



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 Aerzener Maschinenfabrik GmbH
Reherweg 28
31855 Aerzen
Germany

DESCRIPTION Delta Blower unit consists of the main components Rotary Piston Blower stage, base frame, inlet and discharge silencer, safety valve, E-motor, V-belt-drive and control panel.
Delta Screw unit consists of the main components Screw Compressor stage, base frame, inlet and discharge silencer, safety valve, E-motor, coupling and control panel.
Delta Hybrid unit consists of main components Rotary Piston Compressor stage, base frame, inlet and discharge silencer, safety valve, E-motor, V-belt-drive and control panel.

TYPES Delta Blower:
GM 3 S, GM 4 S, GM 7 L, GM 10 S, GM 15 L, GM 25 S, GM 30 L, GM 35 S, GM 50 L, GM 60 S, GM 80 L, GM 90 S, GM 130 L, GM 150 S,
Delta Screw:
VM 45, VML 60, VM 75, VM 85, VML 95, VM 100, VM 140, VML 140, VML 150, VML 250,
Delta Hybrid:
D 12 H, D 12 S, D 17 L, D 24 H, D 24 S, D 28 L, D 36 H, D 36 S, D 46 L, D 62 H, D 62 S, D 75 L, D 98 H, D 98 S, D 152 H, D152 S

APPLICATION Supply of low pressure, oil free air for non-essential systems in ships classed or intended for Classification with Lloyd's Register.

Certificate No. 16 / 20081
Issue Date 24 August 2016
Expiry Date 23 August 2021
Sheet 1 of 2

 Lloyd's Register
Torsten Schröder
Hamburg Technical Support Office
Lloyd's Register EMEA
LR031.1.2015.12

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Lloyd's
Register

STANDARD Lloyd's Register Rules and Regulations for the Classification of Ships, January 2016

RATINGS	Type	Capacity	E-Motor	Difference pressure
	Delta Blower	30 – 15000 cbm/h	1,5 to 355 kW	up to 1,0 bar
	Delta Screw	770 - 15000 cbm/h	55 to 800 kW	up to 3,5 bar
	Delta Hybrid	110 – 9000 cbm/h	37 to 315 kW	up to 1,5 bar

OTHER CONDITIONS The manufacturer's installation instructions are to be sought.

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/ENS 34907-16 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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