



Type Approval Certificate Extension

This is to certify that Certificate No. 03/20006 (E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	AB Volvo Penta 40508 Gothenburg Sweden	
	DEUTZ AG Plant Ulm-Donautal Nicolaus-Otto-Strasse 25 89079 Ulm Germany	DEUTZ AG Plant Cologne-Porz Ottostrasse 1 51149 Köln Germany
DESCRIPTION	Four stroke, turbocharged and intercooled, trunk piston, in-line type internal combustion engine	
TYPES	D5A T, D5A TA & D5A-B TA D7A T, D7A TA, D7A-B TA, D7C TA & D7C-B TA	
APPLICATION	As prime and auxiliary drives on ships and offshore installation classed or intended for classification with Lloyd's Register.	
STANDARD	Lloyd's Register Rules and Regulations for the Classification of Ships (Edit. 2012)	

Certificate No.	03/20006 (E3)
Issue Date	12 March 2013
Expiry Date	19 February 2018
Sheet	1 of 5

Olaf Schmidt
Hamburg Design Support Office
Lloyd's Register EMEA

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RATINGS

Propulsion and
Auxiliary / Emergency

D5A T

Maximum firing pressure, bar : 129
Maximum continuous power rating : 95 kW at 2300 rpm
89 kW at 2100 rpm
83 kW at 1900 rpm
81 kW at 1800 rpm
74 kW at 1500 rpm

D5A TA

Maximum firing pressure, bar : 129
Maximum continuous power rating : 118 kW at 2300 rpm
110 kW at 2100 rpm
103 kW at 1900 rpm
100 kW at 1800 rpm
91 kW at 1500 rpm

D5A-B TA

Maximum firing pressure, bar : 129
Maximum continuous power rating : 118 kW at 2300 rpm
102 kW at 2300 rpm
103 kW at 1900 rpm
89 kW at 1900 rpm

D7A T

Maximum firing pressure, bar : 134
Maximum continuous power rating : 145 kW at 2300 rpm
134 kW at 2100 rpm
126 kW at 1900 rpm
123 kW at 1800 rpm
111 kW at 1500 rpm

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RATINGS

Propulsion and

Auxiliary / Emergency

D7A TA

Maximum firing pressure, bar

134

Maximum continuous power rating :

174 kW at 2300 rpm

162 kW at 2100 rpm

153 kW at 1900 rpm

149 kW at 1800 rpm

134 kW at 1500 rpm

D7A-B TA

Maximum firing pressure, bar :

134

Maximum continuous power rating

174 kW at 2300 rpm

148 kW at 2300 rpm

153 kW at 1900 rpm

130 kW at 1900 rpm

D7C TA

Maximum firing pressure, bar

134

Maximum continuous power rating :

195 kW at 2300 rpm

182 kW at 2100 rpm

169 kW at 1900 rpm

163 kW at 1800 rpm

142 kW at 1500 rpm

D7C-B TA

Maximum firing pressure, bar

134

Maximum continuous power rating :

195 kW at 2300 rpm

166 kW at 2300 rpm

182 kW at 2100 rpm

169 kW at 1900 rpm

146 kW at 1900 rpm

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03/20006 (E3)

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12 March 2013

Expiry Date

19 February 2018

Sheet

3 of 5

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RATINGS Auxiliary / Emergency	D5A T	
	Maximum firing pressure, bar	129
	Maximum continuous power rating	85 kW at 1800 rpm 81 kW at 1500 rpm
	D5A TA	
	Maximum firing pressure, bar	129
	Maximum continuous power rating	105 kW at 1800 rpm 97 kW at 1500 rpm
	D5A-B TA	
	Maximum firing pressure, bar	129
	Maximum continuous power rating	100 kW at 1800 rpm 92 kW at 1500 rpm
	D7A T	
	Maximum firing pressure, bar	134
	Maximum continuous power rating	128 kW at 1800 rpm 122 kW at 1500 rpm
	D7A TA	
	Maximum firing pressure, bar	129
	Maximum continuous power rating	155 kW at 1800 rpm 146 kW at 1500 rpm
	D7A-B TA	
	Maximum firing pressure, bar	129
	Maximum continuous power rating	148 kW at 1800 rpm 139 kW at 1500 rpm

Certificate No. 03/20006 (E3)

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Expiry Date 19 February 2018

Sheet 4 of 5

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"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. HMD 9659-03, Issue No. 3, dated 12.03.13 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 03/20006 (E2) to which this extension should be attached.

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Sheet	5 of 5

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