

Product Update

ALL-IN-ONE.GAS

New Firmware – Release 1.2.0



The new firmware 1.2.0 is now available for the MOTORTECH generator & CHP control system ALL-IN-ONE.GAS.

Download

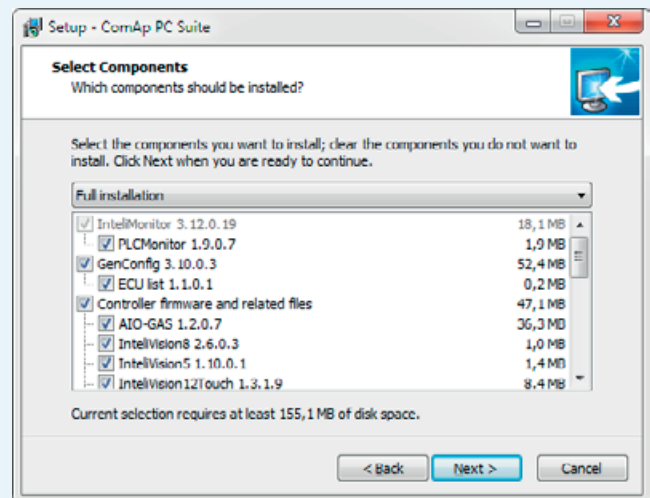
The new firmware is included in the latest ALL-IN-ONE.GAS installation package 1.2.0 of the ComAp PC Suite. This installation package including a detailed new features list and the firmware file 1.2.0 can be downloaded at the following address (175 MB):

https://www.motortech.de/fileadmin/user_upload/data/AIO-GAS-1.2.0

Please note that the above installation package does not include the latest MOTORTECH ECU list 1.6.0.

Use the installation package to install the new firmware. For this, execute the downloaded EXE file by double-clicking it and then follow the instructions.

Further information on performing firmware updates can be found in the ALL-IN-ONE.GAS Global Guide 1.1.0 in section *Firmware* and *Archive Overview*.



New Functions and Modifications

- New parameter conditions concerning power derating and minimum power in parallel to mains
 - The set *Min power PtM* value in the *Gener protect group* limits the lowest configurable value of the following parameters: *Derating1 pwr* and *Derating2 pwr* in the *ProcessControl* group; *PwrReduction1A*, *PwrReduction1B* and *PwrReduction1C* in the *Pwr Reduction* group; *KnockingReduct* in the *AFR Control* group.
 - The highest configurable value of *Min power PtM* is now limited by the set *Derating1 pwr* value.
 - If *Derating2 pwr* is set lower than *Min power PtM*, the slow stop alarm *DeratePwrErr* will be issued.

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Customers / others	Yes
Representatives and Sales Partners	Yes
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Configuration example

ProcessControl: *Derating1 pwr* 50 %
 Derating2 pwr 40 %
Gener protect: *Min power PtM* 5 %

In this example, setting *Min power PtM* above 50 % is not possible, because it cannot be set higher than *Derating1 pwr*. *Min power PtM* can be set to values above 40 %, but then the slow stop alarm *DeratePwrErr* will be issued.

- Communication loss detection now available for MIC ignition controller, VariStep stepper motor driver and MAN® data logger
 - Communication loss detection can be activated for each device by the respective parameter in the Engine protect group (see table below).
 - For each device, a corresponding logical binary output (LBO) was added (see table below).
 - For each device, the constant reception of a specific CAN frame is checked. If the respective frame is not received within 2 seconds, the corresponding logical binary output is set to 1 and a respective warning is issued and protocolled in the history.

Feature	MIC Ignition Controller	VariStep Stepper Motor Driver	MAN® Data Logger
Setpoint <i>Engine protect</i>	<i>MICComLost</i>	<i>VariStpComLost</i>	<i>LoggerComLost</i>
Logical Binary Output	<i>MICComLost</i>	<i>VariStpComLost</i>	<i>LoggerComLost</i>
Supported CAN Modes	<i>J1939</i> at source address 52	<i>ALL-IN-ONE (J1939)</i> at source address 90	<i>J1939</i> ; source addresses pre-programmed from factory

- Please note that the VariStep at source address 91 is not evaluated by the *VariStpComLost* function.
- In order to slowly stop or shut down the engine when a communication loss is detected by the activated function, add a VPIO module to your module configuration. Then assign the respective logical binary output from the *Log Bout* group as source to one of the binary outputs of the VPIO module. For the corresponding binary input of the same VPIO module, set the desired protection (*Slow stop* or *Shutdown*). For the MAN® data logger, we recommend to always set *Shutdown* as protection.
- Direction of AFR regulation changed
 - The direction of the PID loop of the AFR regulation has been changed and now works the same way as in the ALL-IN-ONE.NTC/.NT. Thus, a positive *AFRvalve gain* setting in the *AFR Control* group will increase the mixer position if the requested AFR value is higher than the actual AFR value and it will decrease the mixer position if the requested AFR value is lower than the actual AFR value.

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Bugfixes

- Force value function fixed for several parameters
 - The regulation now freezes when the following parameters are forced to value 0: *Speed gov bias*, *Load gain*, *Freq gain* and *Angle gain* in the *Sync/Load ctrl* group; *Voltage gain* and *PF gain* in the *Volt/PF ctrl* group
- Unwanted power limitation
 - When at least one of the capability curves (*CapabilityQ L* or *CapabilityQ C*) in *User Sensors* was missing, the requested power was limited by the set value of the parameter *Nomin power* in the *Basic settings* group at the moment the controller was reset (for example after programming has been finished or the power supply has been switched on).
- MainsProtState pulse filtering fixed
 - During the release of LBO *MainsProtState*, unwanted pulses were accidentally generated.
- Derated power below *Min power PtM* caused engine overload
 - When the derated power fell below the set *Min power PtM* in the *Gener protect* group, the *Gener* value *Act power* in some cases showed values above the set *Nomin power* in the *Basic settings* group.
- Shutdown alarm flashed in some cases when communication with either MIC ignition controller, VariStep stepper motor driver or MAN[®] data logger was lost
 - This issue was fixed in the MOTORTECH ECU list 1.6.0 by changing the CAN frame period.
The new MOTORTECH ECU list 1.6.0 can be downloaded at:
https://www.motortech.de/fileadmin/user_upload/software/ECU_list-Motortech-1.6.0.zip

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