

VariStep3

MOTORTECH Stepper Motor Driver Control



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The stepper motor driver control developed by MOTORTECH guarantees the ideal control of the various types of MOTORTECH VariFuel2 air/gas mixers and throttle bodies with integrated stepper motor.

- Precise mixer and throttle adjustment due to microstep operation
- Very fast response times
- Increased power output provides high torque and quick movement even when driving big stepper motors
- Accelerated reference run
- LEDs displaying unit status and activity
- Combination of several units without signal amplifier/splitter
- Integrated CANopen and Modbus RTU interface
- Configuration via MICT software
- Error data logging for improved diagnostic options
- Compact design
- Plug-in terminals
- Easy access to connectors and switches
- Switch board installation on DIN rail



Technical Data

- 18-32 VDC power supply
- -20 °C up to +60 °C (-4 °F up to 140 °F) ambient temperature
- 0-20 mA/ 0-10V analog input and output, flexible configuration
- 5 digital inputs, 5 to 32 V compatible, DC-isolated
- 6 digital outputs, up to 32 V, 100 mA, DC-isolated

Interfaces

- CAN Bus 2.0b interface (CANopen protocol)
- RS485 interface (Modbus RTU)
- USB 1.1 interface

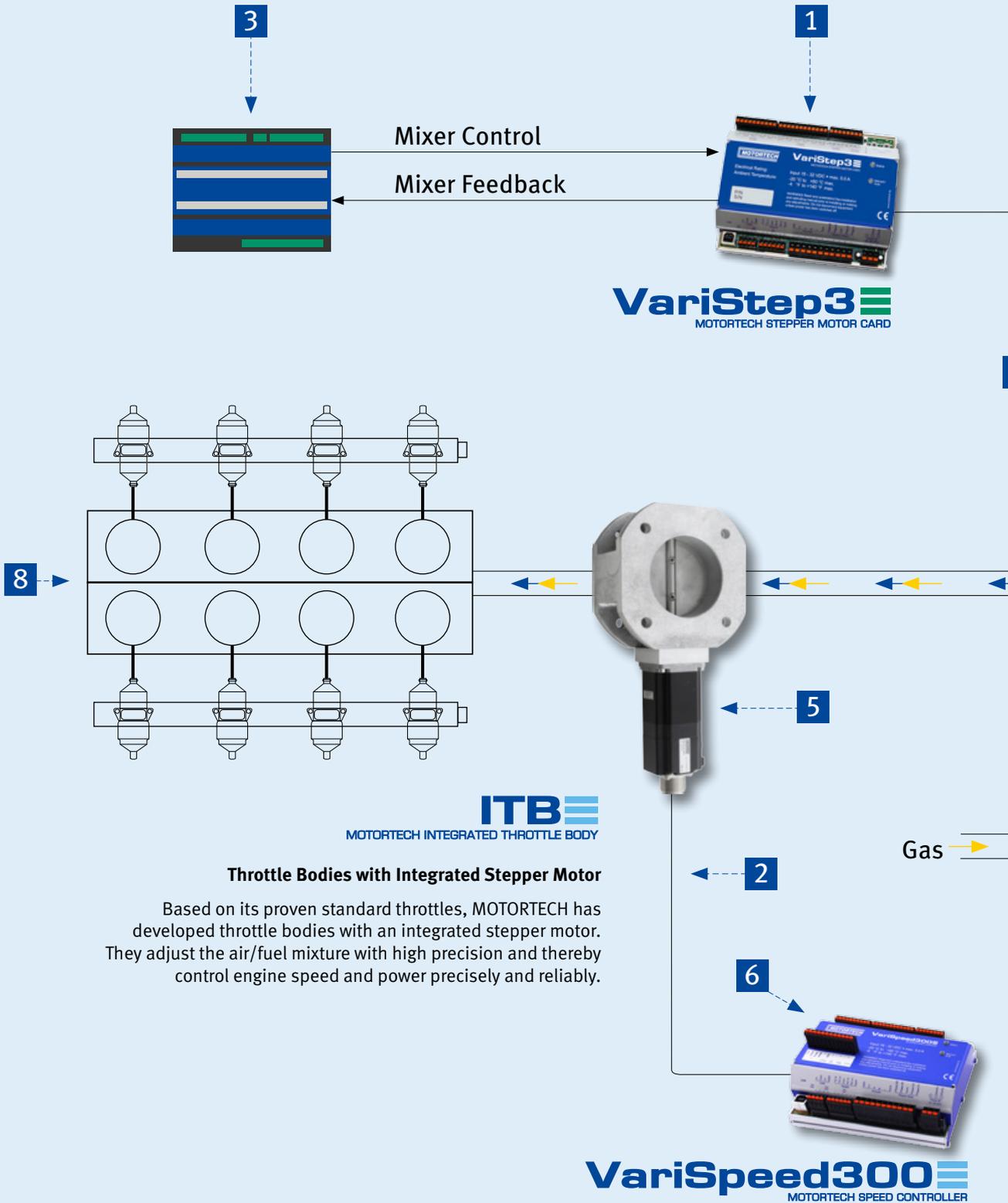
Configuration

- Using the graphic user interface MICT (MOTORTECH Integrated Configuration Tool)
- Manual control via push-button

Housing

- Protection class IP 20
- Dimensions 160 x 126 x 62 mm (6.3 x 5.0 x 2.4 in.)

System Overview



VariStep3
MOTORTECH STEPPER MOTOR CARD

ITB
MOTORTECH INTEGRATED THROTTLE BODY

Throttle Bodies with Integrated Stepper Motor

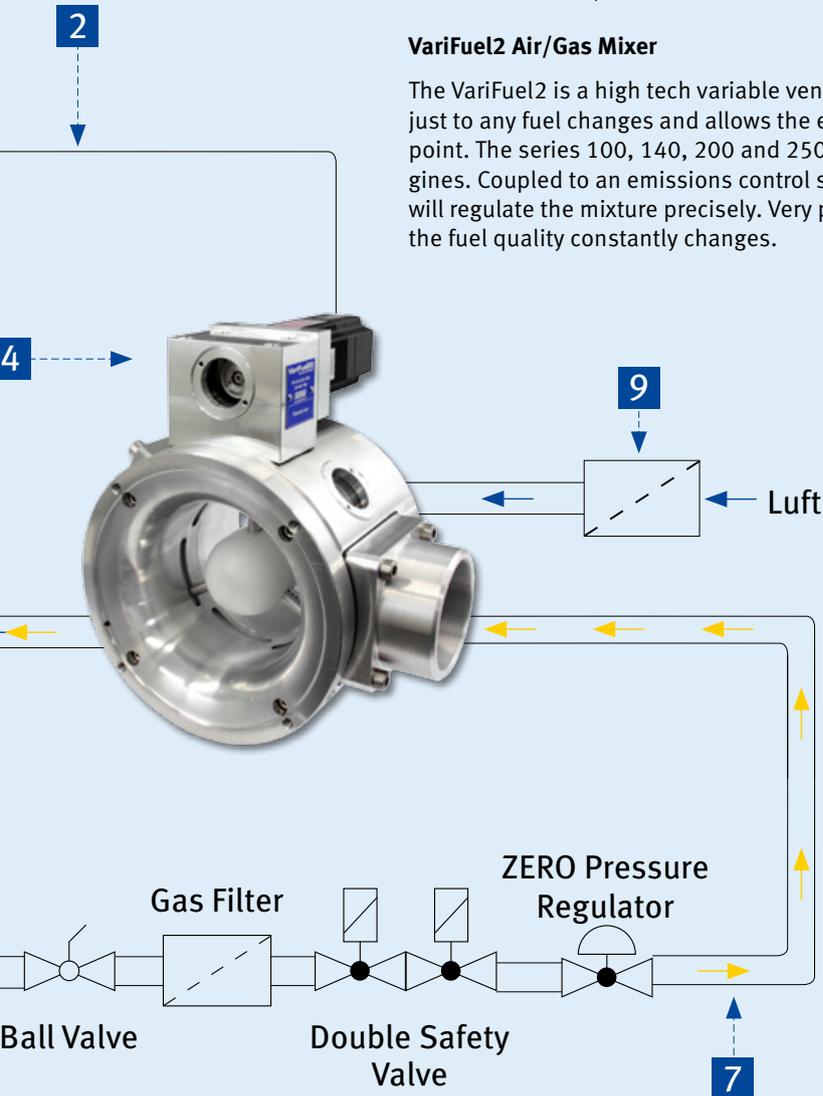
Based on its proven standard throttles, MOTORTECH has developed throttle bodies with an integrated stepper motor. They adjust the air/fuel mixture with high precision and thereby control engine speed and power precisely and reliably.

VariSpeed300
MOTORTECH SPEED CONTROLLER

VariFuel2

VariFuel2 Air/Gas Mixer

The VariFuel2 is a high tech variable venturi type mixer that can constantly adjust to any fuel changes and allows the engine to operate at its most efficient point. The series 100, 140, 200 and 250 are available for a wide range of engines. Coupled to an emissions control system (lean burn or stoichiometric) it will regulate the mixture precisely. Very popular in biogas applications where the fuel quality constantly changes.



