Certificate No: LR2003694SS
Issue Date: 21/05/2020
Expiry Date: 31/05/2021

Software Conformity Certificate

This certificate is issued to

Manufacturer **AVAT Automation GmbH**

Address Derendinger Straße 40, Tübingen, 72072, Germany

Software: Overall application versions HM_2018_01 (HiMECS-DF_A) and HM_2019_05 (HiMECS-DF_A 2)

Control/Alarm Units (MC210) :

HiMECS-DF_A HM_2018_01 (HW Rev V2) : PLC Version: MECS 1.37
Package:HiMECS-DF-A-Control-1.3.4

HiMECS-DF_A2 HM_2019_05 (HW Rev V3) : PLC Version: MECS 1.21
Package:HiMECS-DF-A2-Control-1.2.0

Safety Unit (MX207) :

HiMECS-DF_A HM_2018_01 (HW Rev V2) : PLC Version: Safety Unit 1.33
Package:HiMECS-DF-A-Safety-1.4.2

HiMECS-DF_A2 HM_2019_05 (HW Rev V3) : PLC Version: Safety Unit 1.05
Package:HiMECS-DF-A2-Safety-1.0.6

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Joern Brügmann

Senior Surveyor in Charge Engineering to
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A member of the Lloyd's Register Group

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Remote Unit (MX213)

HiMECS-DF_A HM_2018_01 (HW Rev V2) : PLC Version: Remote Unit 1.10
Package: HiMECS-DF-A-Remote-1.1.1

HiMECS-DF_A2 HM_2019_05 (HW Rev V3) : PLC Version: Remote Unit 1.03
Package: HiMECS-DF-A-Remote-1.1.2

E2PRECON (Pressure Monitoring Application) :

HiMECS-DF_A HM_2018_01 : HHP113
HiMECS-DF_A2 HM_2019_05 : HHP118

Description: Application Software HiMECS-DF_A /-A2 (ACP & MCP) for Control, Monitoring and Safety Functions of Machinery Electric Control System for Hyundai H35DF Duel Fuel Engines

Operating Environment: Bachmann Electronics PLC and various communication and digital/analogue input/output modules covered by LR cert 10/20022(E3)

PLC Firmware on M1 series CPUs: MC210, MX207, MX213 /
MSys 4.02 Release MCore 4.02 Release for HiMeCS-DF-A1
MSys 4.36-# Release, MCore 4.36-1 Release for HiMeCS-DF-A2-C

E2PRECON-M covered by LR cert: 14/20077

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Software Conformity Certificate

Assessment Module: Software Conformity Assessment System – Module GEN1 (1994)

Qualifications: This certificate is valid for subsequent versions of the software, provided the modifications are performed using the change control process covered by this certification, and appropriate configuration management is maintained.

Major changes are to be notified to LR and documents submitted to demonstrate compliance with assessment criteria (i.e. changes that result in additional functionality or a wider scope of certification).

This certificate is valid only for the software mentioned herein and excludes software that has been developed outside the assessed development process.

Previous Version: This Software Conformity Assessment certificate supersedes SWC 18/20002 dated 01 June 2018.

The Design Appraisal Document No. HTS/ETS 36975-18 Issue No. 1 and its supplementary Software Conformity Assessment Terms and Conditions form part of this Certificate.

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