 kW - 20,4 kW 3ph Generatoren
auf Anfrage	Parallel Schaltbox 25,5 - 40,0 kW 3ph Generatoren
auf Anfrage	Parallel Schaltbox 42,5 kW - 55,2 kW 3ph Generatoren



Combinable with automatic  
230 V switching unit in  
a single housing

### Shore-side power circuit



# 1.4 CURRENT DISTRIBUTION AND SWITCHING

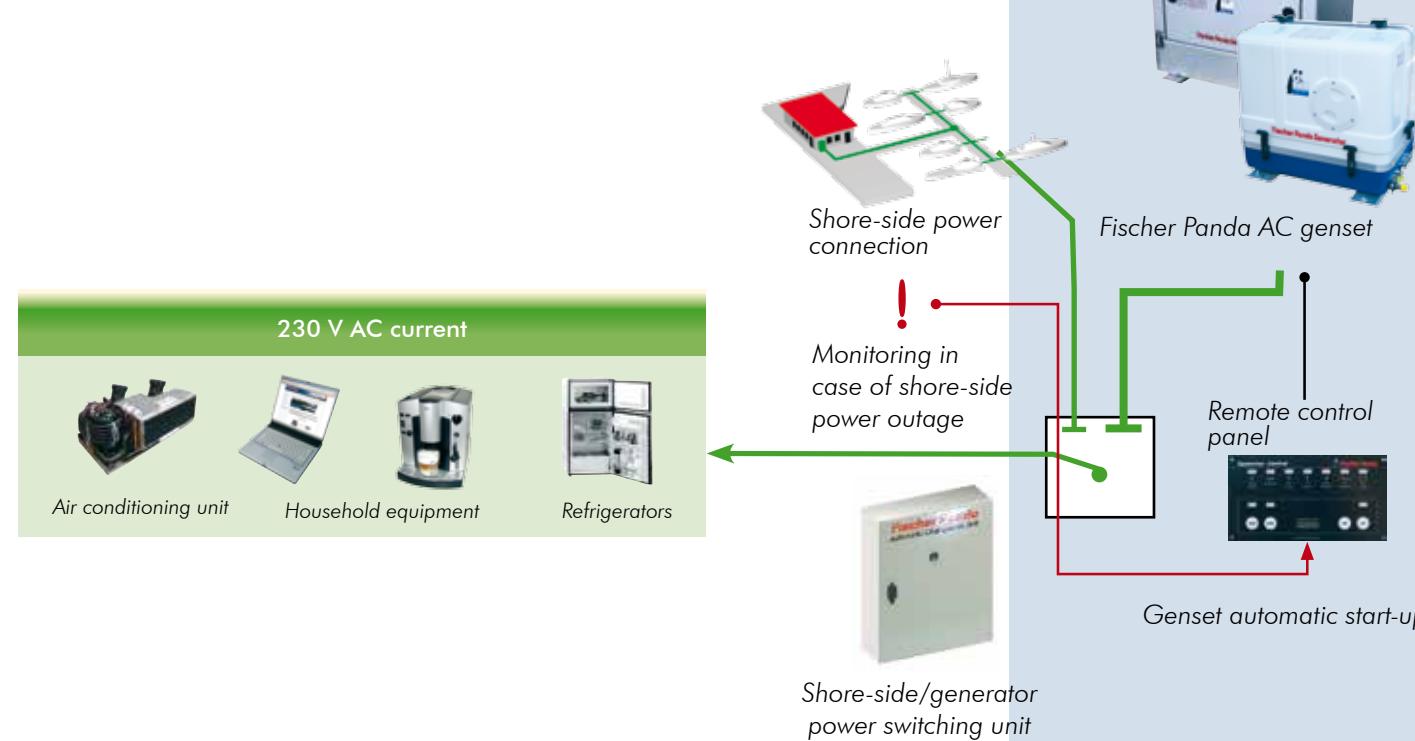
## Automatic shore-side/generator power switch

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 switch back so that the shore-side power is again used as the main power source. Stopping the generator leads to an immediate switch back to the shore-side.

Automatische Landstrom/Generator-Umschaltung	
auf Anfrage	Automatische Landstrom / Generatorumschaltbox 230/50/1PH/ Generator max 10,2kW / Landstrom max. 1ph 6kW
• auf Anfrage	Automatische Landstrom / Generatorumschaltbox 400/50/3PH/ Generator max 24 KW Landstrom max. 3ph 17kW
auf Anfrage	Automatische Landstrom / Generatorumschaltbox 400/50/3PH/ Generator max 40,0 KW
auf Anfrage	Automatische Landstrom / Generatorumschaltbox 400/50/3PH/ Generator max 55,2 KW



Automatic shore-side/  
generator power switch



# 1.4 CURRENT DISTRIBUTION AND SWITCHING



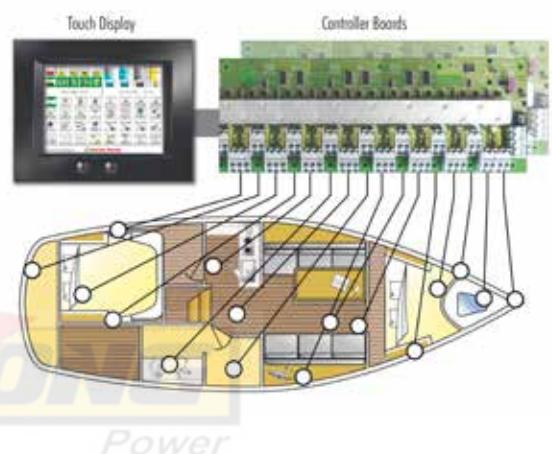
System control board

## 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).



### Digitales Bordstrom-Management

21.02.02.019S	System Control Board SCB 32 V1.0 Komplettsystem bestehend aus : Display V2.0 Powerboard 1 V08C/16 Kanäle Powerboard 2 V08C/16 Kanäle Sensorboard V05.0 Digibox V01.0 Shunt 100A/60mV Kabelsatz 1 (Verbindung Display, Powerboard, Sensorboard) Stromstoss-Schalter Schrittschalter 16A 1Kontakt Schliesser 12VDC Serie 20.21
	<b>ACHTUNG!</b> Vor Lieferung / Bestellung müssen die Systemspannung (12V oder 24V) und ggf. die Schaltsymbole / Sensoren angegeben werden !



## 2. Accessory programme

Marine and vehicle applications



Part 2

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

## 2.1 INSTALLATION KITS

## Marine applications



### 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

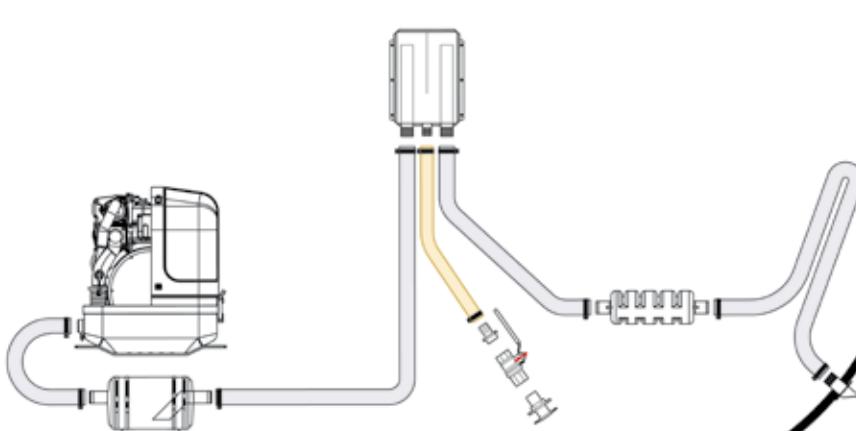
The basic version contains all components required for a standard installation

### ■ 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.

# Marine applications

## 2.1 INSTALLATION KITS



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

### Cooling water installation



### Exhaust installation

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

### Exhaust installation



### Fuel installation

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

### Fuel installation



## 2.1 INSTALLATION KITS

Marine



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

### Installationskit Basis-Version ohne Abgas-Wasser-Trenneinheit

21.03.04.046	Installation Kit Panda 4500 ohne Trenneinheit Version 1
21.03.04.080	Installation Kit Panda 4000s, 5000-15000 / AGT 4000-AGT 14000 PMS ohne Trenneinheit Version 1
21.03.04.055	Installation Kit Panda 18-24 / AGT 15000-16000 PMS ohne Trenneinheit
21.03.04.018	Installation Kit Panda 50 YA PMS ohne Trenneinheit
21.03.04.016	Installation Kit Panda 30 / AGT 25000 PMS ohne Trenneinheit
21.03.04.029	Installation Kit Panda 60/4 PMS ohne Trenneinheit

### Premium version installation kits

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

### Installationskit Premium-Version

21.03.04.056	Installation Kit Panda 4500 mit Trenneinheit Version 2
21.03.04.057	Installation Kit Panda 4000s, 5000-15000 / AGT 4000-AGT 14000 PMS mit Trenneinheit Version 2
21.03.04.067	Installation Kit Panda 18 - 24 / AGT 15000-16000 PMS mit Trenneinheit
21.03.04.017	Installation Kit Panda 30 / AGT 25000 PMS mit Trenneinheit
21.03.04.019	Installation Kit Panda 50 PMS mit Trenneinheit
21.03.04.021	Installation Kit Panda 60/4 PMS mit Trenneinheit
21.03.04.028	Installation Kit Panda 65 PMS mit Trenneinheit



