

Ignition Module IM 3.1 / 3.2

This ignition module IM is an external ignition power stage capable of supplying up to three non-transistorized ignition coils.

The IM input signal should be supplied by an ECU with ignition signal outputs in the range of 10 to 20 mA (e.g. MS 4 Sport/MS 4.4 Sport).

The IM unit combines the robustness of a high quality production part with good electrical performance to provide an ideal solution for adapting non-transistorized coils to an ECU without internal ignition driver stages.



IM 3.1 [1]

IM 3.2 [2]

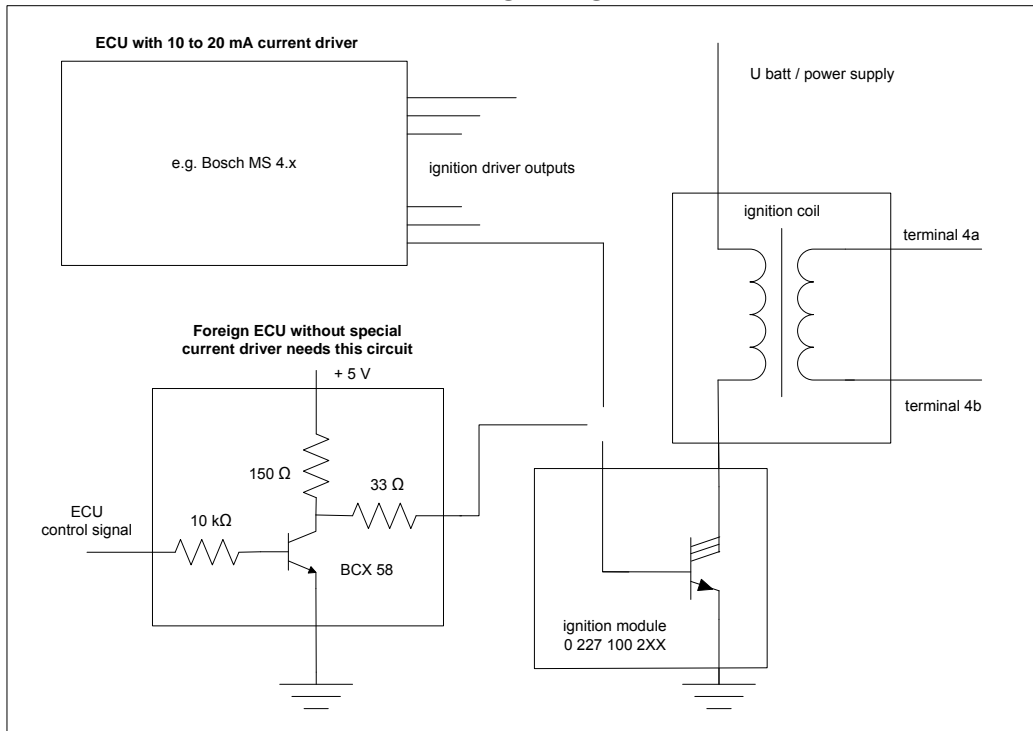
Application	
Primary current	≤ 8.5 A
Clamp voltage	380 V ±30 V
Operating temperature range @ measuring point	-40 ... 120 °C
Storage temperature range	-40 ... 130 °C
Max. vibration	400 m/s ² @ 5 ... 2,500 Hz

Electrical Data	
U _{Batt} typical	13.5 V
Voltage supply	6 ... 16.5 V
I _B high active on	min. 10 mA
I _B low off	0 mA
I _B	10 ... 22 mA
I _c typical	≤ 8.5 A
I _c max. @ T _U < 120 °C	< 10 A
U _{CE} satt @ I _c = 5 A	< 3 V
U _{CE} satt @ I _c max	< 9 V

Mechanical Data	
Size	[1] 70.5 x 68 x 20 mm [2] 71 x 48 x 21 mm
Weight w/o wire	47 g
Mounting	2 x M4 screws with spring washer

Characteristic	
Characteristic dwell time	see characteristic dwell time from the ignition coil used
Internal transistor	triple Darlington

Electronic circuit for connecting the ignition modules IM 3.1 / 3.2



Connectors

[1] Connector 1 Three Pin Connector @ 3.1

Connector	Bosch Jetronic 3-pin
Mating connector	D 261 205 289-01
Pin 1	Collector Transistor 1
Pin 2	Collector Transistor 2
Pin 3	Collector Transistor 3

[1] Connector 2 Four Pin Connector @ 3.1

Connector	Bosch Jetronic 4-pin
Mating connector	D 261 205 351-01
Pin 1	Basis Transistor 3
Pin 2	Gnd
Pin 3	Basis Transistor 2
Pin 4	Basis Transistor 1

[2] Connector 1 Seven Pin Connector @ 3.2

Connector	Bosch Jetronic 7-pin
Mating connector	F 02U B00 252-01
Pin 1	Collector Transistor 1
Pin 2	Basis Transistor 1
Pin 3	Collector Transistor 2
Pin 4	Gnd
Pin 5	Basis Transistor 2
Pin 6	Collector Transistor 3
Pin 7	Basis Transistor 3

Application Hint

The ignition modules 3.1 / 3.2 can be used with: Coil 2x2, 3x2, P35, P35-T and PS or comparable coils.

Please ensure that the connectors are safe from water.

The IM has to be mounted onto a cooling body. The mounting surface needs a planarity of 0.2 mm.

A heat conductive paste has to be used.

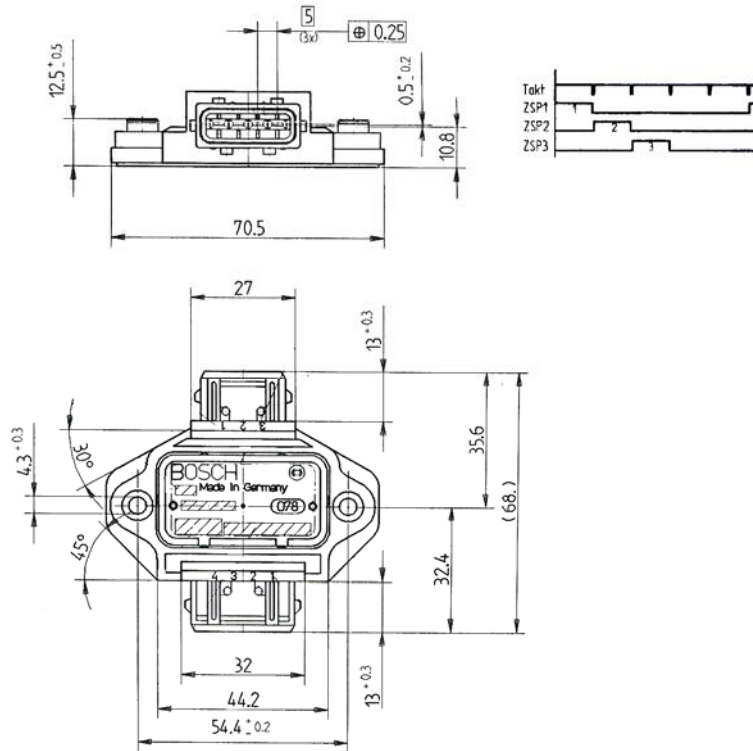
The IM 3.1 / 3.2 are designed for use with engine control units which have no integrated ignition transistor.

Please observe the specified limit values.

Please find further application hints in the offer drawing (<http://www.bosch-motorsport.com>).

Part Number

Ignition Module IM 3.1 [1]	0 227 100 209
Ignition Module IM 3.2 [2]	0 227 100 203

Dimensions IM 3.1

Dimensions IM 3.2
