

Approval Certificate

Certificate No. 74016-09 HH

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This is to certify that the undernoted engine manufacturer has been approved in accordance with the relevant requirements of the GL Approval System

Engine Manufacturer	AB Volvo Penta 41715 Göteborg, Sweden						
Place of engine built	Deutz AG Köln-Porz (Eil), Germany						
Product	Diesel Engine						
Engine Series / Type	D5A-BTA						
Technical Data							
No. of Cylinders	4	4	4	4	4	4	4
Cylinder Diameter [mm]	108	108	108	108	108	108	108
Stroke [mm]	130	130	130	130	130	130	130
Rated Power [kW/Cylinder]	22.75	25	25.75	27.5	29.5	24.25	26.25
Rated Speed [1/min]	1500	1800	1900	2100	2300	1500	1800
Max. Firing Pressure [bar]	129	129	129	129	129	129	129
Application	Propulsion	Propulsion	Propulsion	Propulsion	Propulsion	Auxiliary	Auxiliary
Approval Standard	GL-Regulations for Mass Produced Engines, July 1987						
GL-Registration No.	SM - 310						
Approval Documents	08-109584, 78031/01						

Hamburg, 2009-02-16

This Certificate is valid from

Germanischer Lloyd

R. Michael

2009-02-16 until 2014-03-03

The latest edition of the General Terms and Conditions of Germanischer Llyod is applicable. German law applies.