Installation kit  
Premium version

## Marine and vehicle applications

## 2.2 INSTALLATION ACCESSORIES



### 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

## 2.2.1 INSTALLATION ACCESSORIES

## Marine cooling system

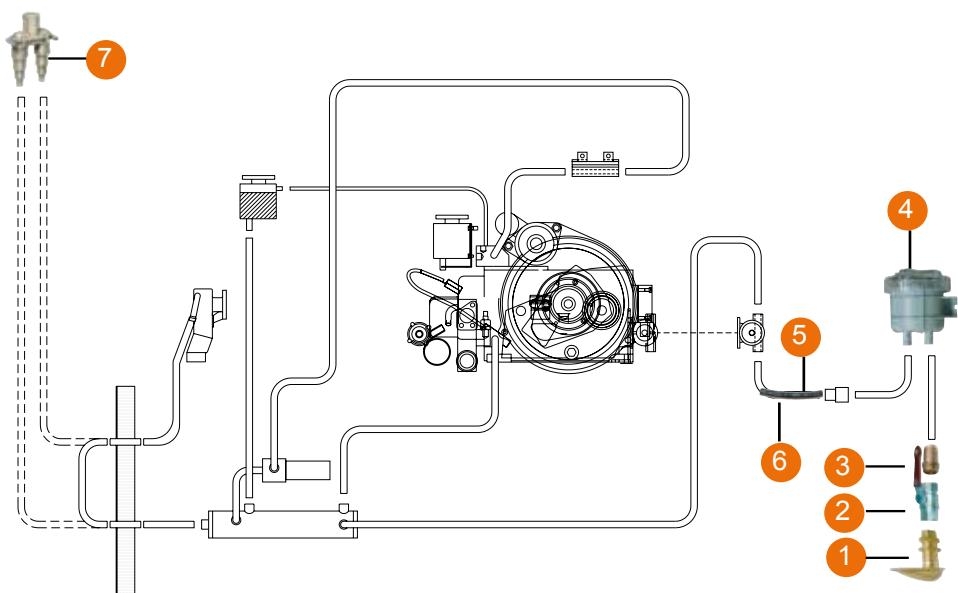


Installation accessories individual components

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



# Marine cooling system

## 2.2.1 INSTALLATION ACCESSORIES

### 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



#### Borddurchlass mit Sieb

21.08.01.005	Borddurchlass Ms mit gefrästem Sieb 1/2
21.08.01.006	Borddurchlass Ms mit gefrästem Sieb 3/4
21.08.01.004	Borddurchlass Ms mit gefrästem Sieb 1
21.08.01.025	Borddurchlass Ms mit gefrästem Sieb 1 1/4"
21.08.01.003	Borddurchlass 1 1/2" mit gefrästem Sieb
21.08.01.024	Borddurchlass Ms mit gefrästem Sieb 2"
21.08.01.002	Borddurchlass 2 1/2" mit gefrästem Sieb

Through-hull with filter

### 2 Sea valve / ball valve

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



#### Seeventil / Kugelhahn

32.10.12.010	Kugelhahn Pressmessing bis 40 bar 1/4
32.10.12.011	Kugelhahn Pressmessing bis 40 bar 3/8
32.10.12.012	Kugelhahn Pressmessing bis 40 bar 1/2
32.10.12.013	Kugelhahn Pressmessing bis 40 bar 3/4
32.10.12.014	Kugelhahn Pressmessing bis 40 bar 1
32.10.12.015	Kugelhahn Pressmessing bis 40 bar 1-1/4
32.10.12.016	Kugelhahn Pressmessing bis 40 bar 1-1/2
32.10.12.002	Kugelhahn Pressmessing bis 40 bar 2" IG
32.10.12.003	Kugelhahn Pressmessing bis 40 bar 2 1/2" IG

Sea valve / ball valve

## 2.2.1 INSTALLATION ACCESSORIES

## Marine cooling system



Hose connection



Seawater filter

### 3 Hose connection

see "Optional accessories" page 52

### 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

#### Seewasserfilter

21.08.03.002	Kühlwasserfilter 12,7mm / 1/2" FTR140/13
21.08.03.003	Kühlwasserfilter 19,1mm / 3/4" FTR140/19
21.08.03.004	Kühlwasserfilter 15,9mm / 1/2" FTR140/16
21.08.03.007	Seewasserfilter Vetus FTR330-13 (1/2")
21.08.03.008	Seewasserfilter Vetus FTR330-19 (3/4")
21.08.03.009	Seewasserfilter Vetus FTR330-25 (1")
21.08.03.010	Seewasserfilter Vetus FTR330-32 (1-1/4")
21.08.03.011	Seewasserfilter Vetus FTR330-38 (1-1/2")



Hose clamps

### 5 Hose clamps

see "Optional accessories" page 50

# Marine cooling system

## 2.2.1 INSTALLATION ACCESSORIES

### 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

#### Kühlwasserschlauch

33.04.05.020	Wasserschlauch Klar Vetus mit Drahtinnenspirale DWHOSE Ø12mm
33.04.05.017	Wasserschlauch Klar mit Drahtinnenspirale DWHOSE Ø16mm
33.04.05.021	Wasserschlauch Klar Vetus mit Drahtinnenspirale DWHOSE Ø19mm
33.04.05.022	Wasserschlauch Klar Vetus mit Drahtinnenspirale DWHOSE Ø25mm
33.04.05.015	Wasserschlauch Klar Vetus mit Drahtinnenspirale DWHOSE Ø30mm
33.04.05.016	Wasserschlauch Klar Vetus mit Drahtinnenspirale DWHOSE Ø38mm



### 7 Ventilation valve (plastic)

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



Ventilation valve

#### Belüftungsventil

21.08.03.013	Belüfter Vetus Airvent V ohne Schlauch (bis Panda 30)
21.08.03.001	Belüfter Vetus Airvent mit Ventil 38mm (ab Panda 30)
21.08.03.014	Belüfter mit Belüftungsventil und Schlauch Airvent H

## 2.2.2 INSTALLATION ACCESSORIES

## Marine exhaust system

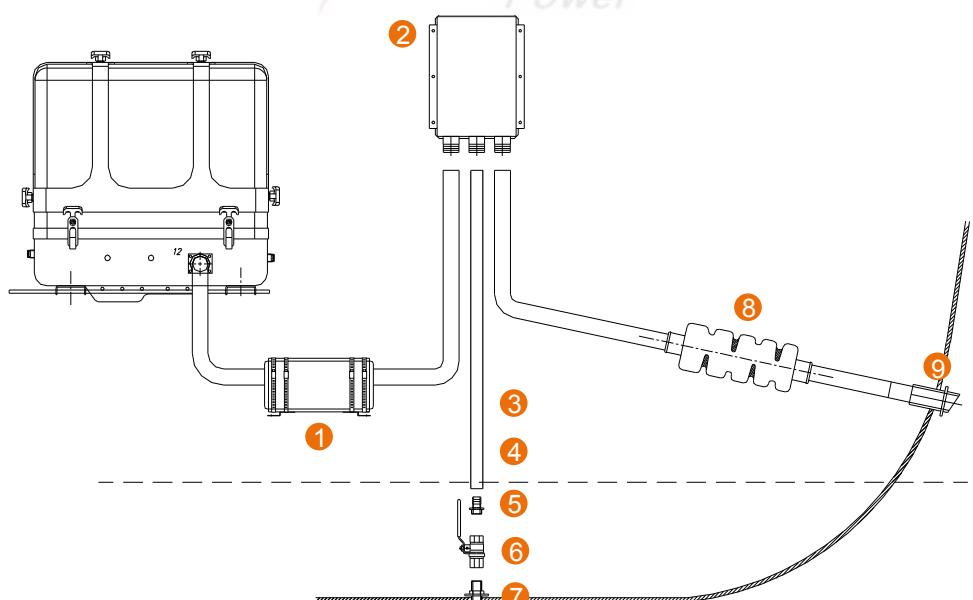


### Installation accessories individual components

### Exhaust system for marine gensets

**ARMSTRONG** Power

- 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



# Marine exhaust system

## 2.2.2 INSTALLATION ACCESSORIES

### 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

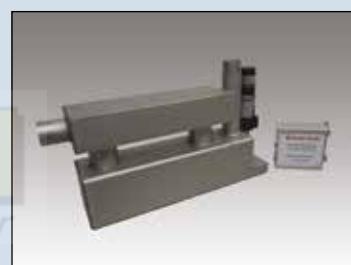
#### Wassersammler / Schalldämpfer

21.08.02.012	Wassersammler FP 160/40 Ø40mm
21.08.02.013	Wassersammler FP 160/50 Ø50mm
21.08.02.014	Wassersammler FP 160/60 Ø60mm

### 1 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

#### Aktiver Wassersammler

21.08.02.002	Aktiver Wassersammler Fischer Panda 40-40-18
--------------	--

#### Nachlaufsteuerung für aktiven Wassersammler

31.42.02.018	Nachlaufsteuerung Wassersammler
--------------	---------------------------------

#### Pumpe

40.07.02.009	Umwälzpumpe Johnson CM30P7-1 12V 16mm Anschluss mit Deutsch Stecker DT 04-2P
--------------	---

## 2.2.2 INSTALLATION ACCESSORIES

## Marine exhaust system



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.

#### Abgas-Wasser-Trenneinheit

31.50.01.006	Abgas-Wasser-Trenneinheit FP Ø 40-25-40mm
31.50.01.002	Abgas-Wasser-Trenneinheit FP Ø 40-25-40mm mit Dämmflockierung
31.50.01.005	Abgas-Wasser-Trenneinheit FP Ø 40-30-40mm
31.50.01.009	Abgas-Wasser-Trenneinheit FP Ø 40-30-40mm mit Dämmflockierung
31.50.01.010	Abgas-Wasser-Trenneinheit FP Ø 50-40-50mm
31.50.01.011	Abgas-Wasser-Trenneinheit FP Ø 50-40-50mm mit Dämmflockierung
31.50.01.012	Abgas-Wasser-Trenneinheit FP Ø 60-50-60mm
31.50.01.013	Abgas-Wasser-Trenneinheit FP Ø 60-50-60mm mit Dämmflockierung

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.

