



Lloyd's
Register

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER Fischer Panda GmbH
Otto-Hahn-Straße 40
33104 Paderborn
Germany

DESCRIPTION Electrical power generation for marine recreation application

TYPE Panda i - Series
Panda x- Series
VCS

Description	Power (kVA)	Control system
Panda 5000i.Neo PMS	5	iControl
Panda 5000i PMS	5	iControl
Panda 8000i PMS	8	iControl
Panda 10000i PMS	10	iControl
Panda 15000i PMS	15	iControl
Panda 19i PMS	19	iControl
Panda 25i PMS	25	iControl
Panda 45i PMS	45	iControl
Panda 60i PMS	60	iControl
Panda 4000s .Neo PMS	4	xControl
Panda 8000x PMS	8	xControl
Panda 10000x PMS	9.4	xControl
Panda 12000x PMS	12	xControl

Certificate No. 18/20064
Issue Date 16 October 2018
Expiry Date 15 October 2023
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Jörn Brüggemann
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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Description	Power (kVA)	Control system
Panda 15000x PMS	15	xControl
Panda 18x PMS	18	xControl
Panda 24x PMS	24	xControl
Panda 30x PMS	30	xControl
Panda 30ICx	31,7	xControl
Panda 35-4x PMS	31,0	xControl
Panda 4K PMS	4,7	VCS
Panda 5K PMS	4,7	VCS
Panda 7 Mini PMS	6,0	VCS
Panda 8 Mini PMS	7,5	VCS
Panda 7.5-4 PMS	7,6	VCS
Panda 9-4 PMS	9,4	VCS
Panda 12 Mini PMS	11,5	VCS
Panda 12-4 PMS	12,4	VCS
Panda 12 Mini PMS	10,8	VCS
Panda 22-4 PMS	21,9	VCS
Panda 30-4 PMS	29,4	VCS
Panda 40-4 PMS	41,2	VCS
Panda 50-4 PMS	47,1	VCS
Panda 60-4 PMS	58,8	VCS
Panda 70-4 PMS	71,8	VCS
Panda 85-4 PMS	85,9	VCS
Panda 110-4 PMS	108,2	VCS
Panda 130-4 PMS	130,6	VCS

APPLICATION

Electrical power generation for marine recreation applications for use in category ENV1[Ⓢ] as defined in Lloyd's Register Type Approval System, Test Specification Number 1, July 2013.

ADDITIONAL TESTS

Ⓢ In divergence to Lloyd's Register Test Specification No.1 tests have been carried out in accordance with the following standards:
Vibration test, MIL-STD 810G, Method 514.6 Category 11- Railroad-train
Humidity test, MIL-STD 810G, Method 507.5, Procedure II, Aggravated

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Dry heat test, MIL-STD 810G, Method 501.5, Procedure I, Storage
Low Temperature test, MIL-STD 810G, Method 502.5

STANDARD

Manufacture Standard,
IEC 60092-504
IEC 60092-507

LIMITATIONS

These applications are not in accordance with the requirements of the Lloyd's Register Rules and Regulations. Therefore these applications are not suitable as Propulsion-, Auxiliary-, and/or Emergency power supply on Lloyd's Register classed ships.

PLACE OF PRODUCTION

Fischer Panda GmbH
Otto-Hahn-Straße 40
33104 Paderborn
Germany

Zakład Handlowo Usługowy
Zygmunt Zarna
Ul Tracka 5
PL-10364 Olsztyn
Poland

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 37440-18 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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