TYPE APPROVAL CERTIFICATE

Polish Register of Shipping certifies that the undernoted product type

OIL MIST DETECTION SYSTEM

GRAVINER MARK 7
(Mk 7)

issued to
Carrier Fire & Security Ltd
8 Newmarket Court
Chippenham Drive
Milton Keynes
MK10 0AQ
United Kingdom

manufactured by
UTC CCS Manufacturing Polska Sp. z o. o.
Ul. Kolejowa24
39-100 Ropczyce, Poland

is approved as complying with the requirements of the

PRS Rules and is suitable for use on board of ships classified by PRS or in appliances with PRS certificates.

Certificate No. **TE/1217/883023/20**

Expiry date **2025-10-05**

Issued at

Gdańsk, 2020-10-06

C/020/54

Signature

Polski Rejestr Statków S.A.
al. Gen. Józefa Hallera 126
80-416 Gdańsk, Poland

Tel. +(48) 58 346 17 00
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mailbox@prs.pl
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Continued overleaf

Technical data

Product description/purpose: System continuously monitors the oil mist concentration in air in the crankcase of a diesel engine and will signal an alarm if the value exceeds the limit.
System components: Control Unit, Detectors, Display Unit.

Control Unit part number (located on the inside of the lid)

1-53836-K270	OMD Mk7 Control Unit
1-53836-K270-01	OMD Mk7 Control Unit, Caterpillar
1-53836-K276	OMD Mk7 Control Unit – non-membrane

Detectors part number (located on the label wrapped around the detector head)

1-53836-K269	OMD Mk7 Detector
1-53836-K269-01	OMD Mk7 Detector – Short sample tube

Remote Display Unit part number (located on the back of the unit)

1-53836-K271	OMD Mk7 Remote Display Unit

Power supply rated voltage: 24V DC.
Control circuits rated voltage: 24V DC.
Max. permissible ambient temperature for all system components: +70°C.
Enclosure protection degree of system components:
Control unit and Detectors: IP65.
Display unit: IP32.
Max. number of detectors (for one Control Unit): 10.

Basis of approval

1. The technical documentation approved by PRS on 2020-12-10.
2. Reports from tests carried out acc. to PRS Publication 11/P (Ed. 01.2016), UR M67 rev. 2 and UR M10 rev. 4.
3. The Quality Management System Certificate No. FM 27122 issued by BSI Assurance UK.
4. The inspection of the production process and quality control system carried out on 2020-12-09.
5. PRS Survey Report No. TM/PU/1216/20 issued on 2020-12-10.
6. The previous PRS Type Approval Certificatc No. TE/2157/883023/17.

Additional conditions and remarks:

1. Line monitoring is to be provided for SLD/SHD circuit (self-check type) retaining fail-to-safety principle.
2. Fault relay circuit (NC contact) is to be also connected to Ship's AMS.
3. The basic functional tests of each system are to be carried out during engine tests (at the engine manufacturer workshop).
4. Each product is to be marked with: manufacturer name, part number.
5. The condition for maintain validity of this Certificate is to maintain validity of a.m. ISO9001 Certificate.

Notes

1 The approval is valid only when the product is used in accordance with the manufacturer's conditions.
2 Changes of product design and materials which influence product quality are to be agreed with PRS.
3 Type Approval Certificate will be cancelled in the case of dissatisfactory service results, modifications made in the product structure or materials without PRS' consent, not advising PRS of the manufacturer's name change.

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