#### Abgasschlauch mit Drahtinnenspirale

33.04.08.003	Abgasschlauch schwarz mit Drahtinnenspirale Ø 20mm
33.04.08.004	Abgasschlauch schwarz mit Drahtinnenspirale Ø 25mm
33.04.08.005	Abgasschlauch schwarz mit Drahtinnenspirale Ø 30mm
33.04.08.006	Abgasschlauch schwarz mit Drahtinnenspirale Ø 40mm
33.04.08.007	Abgasschlauch schwarz mit Drahtinnenspirale Ø 51mm
33.04.08.008	Abgasschlauch schwarz mit Drahtinnenspirale Ø 60mm



Exhaust hose

# Marine exhaust system

## 2.2.2 INSTALLATION ACCESSORIES

### 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



"Super Silent" exhaust hose

### Abgasschlauch Super Silent

33.04.08.014	Abgasschlauch Low Noise schwarz mit Drahtinnenspirale Ø 40mm
--------------	--

### 4 Hose clamps

see "Optional accessories" page 50



Hose clamps

### 5 Hose connection

see "Optional accessories" page 52



Hose connection

### 6 Sea valve / ball valve

brass, 2 x internal thread



Sea valve / ball valve

### Seeventil / Kugelhahn

32.10.12.010	Kugelhahn Pressmessaging bis 40 bar 1/4
32.10.12.011	Kugelhahn Pressmessaging bis 40 bar 3/8
32.10.12.012	Kugelhahn Pressmessaging bis 40 bar 1/2
32.10.12.013	Kugelhahn Pressmessaging bis 40 bar 3/4
32.10.12.014	Kugelhahn Pressmessaging bis 40 bar 1
32.10.12.015	Kugelhahn Pressmessaging bis 40 bar 1-1/4
32.10.12.016	Kugelhahn Pressmessaging bis 40 bar 1-1/2
32.10.12.002	Kugelhahn Pressmessaging bis 40 bar 2" IG
32.10.12.003	Kugelhahn Pressmessaging bis 40 bar 2 1/2" IG

## 2.2.2 INSTALLATION ACCESSORIES

## Marine exhaust system



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.

#### Borddurchlass Messing

21.08.01.005	Borddurchlass Ms mit gefrästem Sieb 1/2
21.08.01.006	Borddurchlass Ms mit gefrästem Sieb 3/4
21.08.01.004	Borddurchlass Ms mit gefrästem Sieb 1
21.08.01.025	Borddurchlass Ms mit gefrästem Sieb 1 1/4"
21.08.01.003	Borddurchlass 1 1/2" mit gefrästem Sieb
21.08.01.024	Borddurchlass Ms mit gefrästem Sieb 2"
21.08.01.002	Borddurchlass 2 1/2" mit gefrästem Sieb



Marine silencer

### 8 OPTIONAL: Silencer

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

see "Optional accessories" page 49

### 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).

#### Außenspiegel-Borddurchlass

21.08.01.018	Abgasspiegeldurchführung Gummi Vetus Ø40mm
21.08.01.015	Abgasspiegeldurchführung Gummi Vetus Ø50mm
21.08.01.016	Abgasspiegeldurchführung Gummi Vetus Ø60mm

## Vehicle cooling and exhaust system 2.3 INSTALLATION ACCESSORIES



Installation accessories individual components

Cooling and exhaust system for vehicle gensets



## 2.3.1 INSTALLATION ACCESSORIES Vehicle cooling and exhaust system



Gradual fan controller with temperature sensor and hose connector



Exhaust pipe elbow



Roof lead-through fitting

### 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

#### Stufenlose Lüfterregelung mit Temperatursensor und Schlauchverbinder

21.02.04.013	Elektronische Lüftersteuerung Ziehl Abegg PKDT5, 3-phasig, 400V, 5A
21.02.04.014	Elektronische Lüftersteuerung Ziehl Abegg PTKE6-M, 1-phasig, 230V, 6A
21.02.04.002	Elektronische Lüftersteuerung Ziehl Abegg PXET6Q, 1-phasig, 230V, 6A

### 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.

#### Abgas-Rohrbogen

21.03.02.034	Silikonschlauch und Abgasrohrbogen 90° NW 40
--------------	--

### 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.

#### Kühlwasser-Dachdurchführung

31.20.04.053	Kühlwasser Dachdurchführung 1 x Ø40mm mit 90° Bogen und Dachabdichtungsplatte
31.20.04.054	Kühlwasser Dachdurchführung 1 x Ø50mm mit 90° Bogen und Dachabdichtungsplatte

# Vehicle cooling and exhaust sys-

## 2.3.1 INSTALLATION ACCESSO-

### 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.

Kühlwasser-Dachdurchführung	
31.20.04.050	Kühlwasser Dachdurchführung 2 x Ø20mm mit 90° Bogen und Dachabdichtungsplatte
31.20.04.051	Kühlwasser Dachdurchführung 2 x Ø25mm mit 90° Bogen und Dachabdichtungsplatte
31.20.04.052	Kühlwasser Dachdurchführung 2 x Ø30mm mit 90° Bogen und Dachabdichtungsplatte
31.20.04.055	Kühlwasser Dachdurchführung 2 x Ø50mm mit 90° Bogen und Dachabdichtungsplatte



Roof lead-through fitting

### 5 Exhaust hose

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

Abgasschlauch HYDRA	
33.04.08.001	Abgasschlauch FA330S DN40 Biegeradius 210mm
33.04.08.002	Abgasschlauch HYDRA Typenreihe FA330S Edelstahl 1.4301 DN30 Biegeradius 210mm
33.04.08.010	Abgasschlauch HYDRA Typenreihe FA330S Edelstahl 1.4301 DN75 Biegeradius 210mm
33.04.08.011	Abgasschlauch HYDRA FA330S DN50 Biegeradius 210mm
33.04.08.013	Abgasschlauch HYDRA Typenreihe FA330S Edelstahl 1.4301 DN60 Biegeradius 210mm



HYDRA exhaust hose

## 2.2.1 INSTALLATION ACCESSORIES Vehicle cooling + exhaust system



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

#### Kühlwasserschlauch

33.04.05.004	Kühlwasserschlauch DIN 73411 NW Ø 8mm
33.04.05.005	Kühlwasserschlauch DIN 73411 NW Ø 10mm
33.04.05.006	Kühlwasserschlauch DIN 73411 NW Ø 12mm
33.04.05.007	Kühlwasserschlauch DIN 73411 NW Ø 13mm
33.04.05.008	Kühlwasserschlauch DIN 73411 NW Ø 16mm
33.04.05.009	Kühlwasserschlauch DIN 73411 NW Ø 18mm
33.04.05.010	Kühlwasserschlauch DIN 73411 NW Ø 19mm
33.04.05.011	Kühlwasserschlauch DIN 73411 NW Ø 20mm
33.04.05.012	Kühlwasserschlauch DIN 73411 NW Ø 25mm
33.04.05.013	Kühlwasserschlauch DIN 73411 NW Ø 30mm
33.04.05.014	Kühlwasserschlauch DIN 73411 NW Ø 40mm



Hose clamps

### 9 Hose clamps

see "Optional accessories" page 50



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.

#### Silikonschlauch

33.04.03.005	Silikon-Gewebeschlauch, Durchmesser 40mm, temperaturbeständig bis 280° L2500
33.04.03.012	Silikon-Gewebeschlauch Ø30mm
33.04.03.014	Silikon-Gewebeschlauch Ø50mm

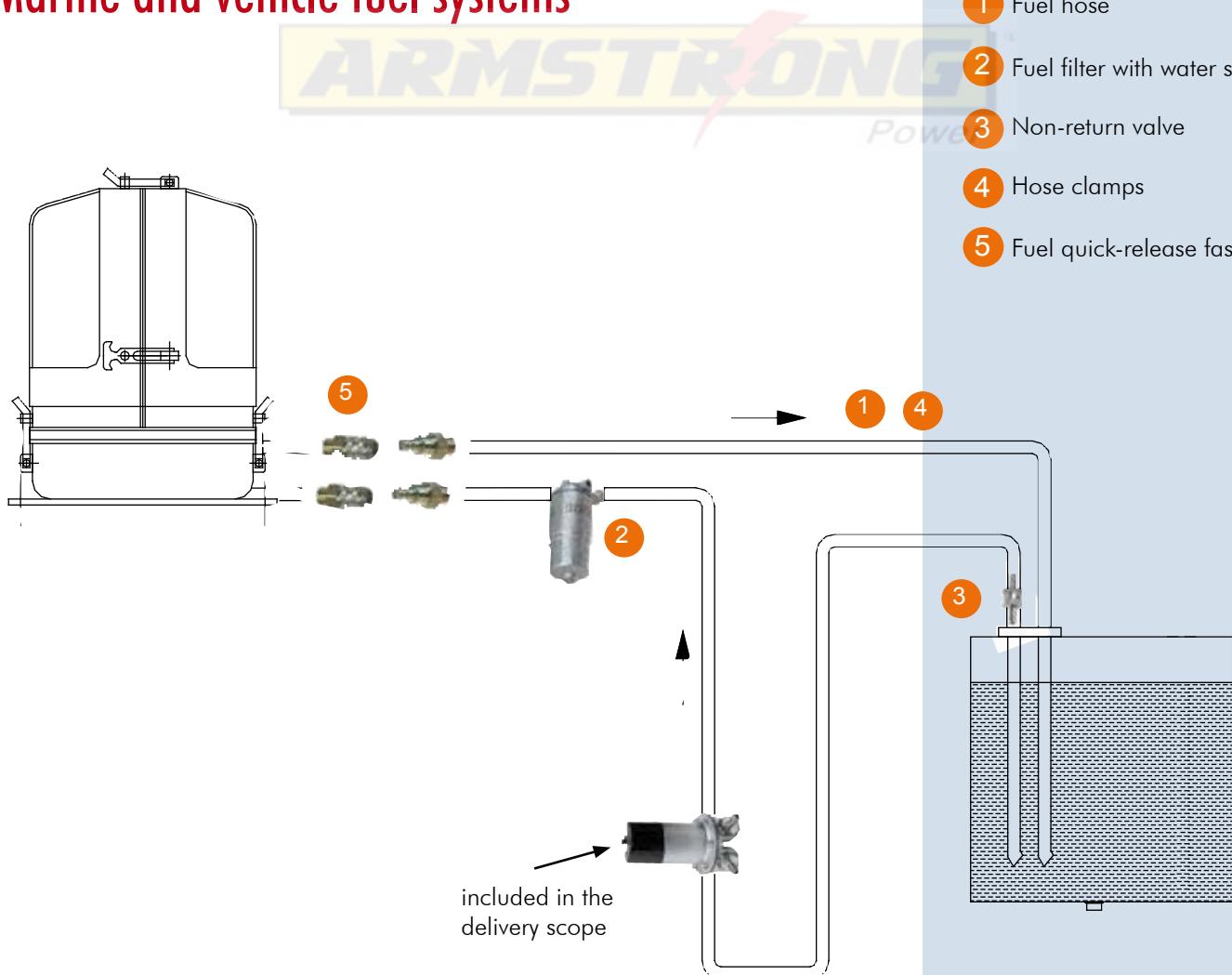
## Fuel system

## 2.3 INSTALLATION ACCESSORIES



### Installation accessories individual components

### Marine and vehicle fuel systems



## 2.3 INSTALLATION ACCESSORIES

### Fuel system



Fuel hose



Fuel filter with  
water separator



Non-return valve

#### 1 Fuel hose

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

##### Kraftstoffschlauch

33.04.07.003	Kraftstoffschlauch ISO7840A1 Ø 5 mm innen
33.04.07.004	Kraftstoffschlauch ø 8 mm innen

#### 2 Fuel filter with water separator

##### Kraftstofffilter mit Wasserabscheider

36.01.02.020	Vetus WS 180
--------------	--------------

##### Austauschelement

36.01.02.030	Kraftstoffvorfilterelement Typ WK 842/2 mit Wasserabscheider
--------------	---

#### 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.

##### Rückschlagventil

21.09.02.007	Rückschlagventil Aluminium InnenØ 06mm
21.09.02.005	Rückschlagventil Aluminium für Schlauch DN 8mm
21.09.02.008	Rückschlagventil Kunststoff Pierburg innenØ 8mm