Description

- 1 VariStep3 stepper motor driver control
- 2 Stepper motor harness
- 3 Emissions control system
- 4 VariFuel2 air/gas mixer
- 5 ITB throttle body with integrated stepper motor
- 6 VariSpeed300 speed controller
- 6 Gastrain
- 7 Engine
- 8 Air filter

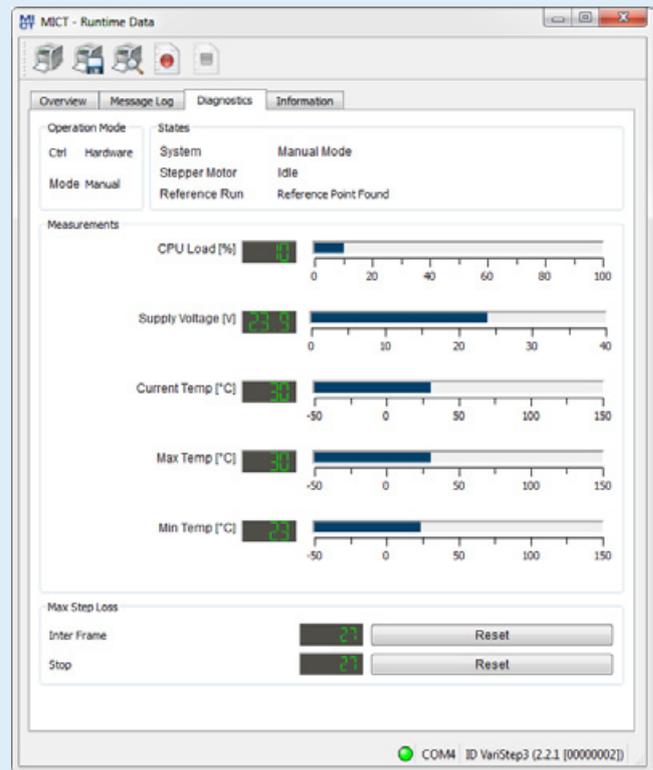
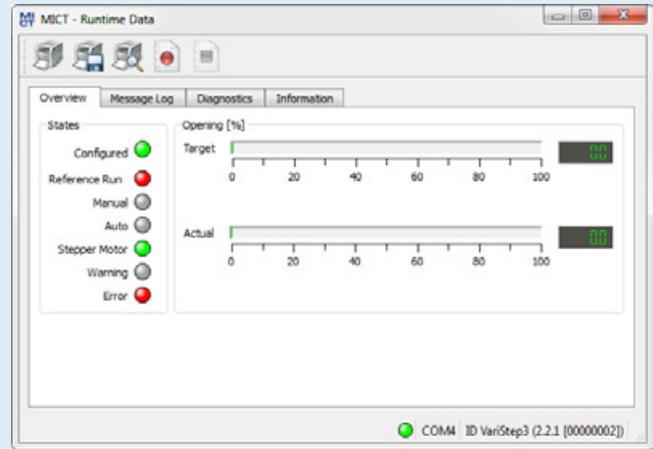
MICT

MOTORTECH INTEGRATED CONFIGURATION TOOL

MICT – MOTORTECH Integrated Configuration Tool

The MICT is the graphical user interface for the VariStep stepper motor card. All functions of the VariStep are user programmable and can be displayed individually.

- Language selectable (DE/EN/CN)
- Microsoft Windows XP/Vista/7 compatible
- Programmable for different VariFuel2 models, ITB throttle series and throttle gears
- Configuration of inputs and outputs
- Preadjustment of two fixed mixer positions
- Display of debit and actual value as well as operation status
- Permanent data acquisition
- Configuration of CAN Bus interface for ALL-IN-ONE signals
- Print function of a given moment in the operation can be used for external problem analysis, etc.
- Context sensitive online help
- Different access levels to avoid accidental misconfigurations



Order Information

P/N	Description	Scope of Delivery
31.01.960	VariStep3 stepper motor driver control	Stepper motor driver control, USB interface cable, MICT configuration software, Operating manual

We aim at your problems!



Regardless of which part of the globe we need to travel to.

We know that the stakes are high, and therefore we outperform the others. That is because we want everything to run smoothly at your site, everywhere and at any time.



This is entirely in keeping up with our motto:

Let us drop everything and work on your problem!



Distribution partner for DENSO spark plugs



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