

Engine Control Unit MS 15.1

www.bosch-motorsport.com



- ▶ 8 injection output stages
- ▶ For solenoid injectors
- ▶ 60 data inputs

The MS 15.1 is an ECU for Diesel engines with up to 8 cylinders. It is developed for use with Bosch solenoid injectors.

Application

Engines with the following numbers of cylinders are supported:	3, 4, 5, 6, 8, <3 on request
Injector type	Solenoid injectors
Control strategy	Quantity based
Injection timing	2 pilot injections 2 main injections 1 post injection
Turbo boost control	Single or Bi-Turbo
Lambda measurement	
Traction control	Optional
Gear cut for sequential gearbox	
Speed limiter	
Optional function packages available	
Interface to Bosch Data Logging System	
Max. vibration	Vibration profile 1 (see Appendix or www.bosch-motorsport.com)

Technical Specifications

Mechanical Data

Aluminum housing	
4 connectors in motorsport technology with high pin density, 187 pins	
Vibration damped circuit boards	
8 housing fixation points	
Size	210 x 199 x 36 mm
Protection Classification	IP67 to DIN 40050, Section 9, Issue 2008
Weight	1,780 g
Temperature range	-20 to 85°C

Electrical Data

Power consumption w/o inj.	Approx. 5 W at 14 V
Power consumption	Approx. 140 W at 14 V

Inputs

2 inputs for thermocouple exhaust gas temperature sensors
2 lambda interfaces LSU
4 inputs for wheel speed sensors; basic design for inductive sensors

4 inputs for turbo speed sensors; basic design for inductive sensors

1 input for inductive crankshaft sensor

1 input for Hall-effect camshaft sensor

3 system inputs 0 to 5 V

13 universal inputs 0 to 5 V, fixed pull-up

27 universal inputs 0 to 5 V, switchable pull-up

3 digital inputs

Outputs

8 injection power stages

12 power stages (low side)

2 power stages for lambda heater

2 H-bridges

2 sensor supplies 5 V/system use

3 sensor supplies 5 V/300 mA

3 sensor supplies 10 V/100 mA

Software Tools

Modas Sport Calibration Software	Inclusive
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WinDarab Analysis Software	On request
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Optional Functionality

Traction control SW upgrade	F 02U V00 778-01
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Chassis SW upgrade	F 02U V00 779-01
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Two bank hydraulic control SW upgrade	F 02U V00 949-01
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Environment (not included)

Programming interface MSA-Box II	F 02U V00 327-03
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Data logger C 60	F 02U V00 875-03
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Display DDU 7	F 02U V01 130-04
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Display DDU 8	F 02U V00 873-05
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Mating Connectors (not included)

Mating Connector I AS 6-16-35 SN	F 02U 000 466-01
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Mating Connector II AS 6-16-35 SB	F 02U 000 468-01
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Mating Connector III AS 6-16-35 SC	F 02U 000 469-01
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Mating Connector IV AS 6-12-35 SD	F 02U 000 445-01
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Installation Notes

Internal battery for data preservation included.

Required service interval 12 months (internal battery is replaced).

Depending on your experiences with calibration of ECUs we recommend calibration support from Bosch Motorsport.

Please remember that the mating connectors and the programming interface MSA-Box II are not included and must be ordered separately.

Communication

3 CAN interfaces (dash, application, customer use)

2 FireWire interfaces for external communication

Ordering Information

Engine Control Unit MS 15.1

Order number **F 01T A20 022-01**

Software Options

SW Upgrade Traction Control

Order number **F 02U V00 778-01**

SW Upgrade Chassis

Order number **F 02U V00 779-01**

SW Upgrade Two Bank Hydraulic Control

Order number **F 02U V00 949-01**

Represented by:

Europe:
Bosch Engineering GmbH
Motorsport
Robert-Bosch-Allee 1
74232 Abstatt
Germany
Tel.: +49 7062 911 9101
Fax: +49 7062 911 79104
motorsport@bosch.com
www.bosch-motorsport.de

North America:
Bosch Engineering North America
Motorsport
38000 Hills Tech Drive
Farmington Hills, MI 48331-3417
United States of America
Tel.: +1 248 876 2977
Fax: +1 248 876 7373
motorsport@bosch.com
www.bosch-motorsport.com

Latin America:
Robert Bosch Ltda
Motorsport
Av Juscelino Kubitscheck de
Oliveira 11800
Zip code 81460-900
Curitiba - Parana
Brasilia
Tel.: +55 41 3341 2057
Fax: +55 41 3341 2779

Asia-Pacific:
Bosch Engineering Japan K.K.
Motorsport
18F Queen's Tower C, 2-3-5 Minato Mirai
Nishi-ku, Yokohama-shi
Kanagawa 220-6218
Japan
Tel.: +81 45 650 5610
Fax: +81 45 650 5611
www.bosch-motorsport.jp

Australia, New Zealand and South Africa:
Robert Bosch Pty. Ltd
Motorsport
1555 Centre Road
Clayton, Victoria, 3168
Australia
Tel.: +61 (3) 9541 3901
motor.sport@au.bosch.com