# Fuel system

## 2.3 INSTALLATION ACCESSORIES

### 4 Hose clamps

see "Optional accessories" page 50



Hose clips

### 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.

#### Kraftstoff schnellverschlüsse

32.21.20.003	Schnellverschlußkupplung AG 1/4" NW5 Messing
32.21.20.004	Schnellverschlußnippel AG 1/4" NW5 Messing



Nipple quick-release fastener

#### Schlauchadapter

31.20.03.016	Schlauchadapter mit Innengewinde 1/4" d5,5 D8 L33
--------------	---



Coupling quick-release fastener

#### Kupferring

32.02.02.021	Dichtring DIN7603 13x18x1,5 Kupfer massiv
--------------	---

## 2.4 ATTACHMENT SYSTEM

## Marine and vehicle applications



### Attachment system

#### for marine and vehicle gensets



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

# Marine and vehicle applications

## 2.4 ATTACHMENT SYSTEM

### 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

Schwingungsdämpfer abreißsicher	
32.30.01.011	Schwingungsdämpfer BRB 110 M16 SH50
32.30.01.012	Schwingungsdämpfer BRB 110 M16 SH60
32.30.01.013	Schwingungsdämpfer BRB 150 M16 SH40
32.30.01.015	Schwingungsdämpfer BRB 150 M16 SH60
32.30.01.001	Schwingungsdämpfer BRB 180 SH40 M20
32.30.01.002	Schwingungsdämpfer BRB 60 A40 M10 SH40
32.30.01.014	Schwingungsdämpfer BRB 60 A40 M10 SH50
32.30.01.004	Schwingungsdämpfer BRB 60 C60 M10 SH60
32.30.01.005	Schwingungsdämpfer BRB 70 A40 M12 SH40
32.30.01.006	Schwingungsdämpfer BRB 70 A40 M12 SH40
32.30.01.007	Schwingungsdämpfer BRB 80 A40 M10 SH40
32.30.01.008	Schwingungsdämpfer BRB 80 B50 M10 SH50
32.30.01.009	Schwingungsdämpfer BRB 80 B60 M10 SH60

## 2.4 ATTACHMENT SYSTEM



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.

#### Schwingungsdämpfer nicht abreißsicher

32.30.02.011	Metall-Gummi-Puffer 30x40mm Typ „C“ beidseitig Innengewinde M8, SH 55° mit verschraubter Halteplatte und 1 eingeklebten Gewindegelenk M8x22
32.30.02.014	Metall-Gummi-Puffer 40x40mm Typ „C“ beidseitig Innengewinde M8, SH 55° mit verschraubter Halteplatte
32.30.02.020	Metall-Gummi-Puffer 50x50mm Typ „C“ beidseitig Innengewinde M10, SH55° mit verschraubter Halteplatte und 1 eingeklebten Gewindegelenk M10x20



Shock-mount

### Shock-mount, captive, with safety rope

#### Schwingungsdämpfer mit Fangseil

21.03.04.001	Schwingungsdämpfer-Kit Ferretti 50x40 mit Sicherungsseil und Platte
21.03.04.002	Schwingungsdämpfer-Kit Ferretti 50x50 mit Sicherungsseil und Platte
21.03.04.020	Schwingungsdämpfer-Kit Ferretti 75x45 mit Sicherungsseil und Platte

# Marine and vehicle applications

## 2.5 OPTIONAL ACCESSORIES



### Optional accessories

for marine and vehicle gensets



Schalldämpfer für Marine Generatoren	
40.02.01.021	Abgas-Schalldämpfer Vetus MP45
40.02.01.022	Abgas-Schalldämpfer Vetus MP50
40.02.01.023	Abgas-Schalldämpfer Vetus MP60
40.02.01.024	Abgas-Schalldämpfer Vetus MP75
40.02.01.025	Abgas-Schalldämpfer Vetus MP90
40.02.01.026	Abgas-Schalldämpfer Vetus MP100



Marine silencer

Schalldämpfer für Fahrzeug-Generatoren	
31.06.02.022	Abgasschalldämpfer trocken oval Aufhängevorrichtung und Anschlüssen D=40mm Abdeckung



Vehicle muffler

## 2.5 OPTIONAL ACCESSORIES

## Marine and vehicle applications



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.

#### Schlauchschellen

32.03.01.002H	Schlauchschelle Schneckengewinde DIN3017 Ø 008-016mm Breite 9mm
32.03.01.004H	Schlauchschelle Schneckengewinde DIN3017 Ø 012-022mm Breite 9mm
32.03.01.005H	Schlauchschelle Schneckengewinde DIN3017 Ø 016-025mm Breite 9mm
32.03.01.006H	Schlauchschelle Schneckengewinde DIN3017 Ø 020-032mm Breite 9mm
32.03.01.007H	Schlauchschelle Schneckengewinde DIN3017 Ø 025-040mm Breite 9mm
32.03.01.008H	Schlauchschelle Schneckengewinde DIN3017 Ø 032-050mm Breite 9mm
32.03.01.009H	Schlauchschelle Schneckengewinde DIN3017 Ø 040-060mm Breite 9mm
32.03.01.010H	Schlauchschelle Schneckengewinde DIN3017 Ø 060-080mm Breite 9mm
32.03.01.011H	Schlauchschelle Schneckengewinde DIN3017 Ø 090-110mm Breite 9mm
32.03.01.020H	Schlauchschelle Schneckengewinde DIN3017 Ø 020-032mm Breite 12mm
32.03.01.021H	Schlauchschelle Schneckengewinde DIN3017 Ø 025-040mm Breite 12mm
32.03.01.022H	Schlauchschelle Schneckengewinde DIN3017 Ø 032-050mm Breite 12mm
32.03.01.023H	Schlauchschelle Schneckengewinde DIN3017 Ø 040-060mm Breite 12mm
32.03.01.024H	Schlauchschelle Schneckengewinde DIN3017 Ø 050-070mm Breite 12mm
32.03.01.025H	Schlauchschelle Schneckengewinde DIN3017 Ø 060-080mm Breite 12mm

# Marine and vehicle applications

## 2.5 OPTIONAL ACCESSORIES

### Schlauchschellen

32.03.01.026H	Schlauchschelle Schneckengewinde DIN3017 Ø 080-100mm Breite 12mm
32.03.01.027H	Schlauchschelle Schneckengewinde DIN3017 Ø 090-110mm Breite 12mm
32.03.01.028H	Schlauchschelle Schneckengewinde DIN3017 Ø 110-130mm Breite 12mm
32.03.01.029H	Schlauchschelle Schneckengewinde DIN3017 Ø 120-140mm Breite 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 clamp

### Schlauchschellen

32.03.03.001H	Gelenkbolzen-Schlauchschelle W2 Ø27-18mm ND 26 / 25 - 27 mm
32.03.03.002H	Gelenkbolzen-Schlauchschelle W2 Ø34-18mm ND 33 / 31 - 34 mm
32.03.03.003H	Gelenkbolzen-Schlauchschelle W2 Ø39-18mm ND 39 / 37 - 40 mm
32.03.03.004H	Gelenkbolzen-Schlauchschelle W2 Ø42-18mm ND 42 / 40 - 43 mm
32.03.03.005H	Gelenkbolzen-Schlauchschelle W2 Ø45-20mm ND 45 / 43 - 47 mm
32.03.03.006H	Gelenkbolzen-Schlauchschelle W2 Ø50-20mm ND 49 / 47 - 51 mm
32.03.03.007H	Gelenkbolzen-Schlauchschelle W2 Ø53-20mm ND 53 / 51 - 55 mm
32.03.03.009H	Gelenkbolzen-Schlauchschelle W1 Ø58-20mm ND 57 / 55 - 59 mm
32.03.03.010H	Gelenkbolzen-Schlauchschelle W2 Ø58-20mm ND 57 / 55 - 59 mm
32.03.03.011H	Gelenkbolzen-Schlauchschelle W2 Ø62-20mm ND 62 / 60 - 63 mm

## 2.5 OPTIONAL ACCESSORIES

## Marine and vehicle applications

32.03.03.012	Gelenkbolzen-Schlauchschelle W2 Ø66-20mm ND 66 / 63 - 68 mm
32.03.03.013	Gelenkbolzen-Schlauchschelle W2 Ø70-25mm ND 71 / 68 - 79 mm
32.03.03.014	Gelenkbolzen-Schlauchschelle W1 Ø76-25mm ND 76 / 73 - 78 mm
32.03.03.015	Gelenkbolzen-Schlauchschelle W2 Ø82-25mm ND 82 / 79 - 85 mm
32.03.03.016	Gelenkbolzen-Schlauchschelle W2 Ø101-25mm ND 101 / 97 - 104 mm



