



Type Approval Certificate Extension

This is to certify that Certificate No. 05/20005 (E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Siemens AG Building Technologies BT CPS
PLACE OF PRODUCTION	Berliner Ring 23 76437 Rastatt Germany
DESCRIPTION	Microprocessor-based burner management system with integrated fuel-air-ratio control and load control, O2 trim control and flue gas recirculation options for forced draft burners.
TYPE	LMV5X System

Basic unit		LMV5X. ① XX(X)② XX Optional
Software: LMV51.../52.2... V 05.10 LMV50.../52.4... V 10.20		
LM		Burner control, microprocessor based
V		Can bus system, dual-and single-fuel burner for continuous or intermittent operation, depending on the type of flame detector, gas valve proving
5		Electronic fuel/air ratio control with up to 6 actuators
X	0	One to five actuators SQM45.../48...
	1	One to four actuators SQM45.../48...
	2	One to six actuators SQM45.../48...

Certificate No.	05/20005(E3)
Issue Date	23 April 2015
Expiry Date	23 January 2020
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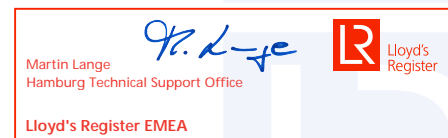
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TYPE (continued)

1 Auxiliary function/other features	0	None
<i>Software: V 02.10</i>	1	Integrated digital PID boiler temperature / pressure controller Adaptation of controller characteristics (PID) Temperature Limiter Automatic adaptation of controller characteristics according to operating mode (modulating/ multistage)
<i>Software: V 01.50</i>	2	Same as 1 (PID controller) plus variable speed drive and fuel counter connection facility
	3	Same as 2 plus flue gas recirculation function (FGR)
	4	Same as 3 plus temperature controlled FGR
XX		Intentionally left blank
(X) : Logistic tool		A...Z
2 Voltage/ frequency	1	AC 120V/ 50 - 60 Hz
	2	AC 230V / 50 - 60 Hz
XX		Intentionally left blank
Flame Detectors:		
Infrared flame detector for continuous operation		QRI(x)xx.xxxxx
(X)	2	Housing : polymeric material x = internal manufacturer's code description
or		
Flame detector photo diode for intermittent operation		QRBxx-xxxxxxxxx x = internal manufacturer's code description
or		
Ionization electrode for continuous operation		for gas operation preferably (according to manufacturer's specification)
or		
UV cell sensor		QRA7x.xxx x = internal manufacturer's code description

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TYPE (continued)

Actuators (1 to 6)		SQM4x.xxxxx
	<i>Software: V 01.60</i>	x = internal manufacturer's code description
Display and operating unit		AZL5x.xx(x)xxx
	<i>Software: V 05.00</i>	x = internal manufacturer's code description
		(x) : Logistic tool

APPLICATION Marine, offshore and industrial applications for use in environmental categories ENV1 and ENV2 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 2002.

DESIGN Manufacturer's specification.

RATING IP65 for QRA7X
IP54 for SQM4X and QRI
IP54 for AZL5X
IP00 for LMV5X

OTHER CONDITIONS Final arrangement of the system is to be in compliance with relevant Lloyd's Register Rules and Regulations.

"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. HTS/ETS 31567-15 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 05/20005(E2) to which this extension should be attached.

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