

Cummins Power Generation (UK) Ltd  
Unit 1, Stevern Way  
Reynolds Industrial Park  
Peterborough  
PE1 5EL

Attn. Noah Cotton

Date 18 July 2011  
Your ref  
Our ref LIV1100272

Dear Sir,

**Cummins Power Generation (UK) Ltd - 2002 LR Type Approval System  
CumminsOnan Brush / Brushless Marine Diesel Engine Generating Set**

We advise that Type Approval of the subject equipment has now been granted.

Please find enclosed for your attention, Type Approval Certificate No. 07/00001(E3), together with the associated Design Appraisal Document and List Entry.

The granting of the Certificate also covers the use of the Type Approval Mark.

We advise that the details of the List Entry are available on the LR web site [www.lr.org](http://www.lr.org)

On the first occasion you logon onto the site you will be requested to complete a dialogue box with the following information:

Name            Company Name            Email address

We draw your attention to the requirement for you to maintain a record of all complaints and remedial actions relative to the certified products.

Yours faithfully



Elizabeth Atherton  
Business Support Supervisor

Enc.

## Type Approval Certificate Extension

*This is to certify* that Certificate No. 07/00001(E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	Cummins Power Generation (UK) Ltd Unit 1, Stevern Way Reynolds Industrial Park Fengate Peterborough, PE1 5EL United Kingdom (UK)
<b>PLACE OF PRODUCTION</b>	Cummins Power Generation 1400 73rd Avenue NE Fridley Minnesota 55432 United States of America
<b>DESCRIPTION</b>	CumminsOnan Brush / Brushless Marine Diesel Engine Generating Set
<b>TYPES</b>	e-QD - MDK series (4 – 32 kW) <sup>(1)</sup> e-QD - MDD series (35 – 99 kW) <sup>(1)</sup>
	<i>(1) To satisfy the Lloyd's Register Rules for down-stream discrimination on fault conditions, the generators should be capable of maintaining, without damage, under steady-state short-circuit conditions a current of at least three times the full load rated current for a duration of at least two seconds.</i>
<b>APPLICATION</b>	Marine, offshore and industrial use
<b>SPECIFIED STANDARDS</b>	IEEE STANDARD 115-1995 "Test Procedure for synchronous Machines, Part 1, Acceptance and performance Testing"
<b>Certificate No.</b>	07/00001(E3)
<b>Issue Date</b>	7 July 2011
<b>Expiry Date</b>	3 February 2017
<b>Sheet</b>	1 of 3



A.M. Anderson  
London Design Support Office  
Lloyd's Register EMEA

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

**SPECIFICATIONS / RATINGS**

Insulation level: Class H, 180° C (Rotor, Stator and Exciter Windings where applicable)

TYPE	ENGINE	OUTPUT POWER (kW)	VOLTAGE (V)	FREQUENCY (Hz)	PHASES (Ø)
MDKBH	Kubota	5	120 / 240	60	1
MDKBH	Kubota	4	110/220/115/230/240	50	1
MDKBL	Kubota	9	120/240	60	1
MDKBL	Kubota	7	110/220/115/230/240	50	1
MDKBK	Kubota	9	120/240	60	1
MDKBK	Kubota	7	110/220/115/230/240	50	1
MDKBM	Kubota	11.5	120/240	60	1
MDKBM	Kubota	9.5	110/220/115/230/240	50	1
MDKBN	Kubota	13.5	120/240	60	1
MDKBN	Kubota	11	110/220/115/230/240	50	1
MDKBP	Kubota	17	120/240 120/208	60 60	1 3
MDKBP	Kubota	13.5 13.5	110/220/115/230/240 220/380	50 50	1 3
MDKBR	Kubota	21.5 21.5	120/240 120/208	60 60	1 3
MDKBR	Kubota	17.5 17.5	110/220/115/230/240 220/380	50 50	1 3
MDKBS / MDKBT	Kubota	27.5	120/240 120/208	60 60	1 3
MDKBS / MDKBT	Kubota	22.5 22.5	110/220/115/230/240 220/380	50 50	1 3
MDKBU	Kubota	32	120/240 120/208	60 60	1 3
MDKBU	Kubota	27 27	110/220/115/230/240 220/380	50 50	1 3
MDKBV	Kubota	23 23	120/240 120/208	60 60	1 3
MDKBV	Kubota	19 19	110/220/115/230 220/380	50 50	1 3

**Certificate No.** 07/00001(E3)  
**Issue Date** 7 July 2011  
**Expiry Date** 3 February 2017  
**Sheet** 2 of 3



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**SPECIFICATIONS / RATINGS (cont.)**