Hose connection

### Hose connection

Material: brass

Schlauchstutzen	
32.20.02.004	Gewindestutzen Ms Sechskant 1/8" AG x 6mm Schlauchanschluß
32.20.02.005	Gewindestutzen Ms Sechskant 1/8" AG x 8mm Schlauchanschluß
32.20.02.006	Gewindestutzen Ms Sechskant 1/4" AG x 6mm Schlauchanschluß
32.20.02.007	Gewindestutzen Ms Sechskant 1/4" AG x 8mm Schlauchanschluß
32.20.02.008	Gewindestutzen Ms Sechskant 1/4" AG x 10mm Schlauchanschluß
32.20.02.009	Gewindestutzen Ms Sechskant 1/4" AG x 13mm Schlauchanschluß
32.20.02.011	Gewindestutzen Ms Sechskant 3/8" AG x 8mm Schlauchanschluß
32.20.02.012	Gewindestutzen Ms Sechskant 3/8" AG x 10mm Schlauchanschluß
32.20.02.013	Gewindestutzen Ms Sechskant 3/8" AG x 13mm Schlauchanschluß
32.20.02.014	Gewindestutzen Ms Sechskant 3/8" AG x 16mm Schlauchanschluß

# Marine and vehicle applications

## 2.5 OPTIONAL ACCESSORIES

### Schlauchstutzen

32.20.02.016	Gewindestutzen Ms Sechskant 1/2" AG x 8mm Schlauchanschluß
32.20.02.017	Gewindestutzen Ms Sechskant 1/2" AG x 10mm Schlauchanschluß
32.20.02.018	Gewindestutzen Ms Sechskant 1/2" AG x 13mm Schlauchanschluß
32.20.02.019	Gewindestutzen Ms Sechskant 1/2" AG x 16mm Schlauchanschluß
32.20.02.020	Gewindestutzen Ms Sechskant 1/2" AG x 19mm Schlauchanschluß
32.20.02.002	Gewindestutzen Ms Sechskant 3/4" AG x 13mm Schlauchanschluß
32.20.02.021	Gewindestutzen Ms Sechskant 3/4" AG x 19mm Schlauchanschluß
32.20.02.022	Gewindestutzen Ms Sechskant 3/4" AG x 25mm Schlauchanschluß
32.20.02.003	Gewindestutzen Ms Sechskant 1" AG x 20mm Schlauchanschluß
32.20.02.023	Gewindestutzen Ms Sechskant 1" AG x 25mm Schlauchanschluß
32.20.02.024	Gewindestutzen Ms Sechskant 1" AG x 32mm Schlauchanschluß
32.20.02.030	Gewindestutzen Ms Sechskant 1-1/4" AG x 30mm Schlauchanschluß
32.20.02.001	Gewindestutzen Ms Sechskant 1" 1/4 Aussengewinde x 32mm Schlauchanschluß
32.20.02.025	Gewindestutzen Ms Sechskant 1-1/4" AG x 40mm Schlauchanschluß



## 2.5 OPTIONAL ACCESSORIES

## Marine and vehicle applications



Hose connector, 90°

### Hose connector 90°

Material: brass

31.20.02.040H	Schlauchverbinder 90° Edelstahl Ø 12/12mm
31.20.02.041H	Schlauchverbinder 90° Edelstahl Ø 20/20mm
31.20.02.042H	Schlauchverbinder 90° Edelstahl Ø 25/25mm
31.20.02.043H	Schlauchverbinder 90° Edelstahl Ø 30/30mm
31.20.02.044H	Schlauchverbinder 90° Edelstahl Ø 40/40mm
31.20.02.045H	Schlauchverbinder 90° Edelstahl Ø 50/50mm
31.20.02.046H	Schlauchverbinder 90° Edelstahl Ø 60/60mm
31.20.02.047H	Schlauchverbinder 90° Edelstahl Ø 75/75mm



Hose connector, straight

### Hose connector, straight

Material: brass

31.20.02.030H	Schlauchverbinder gerade Ø 12mm VA
31.20.02.031H	Schlauchverbinder gerade Ø 14mm VA
31.20.02.032H	Schlauchverbinder gerade Ø 16mm VA
31.20.02.033H	Schlauchverbinder gerade Ø 20mm VA
31.20.02.034H	Schlauchverbinder gerade Ø 25mm VA
31.20.02.035H	Schlauchverbinder gerade Ø 30mm VA
31.20.02.036H	Schlauchverbinder gerade Ø 40mm VA L=60mm
31.20.02.037H	Schlauchverbinder gerade Ø 40mm VA L=80mm
31.20.02.038H	Schlauchverbinder gerade Ø 50mm VA
31.20.02.039H	Schlauchverbinder gerade Ø 60mm VA

# Marine and vehicle applications

## 2.5 OPTIONAL ACCESSORIES

### Hose connector, straight, reduced

Material: brass

Schlauchverbinder	
31.20.01.002H	Schlauchverbinder gerade-reduziert Edelstahl Ø 16mm/14mm
31.20.01.010H	Schlauchverbinder gerade red. Ø 08mm/06mm VA
31.20.01.011H	Schlauchverbinder gerade red. Ø 12mm/06mm VA
31.20.01.012H	Schlauchverbinder gerade red. Ø 12mm/08mm VA
31.20.01.013H	Schlauchverbinder gerade red. Ø 16mm/12mm VA
31.20.01.014H	Schlauchverbinder gerade red. Ø 20mm/12mm VA
31.20.01.015H	Schlauchverbinder gerade red. Ø 20mm/16mm VA
31.20.01.016H	Schlauchverbinder gerade red. Ø 25mm/20mm VA
31.20.01.017H	Schlauchverbinder gerade red. Ø 30mm/25mm VA
31.20.01.018H	Schlauchverbinder gerade red. Ø 40mm/30mm VA
31.20.01.019H	Schlauchverbinder gerade red. Ø 50mm/40mm VA
31.20.01.020H	Schlauchverbinder gerade red. Ø 80mm/60mm VA



Hose connection,  
straight, reduced

## 2.5 OPTIONAL ACCESSORIES

## Marine and vehicle applications



T-piece

### T-pieces

Material: stainless steel

#### T-Stücke

31.10.02.001	Schlauchverbinder T-Stück Ø 40/08/40mm VA
31.10.02.003	Schlauchverbinder T-Stück Ø 25mm-M14x1,5-25mm Messing
31.20.02.006	Schlauchverbinder T-Stück Ø 20mm-M14x1,5-20mm
31.20.02.013	Schlauchverbinder T-Stück Ø 25/08/25mm VA
31.20.02.014	Schlauchverbinder T-Stück Ø 60/08/60mm VA
31.20.02.021	Schlauchverbinder T-Stück Ø 50/16/50mm VA
31.20.02.022	Schlauchverbinder T-Stück Ø 20/20mm/ 3/8"
31.20.02.023	Schlauchverbinder T-Stück Ø 50/25/50mm VA
31.20.02.049	Schlauchverbinder T-Stück Ø 08/08/08mm VA
31.20.02.050	Schlauchverbinder T-Stück Ø 20/16/20mm VA
31.20.02.051	Schlauchverbinder T-Stück Ø 20/20/20mm VA
31.20.02.052	Schlauchverbinder T-Stück Ø 20/30/20mm VA
31.20.02.053	Schlauchverbinder T-Stück Ø 25/25/25mm VA
31.20.02.054	Schlauchverbinder T-Stück Ø 30/30/30mm V4A
31.20.02.055	Schlauchverbinder T-Stück Ø 40/16/40mm VA
31.20.02.057	Schlauchverbinder T-Stück Ø 12/12/12 mm VA
31.20.02.058	Schlauchverbinder T-Stück Ø 16/16/16 mm V4A
31.20.02.059	Schlauchverbinder T-Stück Ø 20/08/20mm VA
31.20.02.060	Schlauchverbinder T-Stück Ø 20/16/20mm VA
31.20.02.061	Schlauchverbinder T-Stück Ø 25/10/25mm VA
31.20.02.062	Schlauchverbinder T-Stück Ø 25/16/25mm VA
31.20.02.063	Schlauchverbinder T-Stück Ø 30/08/30mm VA
31.20.02.064	Schlauchverbinder T-Stück Ø 30/16/30mm VA
31.20.02.065	Schlauchverbinder T-Stück Ø 50/08/50mm VA

# Marine and vehicle applications

## 2.5 OPTIONAL ACCESSORIES

### T-Stück

31.20.02.066	Schlauchverbinder T-Stück Ø 25/25mm/ 3/8
31.20.02.067	Schlauchverbinder T-Stück Ø 30/30mm/ 3/8
31.20.02.068	Schlauchverbinder T-Stück Ø 40/40mm/ 3/8
31.20.02.069	Schlauchverbinder T-Stück Ø 30/30mm/ 1xM14x1,5
31.20.02.070	Schlauchverbinder T-Stück Ø 20/20mm/ 1xM22x1,5
31.20.02.071	Schlauchverbinder T-Stück Ø 20/20mm/ 2xM22x1,5
31.20.02.072	Schlauchverbinder T-Stück Ø 25/25mm/ 1xM22x1,5



T-piece



## 2.5 OPTIONAL ACCESSORIES

## Marine and vehicle applications



Threaded fitting

### Threaded fitting

Materials: stainless steel

#### Schraubfitting

32.10.06.002	Schraubfitting Muffe Ms 1/4" Innengewinde x 1/4" Innengewinde
32.10.06.004	Schraubfitting Muffe Ms 1/2" Innengewinde x 1/2" Innengewinde
32.10.06.005	Schraubfitting Muffe Ms 3/4" Innengewinde x 3/4" Innengewinde
32.10.06.006	Schraubfitting Muffe Ms 1" Innengewinde x 1" Innengewinde
32.10.06.007	Schraubfitting Muffe Ms 1-1/4" Innengewinde x 1-1/4" Innengewinde
32.10.06.008	Schraubfitting Muffe Ms 1-1/2" Innengewinde x 1-1/2" Innengewinde
32.10.06.009	Schraubfitting Muffe Ms 2" Innengewinde x 2" Innengewinde
32.10.06.001	Schraubfitting Muffe Ms 2 1/2" Innengewinde x 2 1/2" Innengewinde

