



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 09/70004 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Green Instruments A/S
PLACE OF PRODUCTION	Erhvervsparken 29 DK-9700 Brønderslev Denmark
DESCRIPTION	Analyser for direct on-stack wet measuring of NO _x and Oxygen of exhaust gas emissions. The analyser has 2 analogue output signals 4-20mA, digital outputs for alarms and CAN-Bus for other interfaces; internal log of the last 360 values; full data and alarm logs in SD card. Back flushing of the stack gas probe can be controlled by the analyser.
TYPE	Analyser models, G4100 NO _x /O ₂ with ejector probe, or G4130 NO _x /O ₂ with diffusion probe comprising: analyser, sample/calibration board and gas probe. Both models exist in panel mounted and stand-alone versions of the analyzer.
APPLICATION	Marine, Offshore and Industrial applications suitable for use in environmental categories ENV1 and ENV2 as defined in LR Test Specification no.1: 2002, where the test specification is applicable for the service.
STANDARDS	Manufacturer's Specification IACS E10 Resolution MEPC.177(58) (NO _x Technical Code 2008) – sections 1.6.2 to 1.10 of appendix
Certificate No.	09/70004(E1)
Issue Date	09 December 2013
Expiry Date	08 February 2019
Sheet	1 of 2

Lloyd's Register EMEA
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MESURING RANGE

	Range	Accuracy	Repeatability
NOx:	0-1500ppm (F.S. = 1500ppm)	< 2 prc. of F.S	< 1 prc of F.S.
O2:	0-21.0% (F.S. = 21.0%)	< 2 prc. of F.S.	< 1 prc. of F.S.

RATINGS

Power supply: Un=90-230VAC (50/60Hz) or 20-30 VDC

OTHER CONDITIONS

Test of Software has been restricted to demonstration of correct functions during Type Approval testing

Latest Software version is 3.022


"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. TA09/70004(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 09/70004 to which this extension should be attached.

Certificate No. 09/70004(E1)
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Sheet 2 of 2

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