TYPE	ENGINE	OUTPUT POWER (kW)	VOLTAGE (V)	FREQUENCY (Hz)	PHASES (Ø)
MDDCA	John Deere	40	120 / 208	60	3
MDDCB	John Deere	55	120 / 208	60	3
MDDCC	John Deere	65	120 / 208	60	3
MDDCD	John Deere	80	120 / 208	60	3
MDDCE	John Deere	99	120 / 208	60	3
MDDCF	John Deere	40	220 / 380	50	3
MDDCG	John Deere	50	220 / 380	50	3
MDDCH	John Deere	65	220 / 380	50	3
MDDCJ	John Deere	80	220 / 380	50	3
MDDCK	John Deere	35	110/220 - 120/240 110/190 - 255/440	50	1 3

**OTHER CONDITIONS**

The Lloyd's Register Rules must be complied with when fitted on Lloyd's Register Classed Ships or Offshore Units.


*"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."*

All other details remain as indicated on Certificate No. 07/00001, 07/00001(E1) and 07/00001(E2) to which this extension should be attached.

The Design Appraisal Document No. 07/00001(E3) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 07/00001(E2) to which this extension should be attached.

**Certificate No.** 07/00001(E3)  
**Issue Date** 7 July 2011  
**Expiry Date** 3 February 2017  
**Sheet** 3 of 3



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Issue number 1

**DESIGN APPRAISAL DOCUMENT**

Date 7 July 2011	Quote this reference on all future communications LDSO/ETS/LIV1100272/TTP/AMA/WP4947895
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**LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.**

**Issued to: CUMMINS POWER GENERATION (UK) LTD**

**for: BRUSH / BRUSHLESS MARINE DIESEL ENGINE GENERATING SET**

**Types: MDK AND MDD SERIES**

**TYPE APPROVAL CERTIFICATE No. 07/00001(E3)**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

**APPROVAL DOCUMENTATION**

Request form	Undated
Cummins letter	22.11.2010
Cummins email confirming/clarifying TA procedure and type differences (MDDCK/MDDCF)	15.06.2011
Factory visit report CGO 1100010/1	27.11.2010
Specification Sheet MDDCF A-1469	Undated
Specification Sheet MDDCK A-1560	Undated

**Drawings**

CD prepared by Cummins	28.03.2011
Explanation of bill of materials (BOM) differences	Undated
BOP comparison datasheet	Undated
0200_3096 Generator assy (UCD22)	22.01.2004
0226_4924 Lead	05.08.2004
0320_2346 Circuit breaker (H-frame)	25.05.2007
0320_2347 Circuit breaker (J-frame)	02.05.2005
Circuit breaker selection table	01.11.2010

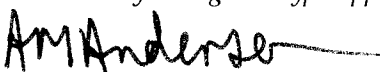
Also all the documentation listed on Design Appraisal Documents associated with Type Approval Certificate No. 07/00001, 07/00001(E1) and 07/00001(E2)

**Supplementary Type Approval Terms and Conditions**

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure*



A.M. Anderson  
London Design Support Office  
Lloyds Register EMEA

**Part 1B**  
**Subject: Main Electrical Generating Sets**  
**Product: Diesel Generating Sets (Part 1B)**

Description of Product				Cert. No.
Producer/Licence No.	Type	Details of Approval	Application	Remarks
Cummins Power Generation (UK) Ltd, Unit 1, Steverm Way, Reynolds Industrial Park, Fengate, Peterborough, PE1 5EL, United Kingdom (UK).	CumminsOnan e-QD - MDK series (4 – 32 kW) <sup>(1)</sup>  CumminsOnan e-QD - MDD series (35 – 99 kW) <sup>(1)</sup> <i>(1) Refer to Remarks Section</i>	Brush / Brushless Marine Diesel Engine Generating Set  Refer to Certificate for technical details	Marine Offshore and Industrial use	Expires: 3 February 2017  - Complies with IEEE STANDARD 115-1995 "Test Procedure for synchronous Machines, Part 1, Acceptance and performance Testing"  - The Lloyd's Register Rules must be complied with when fitted on Lloyd's Register Classed Ships or Offshore Units  <i>(1) To satisfy the Lloyd's Register Rules for down-stream discrimination on fault conditions, the generators should be capable of maintaining, without damage, under steady-state short-circuit conditions a current of at least three times the full load rated current for a duration of at least two seconds.</i>

AMA  
7/7/2011