# Marine and vehicle applications

## 2.5 OPTIONAL ACCESSORIES

### 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.

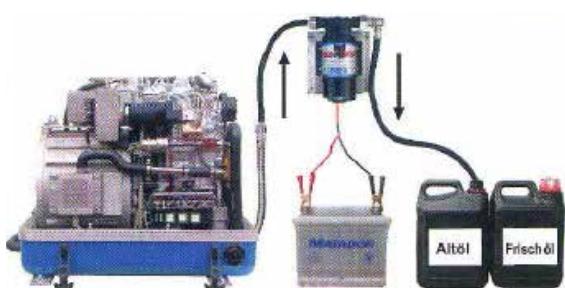


Electrical oil change pump

(Figures shows unit with bracket and connecting line)

#### 12 V Ölwechselpumpe Oilmaster (ohne Halterung und Anschlussleitung)

36.03.01.025 Impellerpumpe Mini-Puppy 12V DC



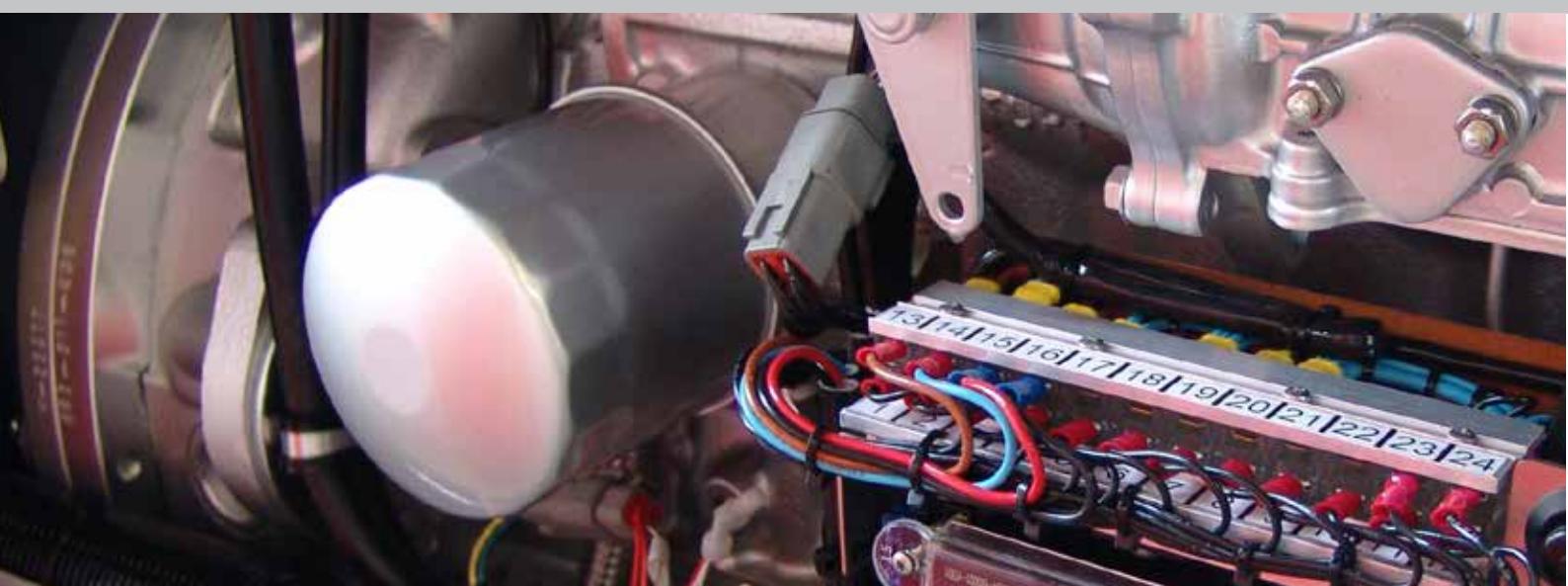
Suctioning off used oil



Refilling fresh oil

## 2.6 SERVICE KITS

## Marine and vehicle applications



### Standard Service Kits

- Standard Kits 1 to 17

### Service Kits Plus

- Service Kits Plus 1 to 29

## Service Kits

**Service Kits - original parts only**

*Power*

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.

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Standard Service Kits

#### Standard service kits 1 to 17

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



### Service Kits Plus

#### Service Kits Plus 1 to 29

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



## 2.6 SERVICE KITS

## Marine and vehicle applications

### 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 (temperature proof)
- 1 x impeller kit (with gasket)

##### for Panda marine gensets

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

#### Service Kit 1

21.03.10.001

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 (temperature proof)
- 1 x impeller kit (with gasket)

##### for Panda marine gensets

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

#### Service Kit 2

21.03.10.002

Service Kit 2

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit 3

#### Contents

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

#### for Panda marine gensets

(PMS)

- 6000 / 6000i
- 8000 / 8000i
- 9000
- AGT5000
- AGT6000



Service Kit 3

#### Service Kit 3

21.03.10.003 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 (temperature proof)  
1 x impeller kit (with gasket)

#### for Panda marine gensets

(PMS)

- 12.000
- 14.000
- AGT 8.000



Service Kit 4

#### Service Kit 4

21.03.10.004 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 (temperature proof)  
1 x Impeller kit (with gasket)

#### for Panda marine gensets

(PMS)

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



Service Kit 5

#### Service Kit 5

21.03.10.005P Service Kit 5

## 2.6 SERVICE KITS



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

21.03.10.006	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

21.03.10.007	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 (temperature proof)

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

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

### Service Kit 8

21.03.10.008	Service Kit 8
--------------	---------------

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit 9

#### Contents

1 x oil filter  
1 x fuel filter  
1 x air filter  
1 x V-belt (temperature 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

#### Service Kit 9

21.03.10.009 Service Kit 9

### Service Kit 10

#### Contents

1 x oil filter  
1 x fuel filter  
1 x air filter  
1 x V-belt (temperature 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

#### Service Kit 10

21.03.10.010 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  
(PMS)

- 4000s



Picture similar

Service Kit 11

#### Service Kit 11

21.03.10.043 Service Kit 11

## 2.6 SERVICE KITS

# Marine and vehicle applications



Picture similar

Service Kit 12



Picture similar

Service Kit 13



Picture similar

Service Kit 14

### 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  
(PMS)

- 4000 Eco

### Service Kit 12

21.03.10.047 Service Kit 12

### Service Kit 13

#### Contents

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

for Panda marine gensets  
(PMS)

- 8 „mini“

### Service Kit 13

21.03.10.049 Service Kit 13

### Service Kit 14

#### Contents

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

for Panda marine gensets  
(PMS)

- 10.000
- 10.000i

### Service Kit 14

21.03.10.055 Service Kit 14

# Marine and vehicle applications

## Service Kit 15

### Contents

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

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

■ 10.000



Picture similar

### Service Kit 15

21.03.10.058 Service Kit 15

Service Kit 15

## Service Kit 16

### Contents

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

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

■ 10.000i



Picture similar

### Service Kit 16

21.03.10.059 Service Kit 16

Service Kit 15

## Service Kit 17

### Contents

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

for Panda marine gensets  
(PMS)

■ 12 „mini“



Picture similar

### Service Kit 14

21.03.10.052 Service Kit 17

Service Kit 14

## 2.6 SERVICE KITS

# Marine and vehicle applications

## Service Kits Plus

### Service Kits Plus 1 to 29

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.

### Service Kit Plus 1

#### Contents

for Panda marine gensets  
(PMS)

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

- 4000i
- 5000i



Plus service kit 1

#### Service Kit Plus 1

21.03.10.011P

Service Kit Plus 1

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit Plus 2

#### Contents

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

#### for Panda marine gensets (PMS)

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



Plus service kit 2

#### Service Kit Plus 2

21.03.10.012P	Service Kit Plus 2
---------------	--------------------

### Service Kit Plus 3

#### Contents

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

#### for Panda marine gensets (PMS)

- 5000 LPE
- AGT 4000



Plus service kit 3

#### Service Kit Plus 3

21.03.10.013P	Service Kit Plus 3
---------------	--------------------

## 2.6 SERVICE KITS

## Marine and vehicle applications



Plus service kit 4

### Service Kit Plus 4

#### Contents

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

for Panda marine gensets

(PMS)

**up to serial No. C02-034-061**

- 6000
- 8000
- AGT 5000
- AGT 6000

### Service Kit Plus 4

21.03.10.014P

Service Kit Plus 4



Plus service kit 5

### Service Kit Plus 5

#### Contents

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

for Panda marine gensets

(PMS)

**up to serial No. C02-034-062**

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

### Service Kit Plus 5

21.03.10.015P

Service Kit Plus 5

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit Plus 6

#### Contents

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

#### for Panda marine gensets

(PMS)

**up to serial No. C04-025-094**

- 9000
- 12000
- 14000
- AGT 8000



Plus service kit 6

#### Service Kit Plus 6

21.03.10.016P

Service Kit Plus 6



### Service Kit Plus 7

#### Contents

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

#### for Panda marine gensets

(PMS)

**up to serial No. C04-025-095**

- 9000
- 12000
- 14000
- AGT 8000



Plus service kit 7

#### Service Kit Plus 7

21.03.10.017P

Service Kit Plus 7

## 2.6 SERVICE KITS

## Marine and vehicle applications



Plus service kit 8

### Service Kit Plus 8

#### Contents

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

for Panda marine gensets  
(PMS)

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

### Service Kit Plus 8

21.03.10.018P

Service Kit Plus 8



Plus service kit 9

### Service Kit Plus 9

#### Contents

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

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

- 4000i
- 5000i

### Service Kit Plus 9

21.03.10.019P

Service Kit Plus 9

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit Plus 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 fuse 25 A
- 3 x car relay
- 1 x plastic bag, white

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

■ 4,5



Plus service kit 10

#### Service Kit Plus 10

21.03.10.020P Service Kit Plus 10



### Service Kit Plus 11

#### Contents

- 4 x fuel filter
- 4 x Filter element for air filter
- 2 x valve cover gasket
- 3 x flat car fuse 15 A
- 3 x flat car fuse 25 A
- 3 x car relay
- 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

#### Service Kit Plus 11

21.03.10.021P Service Kit Plus 11

## 2.6 SERVICE KITS

## Marine and vehicle applications



Plus service kit 12

### Service Kit Plus 12

#### Contents

- 5 x oil filter
- 4 x fuel filter (in metal case)
- 4 x air filter
- 4 x V-belt (temperature-proof)
- 2 x valve cover gasket
- 3 x flat car fuse 15 A
- 3 x flat car fuse 25 A
- 3 x car relay
- 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

