

- ## 11. Unconnected

## IAW5AM pin connections

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12. Unconnected

13. Air pressure sensor APS.

The input is designed for various types of APS sensors used in motorcycles. It is designed to take voltage of 0 to 5 V. APS is powered by the means of reference voltage + 5 V and SENSE GND.

In case the APS is missing in the motorcycle system, the function of the air pressure sensing is taken over by the dashboard that sends the information to ECU through the medium of CANbus. In case both the APS as well as dashboard are missing, the unit sets the correction as if the air pressure is 100 kPa.

14. ATS air temperature sensor.

Option 1) The input is designed for standard thermosensors used in motorcycles. In these sensors the dependence of resistance on temperature is generally the same as in the case of the water temperature sensors.

Option 2) The input is used for sensing of the gearbox neutral position, in this case the atmospheric air temperature values are received by the unit from the dashboard after the CANbus.

*Corsaro: Option 2 is active – no air temperature input, but neutral position sensor*

15. Unconnected

16. Unconnected

17. SM2A output for idle running control stepping motor.

18. SM2B output for idle running control stepping motor.

19. SM1B output for idle running control stepping motor.

20. Grounding of SENSE GND sensors.

Grounding of SENSE GND sensors is used in connecting and powering of sensing components.

21. Unconnected

22. Reference voltage + 5 V.

Reference voltage + 5 V is used for powering of sensing components.

*Corsaro: Power for APS (Air Pressure Sensor)*

23. OILPRESS/NEUTRAL.

Option 1) The input is used for status sensing of the oil pressure switching device and the status is sent to the dashboard by means of CAN.

Option 2) The input is used for sensing of the gearbox neutral position and information about its status is sent to the dashboard by the means of CAN.

24. Unconnected

25. Crankshaft position sensor CMPS.

The input is designed for standard inductive pick-up sensors used in motorcycles.

26. Unconnected

27. Unconnected

28. Main injector – frontal (INJ1)

Outputs of injectors are designed for standard injectors (on-off) used in motorcycles (coil resistance c. 13 Ohm).

29. Grounding of SENSE GND sensors.

Grounding of SENSE GND sensors is used in connecting and powering of sensing components.

30. Unconnected

31. Unconnected

## IAW5AM pin connections

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32. Reference voltage + 5 V.

Reference voltage + 5 V is used for powering of sensing components.

33. Unconnected

34. Grounding of SENSE GND sensors.

Grounding of SENSE GND sensors is used in connecting and powering of sensing components.

35. Grounding of SENSE GND sensors.

Grounding of SENSE GND sensors is used in connecting and powering of sensing components.

36. Unconnected

37. Main injector – rear (INJ2)

Outputs of injectors are designed for standard injectors (on-off) used in motorcycles (coil resistance c. 13 Ohm).

38. Ignition coil IC1 (frontal)

Outputs of ignition coils are designed for standard ignition coils for inductive ignition used in motorcycles (resistance of the primary coiling of the coil c. 1 to 3 Ohm).

## IAW5AM pin connections

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### "CHASSIS/BODY" CONNECTOR

1. Output for switching of the startup contactor  
Output is switched by the controlling unit if conditions for starting motorcycle are executed, that is, when neutral is engaged or the clutch disengaged.
2. Unconnected
3. Unconnected
4. Powering voltage +12 V permanently.
5. Unconnected
6. Output for switching fuel pump relay.  
After the unit is switched on, the fuel relay is switched on for approximately 4 seconds and remains switched on throughout the entire time the motor is running.
7. Unconnected
8. Unconnected
9. "TACHO" tachometer output
10. Unconnected
11. Output for ventilator switching (COOL 1/LAMBDA HEAT)  
Option 1) The output is used for switching of the first cooling ventilator.  
Option 2) The output is used for the lambda probe heating.
12. Unconnected
13. FI INDICATOR  
Output for operating motor failure pilot light.
14. Output for ventilator COOL 2 switching  
The output is used for switching of the second cooling ventilator.
15. Unconnected
16. K-LINE  
Serial service communication line
17. + 12 V KEY  
Voltage from the switch box.
18. Unconnected
19. Unconnected
20. CAN HI  
CANbus outlet.
21. Unconnected
22. LAMBDA SENSOR  
The input is designed both for standard lambda probes (voltage for stoichiometric mixture: 0,4 to 0,8 V) as well as linear lambda probes with converter (UEGO, Wideband 0 – 5 V). It is designed to take voltage of 0 to 5 V.
23. FUEL LEVEL SENSOR  
Input for fuel quantity sensing. The data is sent to the dashboard by the means of CAN.
24. SPEED INPUT  
The input is designed for standard Hall speed sensors used in motorcycles.
25. Unconnected
26. Unconnected

## IAW5AM pin connections

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27. B+

Feeding voltage + 12 V.

Feeding voltage is nominally 14 V. It must be within the range of 8 to 16v. Within this range the unit is able to control optimally all processes.

*Corsaro: used for kill-switch*

28. START INPUT

Sense the startup button status.

29. CAN LOW

Output of CANbus.

30. Unconnected

31. Unconnected

32. SENSE GND LAMBDA

Grounding of the SENSE GND LAMBDA (grounding of the lambda probe).

33. CLUTCH

Sense the status of the switching device on the clutch.

34. Unconnected

35. Unconnected

36. Unconnected

37. Unconnected

38. SIDE STAND

Sense the status of the switching device on the sidestand.

# IAW5AM pin connections

ECU Moto Morini Corsaro

Engine	Chassis																																																																																																																																																																																																																																																																																																																								
<div>ECU MAROON CONNECTOR (ENGINE)</div> <div>34</div> <table><tr><th>PIN</th><th>COLORE</th><th>SEZ.</th><th>FUNZIONE</th></tr><tr><td>1</td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td>TPS INPUT</td></tr><tr><td>4</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td>TEMP. 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