### Service Kit Plus 12

21.03.10.022P

Service Kit Plus 12



### Service Kit Plus 13

#### Contents

- 5 x oil filter
- 4 x fuel filter (in metal case)
- 4 x air filter
- 4 x V-belt (temperature-proof)
- 2 x valve cover gasket
- 3 x flat car fuse 15 A
- 3 x flat car fuse 25 A
- 3 x car relay
- 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

### Service Kit Plus 13

21.03.10.023P

Service Kit Plus 13

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit Plus 14

#### Contents

5 x oil filter  
4 x fuel filter (in metal case)  
4 x air filter  
4 x V-belt (temperature-proof)  
2 x valve cover gasket  
3 x flat car fuse 15 A  
3 x flat car fuse 25 A  
3 x car relay  
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

#### Service Kit Plus 14

21.03.10.024P

Service Kit Plus 14



### Service Kit Plus 15

#### Contents

5 x oil filter  
4 x fuel filter (in metal case)  
4 x air filter  
4 x V-belt (temperature-proof)  
2 x valve cover gasket  
3 x flat car fuse 15 A  
3 x flat car fuse 25 A  
3 x car relay  
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

#### Service Kit Plus 15

21.03.10.025P

Service Kit Plus 15

## 2.6 SERVICE KITS

## Marine and vehicle applications



Plus service kit 16

### Service Kit Plus 16

#### Contents

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

for Panda vehicle gensets

(PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

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

### Service Kit Plus 16

21.03.10.026P

Service Kit Plus 16



Plus service kit 17

### Service Kit Plus 17

#### Contents

- 5 x oil filter
- 4 x fuel filter (in metal case)
- 4 x air filter
- 4 x V-belt (temperature-proof)
- 2 x valve cover gasket
- 3 x flat car fuse 15 A
- 3 x flat car fuse 25 A
- 3 x car relay
- 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

### Service Kit Plus 17

21.03.10.027P

Service Kit Plus 17

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit Plus 18

#### Contents

5 x oil filter  
4 x fuel filter (in metal case)  
4 x air filter  
4 x V-belt (temperature-proof)  
2 x valve cover gasket  
3 x flat car fuse 15 A  
3 x flat car fuse 25 A  
3 x car relay  
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

#### Service Kit Plus 18

21.03.10.028P Service Kit Plus 18



### Service Kit Plus 19

#### Contents

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

#### for Panda marine gensets

(PMS)

- 24
- 30
- 12-4



Plus service kit 19

#### Service Kit Plus 19

21.03.10.029P Service Kit Plus 19

## 2.6 SERVICE KITS

## Marine and vehicle applications



Picture similar

Service Kit Plus 20

### Service Kit Plus 20

#### Contents

for Panda marine gensets  
(PMS)

■ 4000s

- 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 fuse 15 A
- 3 x car relay
- 1 x plastic bag, white

### Service Kit Plus 20

21.03.10.046P Service Kit Plus 20



Picture similar

Service Kit Plus 21

### Service Kit Plus 21

#### Contents

for Panda marine gensets  
(PMS)

■ 4000 Eco

- 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 fuse 15 A
- 3 x car relay
- 1 x plastic bag, white

### Service Kit Plus 21

21.03.10.048P Service Kit Plus 21

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit Plus 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 fuse 15 A  
3 x flat car fuse 25 A  
3 x car relay  
1 x plastic bag, white

for Panda marine gensets  
(PMS)

up to serial No. C02-034-061

■ 8 „mini“



Picture similar

Service Kit Plus 22

### Service Kit Plus 22

21.03.10.050P | Service Kit Plus 22

### Service Kit Plus 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 fuse 15 A  
3 x flat car fuse 25 A  
3 x car relay  
1 x plastic bag, white

for Panda marine gensets  
(PMS)

for serial No. C02-034-062  
and up

■ 8 „mini“



Picture similar

Service Kit Plus 23

### Service Kit Plus 23

21.03.10.051P | Service Kit Plus 23

## 2.6 SERVICE KITS

## Marine and vehicle applications



Picture similar

Service Kit Plus 24

### Service Kit Plus 24

#### Contents

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

for Panda marine gensets  
(PMS)

■ 10.000



Picture similar

Service Kit Plus 25

### Service Kit Plus 25

#### Contents

- 5 x oil filter
- 4 x fuel filter
- 4 x filter element for air filter
- 4 x V-belt (temperature-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  
(PMS)

■ 10.000i

### Service Kit 25

21.03.10.057P Service Kit Plus 25

# Marine and vehicle applications

## 2.6 SERVICE KITS

### Service Kit Plus 26

#### Contents

- 5 x oil filter
- 4 x fuel filter
- 4 x air filter
- 4 x V-belt (temperature-proof)
- 2 x valve cover gasket
- 3 x flat car fuse 15 A
- 3 x flat car fuse 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



Picture similar

Service Kit Plus 26

### Service Kit 26

21.03.10.060P Service Kit Plus 26



### Service Kit Plus 27

#### Contents

- 5 x oil filter
- 4 x fuel filter
- 4 x air filter
- 4 x V-belt (temperature-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



Picture similar

Service Kit Plus 27

### Service Kit 27

21.03.10.061P Service Kit Plus 27

## 2.6 SERVICE KITS

## Marine and vehicle applications



Picture similar

Service Kit Plus 28

### Service Kit Plus 28

#### 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 fuse 15 A
- 3 x flat car fuse 25 A
- 3 x car relay
- 1 x plastic bag, white

for Panda marine gensets  
(PMS)

up to serial No. C04-025-094

- 12 „mini“



Picture similar

Service Kit Plus 29

### Service Kit 28

21.03.10.053P | Service Kit 28

#### 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 fuse 15 A
- 3 x flat car fuse 25 A
- 3 x car relay
- 1 x plastic bag, white

for Panda marine gensets  
(PMS)

from serial No. C04-025-095  
and up

- 12 „mini“

### Service Kit 29

21.03.10.054P | Service Kit 29

## Reference tables for service and installation kits

### Panda marine AC gensets (PMS)

Generator type	Service kit	Plus service kit	Installation kit Basic	Installation kit Premium	Shock-mount, captive	Shock-mount, non-captive
<b>i series with variable R.P.M.</b>						
Panda PMS 4000i / 5000i	21.03.10.001	21.03.10.011	21.03.04.080	21.03.04.057	32.30.01.002	32.30.02.014
Panda PMS 4800i	21.03.10.044	21.03.10.045	21.03.04.080	21.03.04.057	32.30.01.002	32.30.02.014
Panda PMS 6000i / 8000i	21.03.10.003	21.03.10.015	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 10000i	21.03.10.055	21.03.10.057	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 15000i	upon request	21.03.10.042	21.03.04.080	21.03.04.057	32.30.01.008	32.30.02.020
Panda PMS 25i	21.03.10.005	21.03.10.029	21.03.04.055	21.03.04.057	32.30.01.009	32.30.02.020
Panda PMS 45i	upon request	upon request	upon request	upon request	upon request	upon request
<b>with Mini-VCS voltage regulation</b>						
Panda PMS 6500	21.03.10.049	21.03.10.051	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 9 Mini	upon request	upon request	upon request	upon request	upon request	upon request
<b>3000 / 3600 R.P.M.</b>						
Panda PMS 3,8 ND	21.03.10.002	21.03.10.012	21.03.04.046	21.03.04.056	32.30.01.002	32.30.02.014
Panda PSM 4000s	21.03.10.043	21.03.10.046	21.03.04.080	21.03.04.057	32.30.01.002	32.30.02.014
Panda PMS 4000 Eco	21.03.10.047	21.03.10.048	21.03.04.080	21.03.04.057	32.30.01.002	32.30.02.014
Panda PMS 4200	21.03.10.002	21.03.10.012	21.03.04.046	21.03.04.056	32.30.01.002	32.30.02.014
Panda PMS 4,5	21.03.10.002	21.03.10.012	21.03.04.046	21.03.04.056	32.30.01.002	32.30.02.014
Panda PMS 4500 SC/FC	21.03.10.002	21.03.10.012	21.03.04.046	21.03.04.056	32.30.01.002	32.30.02.014
Panda PMS 5000 LPE	21.03.10.001	21.03.10.013	21.03.04.080	21.03.04.057	32.30.01.002	32.30.02.020
Panda PMS 6000 =< C02-034-061	21.03.10.003	21.03.10.014	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 6000 => C02-034-062	21.03.10.003	21.03.10.015	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 8 mini =< C02-034-061	21.03.10.049	21.03.10.050	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 8 mini => C02-034-062	21.03.10.049	21.03.10.051	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 8000 =< C02-034-061	21.03.10.003	21.03.10.014	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 8000 => C02-034-062	21.03.10.003	21.03.10.015	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 9000 =< C04-025-094	21.03.10.003	21.03.10.016	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 9000 => C04-025-095	21.03.10.003	21.03.10.017	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 10 mini	upon request	upon request	upon request	upon request	upon request	upon request
Panda PMS 10000	21.03.10.055	21.03.10.056	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 12 mini =< C04-025-094	21.03.10.052	21.03.10.053	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 12 mini => C04-025-095	21.03.10.052	21.03.10.054	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 12000 =< C04-025-094	21.03.10.004	21.03.10.016	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
Panda PMS 12000 => C04-025-095	21.03.10.004	21.03.10.017	21.03.04.080	21.03.04.057	32.30.01.004	32.30.02.020
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	21.03.10.016	21.03.04.080	21.03.04.057	32.30.01.008	32.30.02.020

Fischer Panda Accessories

Generator type	Service kit	Plus service kit	Installation kit Basic	Installation kit Premium	Shock-mount, captive	Shock-mount, non-captive
Panda PMS 14000 >= C05-014-006	21.03.10.004	21.03.10.017	21.03.04.080	21.03.04.057S	32.30.01.008	32.30.02.020H
Panda PMS 15000	upon request	upon request	21.03.04.080	21.03.04.057	32.30.01.008	32.30.02.020
Panda PMS 16 / PMS 16 digital	upon request	upon request	21.03.04.055	21.03.04.067	32.30.01.009	32.30.02.020
Panda PMS 18	21.03.10.005	21.03.10.018	21.03.04.055	21.03.04.067	32.30.01.009	32.30.02.020
Panda PMS 22 / PMS 22 digital			21.03.04.055	21.03.04.067	32.30.01.009	32.30.02.020
Panda PMS 24	21.03.10.005	21.03.10.029	21.03.04.055	21.03.04.067	32.30.01.009	32.30.02.020
Panda PMS 30	21.03.10.005	21.03.10.029	21.03.04.016	21.03.04.017	32.30.01.009	32.30.02.020
Panda PMS 30 IC	21.03.10.005	21.03.10.029	21.03.04.016	21.03.04.017	32.30.01.009	32.30.02.020
Panda PMS 32	-	-	21.03.04.016	21.03.04.017	upon request	-
Panda PMS 45	-	-	-	-	upon request	-
Panda PMS 50	-	-	21.03.04.018	21.03.04.019	upon request	-
Panda PMS 65	-	-	-	21.03.04.028	upon request	-
Panda PMS 75	-	-	-	-	upon request	-
<b>1500 / 1800 R.P.M.</b>						
Panda PMS 7,5-4	21.03.10.005	21.03.10.018	21.03.04.055	21.03.04.057	32.30.01.009	32.30.02.020
Panda PMS 9-4	21.03.10.005	21.03.10.018	21.03.04.055	21.03.04.057	32.30.01.009	32.30.02.020
Panda PMS 12-4	21.03.10.005	21.03.10.029	21.03.04.055	21.03.04.057	32.30.01.009	32.30.02.020
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	-	-	21.03.04.029	21.03.04.021	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 Basic	Installation kit Premium	Shock-mount, captive	Shock-mount, non-captive
Panda PMS AGT 4000-12V	21.03.10.001	21.03.10.013	21.03.04.080	F2IKV02.P06	32.30.01.002	32.30.02.014
Panda PMS AGT 4000-24V	21.03.10.001	21.03.10.013	21.03.04.080	F2IKV02.P06	32.30.01.002	32.30.02.014
Panda PMS AGT 5000-12V <= C02-034-061	21.03.10.003	21.03.10.014	21.03.04.080	F2IKV02.P06	32.30.01.004	32.30.02.020
Panda PMS AGT 5000-12V >= C02-034-062	21.03.10.003	21.03.10.015	21.03.04.080	F2IKV02.P06	32.30.01.004	32.30.02.020
Panda PMS AGT 6000-24V <= C02-034-061	21.03.10.003	21.03.10.014	21.03.04.080	F2IKV02.P06	32.30.01.004	32.30.02.020
Panda PMS AGT 6000-24V >= C02-034-062	21.03.10.003	21.03.10.015	21.03.04.080	F2IKV02.P06	32.30.01.004	32.30.02.020
Panda PMS AGT 8000-24V <= C04-025-094	21.03.10.004	21.03.10.016	21.03.04.080	F2IKV02.P06	32.30.01.004	32.30.02.020
Panda PMS AGT 8000-24V >= C04-025-095	21.03.10.004	21.03.10.017	21.03.04.080	F2IKV02.P06	32.30.01.004	32.30.02.020
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	21.03.04.055	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	21.03.04.016	21.03.04.017	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 Basic	Installation kit Premium	Shock-mount, captive	Shock-mount, non-captive
<i>i series with variable R.P.M.</i>						
Panda 4000i	21.03.10.006	21.03.10.019	-	-	32.30.01.004	-
Panda 5000i	21.03.10.006	21.03.10.019	-	-	32.30.01.004	-
Panda 6000i	21.03.10.008	21.03.10.023	-	-	32.30.01.007	-
Panda 8000i	21.03.10.008	21.03.10.023	-	-	32.30.01.007	-
Panda 10000i	21.03.10.059	21.03.10.061				
Panda 15000i	21.03.10.008	-	-	-	32.30.01.008	-
<b>3000 / 3600 R.P.M.</b>						
Panda 4,5	21.03.10.007	21.03.10.020	-	-	32.30.01.004	-
Panda 5000 LPE	21.03.10.006	21.03.10.021	-	-	32.30.01.004	-
Panda 6000 SNo<= C02-034-061	21.03.10.008	21.03.10.022	-	-	32.30.01.007	-
Panda 6000 SNo>= C02-034-062	21.03.10.008	21.03.10.023	-	-	32.30.01.007	-
Panda 6500						
Panda 8000 SNo<= C02-034-061	21.03.10.008	21.03.10.022	-	-	32.30.01.007	-
Panda 8000 SNo>= C02-034-062	21.03.10.008	21.03.10.023	-	-	32.30.01.007	-
Panda 8 „mini“						
Panda 9000 SNo<= C04-025-094	21.03.10.008	21.03.10.024	-	-	32.30.01.007	-
Panda 9000 SNo>= C04-025-095	21.03.10.008	21.03.10.025	-	-	32.30.01.007	-
Panda 10000	21.03.10.058	21.03.10.60				
Panda 10 „mini“	upon request	upon request	-	-	upon request	-
Panda 12000 SNo<= C04-025-094	21.03.10.008	21.03.10.024	-	-	32.30.01.007	-
Panda 12000 NE SNo>= C04-025-095	21.03.10.008	21.03.10.025	-	-	32.30.01.007	-
Panda 12 „mini“						
Panda 14000 NE SNo<= C05-014-005	21.03.10.008	21.03.10.024	-	-	32.30.01.008	-
Panda 14000 NE SNo>= C05-014-006	21.03.10.008	21.03.10.025	-	-	32.30.01.008	-
Panda 15000	21.03.10.008	-	-	-	32.30.01.008	-
Panda 16						
Panda 18	21.03.10.009	21.03.10.026	-	-	32.30.01.009	-
Panda 22						
Panda 24	21.03.10.009	21.03.10.027	-	-	32.30.01.009	-
Panda 30 SNo<= E04-011-073	21.03.10.009	21.03.10.027	-	-	32.30.01.009	-
Panda 30 SNo>= E04-011-074	21.03.10.010	21.03.10.028	-	-	32.30.01.009	-
Panda 35	-	-	-	-	32.30.01.009	-
Panda 40	-	-	-	-		-
Panda 47	-	-	-	-	32.30.01.010	-
Panda 60	-	-	-	-		-

Generator type	Service kit	Plus service kit	Installation kit Basic	Installation kit Premium	Shock-mount, captive	Shock-mount, non-captive
Panda 65	-	-	-	-	32.30.01.012	-
Panda 75	-	-	-	-	32.30.01.012	-
Panda 100	-	-	-	-	32.30.01.012	-
<b>1500 / 1800 R.P.M</b>						
Panda 7,5-4	21.03.10.009	21.03.10.026	-	-	32.30.01.009	-
Panda 9-4	21.03.10.009	21.03.10.026	-	-	32.30.01.009	-
Panda 12-4 SNo<=E04-011-073	21.03.10.009	21.03.10.027	-	-	32.30.01.009	-
Panda 12-4 SNo>=E04-011-074	21.03.10.010	21.03.10.028	-	-	32.30.01.009	-
Panda 17-4	-	-	-	-	32.30.01.009	-
Panda 22-4	-	-	-	-	32.30.01.010	-
Panda 30-4	-	-	-	-	32.30.01.010	-
Panda 40-4	-	-	-	-	32.30.01.010	-
Panda 50-4	-	-	-	-	upon request	-
Panda 60-4	-	-	-	-	upon request	-
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 AGT (PVMV-N, PVM-NE, PVMH, PVK-U, PVK-UK)

Generator type	Service kit	Plus service kit	Installation kit Basic	Installation kit Premium	Shock-mount, captive	Shock-mount, non-captive
Panda AGT 4000-12V	21.03.10.006	21.03.10.021	-	-	32.30.01.004	-
Panda AGT 4000-24V	21.03.10.006	21.03.10.021	-	-	32.30.01.004	-
Panda 5000-12V <= C02-034-061	21.03.10.008	21.03.10.022	-	-	32.30.01.007	-
Panda 5000-12V >= C02-034-062	21.03.10.008	21.03.10.023	-	-	32.30.01.007	-
Panda 6000-24V <= C02-034-061	21.03.10.008	21.03.10.022	-	-	32.30.01.007	-
Panda 6000-24V >= C02-034-062	21.03.10.008	21.03.10.023	-	-	32.30.01.007	-
Panda 8000-24V <= C04-025-094	21.03.10.008	21.03.10.024	-	-	32.30.01.007	-
Panda 8000-24V >= C04-025-095	21.03.10.008	21.03.10.025	-	-	32.30.01.007	-
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>i-series with variable R.P.M.</i>					
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
<i>with mini VCS voltage regulation</i>					
Panda PMS 6500	20	20	40	8	8
Panda PMS 9 Mini	20	20	40	8	8
<b>3000 / 3600 R.P.M.</b>					
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
<b>Drehzahl 1500 / 1800 UpM</b>					
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
<b><i>i-series gensets with variable R.P.M.</i></b>				
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
<b>3000 / 3600 R.P.M.</b>				
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
<b>1500 / 1800 R.P.M.</b>				
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





#### Haftungsausschluß:

Alle technischen Daten wie Maßangaben, Leistungsdaten, Gewicht, Materialspezifikation usw. sind nur gültig, wenn sie eine ausdrückliche Bestätigung erhalten haben. Bei allen Angaben ist zu berücksichtigen, dass diese nur dem derzeitigen technischen Stand entsprechen können. Bei den Abmessungen handelt es sich um die Abmessungen des Schalldämmgehäuses. Überstehende Teile wie Verschlüsse, Fittings, U-Profil etc. sind nicht berücksichtigt. Der Besteller muss sich in jedem Einzelfall rückversichern, dass die Angaben mit seinen Vorgaben übereinstimmen. Alle Leistungsdaten beziehen sich auf Luft- und Wassertemperatur von 20°.

#### Disclaimer:

The information contained here is to the best of our knowledge accurate at the date of publication. Please note that the data in this publication reflects the technical state at time of print. Dimensions apply for the sound insulation capsule only and do not include latches, fittings etc. Additional room will need to be calculated for installation to include hoses, cables and capsule mountings. Additional components or alternators may also affect capsule dimensions. Due to our policy of continual product development, we reserve the right to alter technical specifications without notice. All performance data relates to air and water temperatures of 20°C unless otherwise stated.

