

Date:	3 April 2025
To:	Commercial manager/Workshop manager/LPG technician
Reference:	AFC-3.0 DI Compact
Article number:	180/70005X
System:	VSI-3.0 DI
Geography	All

Dear customer,

We are proud to announce that our new, state of the art **AFC-3.0 DI Compact**, will be released soon.

What:

The new AFC-3.0 DI Compact has been developed to have a version that is cost-effective, smaller, lighter but almost as versatile as the current AFC-3.0 DI.

Challenge:

The challenge during the development of the AFC-3.0 DI Compact was to create an AFC that could manage all 3- and 4-cylinder Direct Injected engines, to make it smaller, lighter and better cost-effective, without losing the power and versatility of the AFC-3-DI. We have succeeded and our new AFC-3 DI Compact will further strengthen our position as market leader.



Specifications/features:

- GDI compatible only (no DI+MPI engines).
- 3- and 4-cylinder version.
- 4-cylinder version can be used on 3-cylinder engine.
- 80 pin Molex connector system.
- Mounting with the AFC-2.x clip.
- Calibration is equal to full size AFC-3.0 DI for 95% of all GDI 3-4cylinder calibrations.
- Equal GDI injector circuitry as the AFC-3.0 DI.
- Equal OEM sensor emulation circuitry as the AFC-3.0 DI.
- OEM (petrol ECU) wiring connections equal to the full-size AFC-3.0 DI
 - WIRING LOOM VSI-3 DI 48P BROWN MAIN is equal to the full-size AFC-3.0 DI wiring loom.
 - Relay control option (wiring harness module) is moved to brown connector wiring loom.
 - o GDI-petrol injector pin positions are equal to the full size AFC-3.0 DI wiring loom.

Item	AFC-3.0 DI Compact	
Types	3- and 4-Cylinder version available	
Color	Black	
Environment	Engine compartment or interior -40 °C tot 100 °C	
Homologations	R67, R110, R10	
Housing	Plastic top cover with ventilation plug – Aluminum bottom plate –	
	IP69K	







Dimension Box [mm]	147 x 180 x 38	
Weight [gram]	562	
Operating Voltage [V]	7,5 to 15 Volt, reversed voltage and high voltage pulse protected	
Connector Harness	2 connectors – Molex 80 pin	
Analogue Inputs	10 in total from which: 1 hardware pull-up - 2 with switchable pull-up & pull-down - 2 with switchable pull-down	
Digital Inputs	2 dedicated SMART sensor inputs (including limp home) with emulation output – 2 digital inputs with switchable pull-up and trigger level	
Petrol Injectors	Up to 4 GDI injectors – injector current trigger and high side measurement	
Petrol Injector Types	GDI injectors – flexible injector emulation	
Outputs	4 low impedance gaseous injectors – 2 solenoid valves both with eVP- 500 control capability – 1 relay control output – 1 fast low-side switch	
Analogue Outputs	3 emulation outputs (including limp home)	
Gas Injector Driver 8 Amp (max) peak mode closed loop – fully programmable con Peak & Hold		
Current Consumption [mA]	Standby current 27mA @ 12V – sleep current <0,50mA @ 12V	
Communication Interfaces	3x CAN – 1x LIN – 1x UART	

Description / Part numbers:

Part Description	Part Number
AFC-3.0 DI COMPACT 3 CYLINDER	180/700053/A
AFC-3.0 DI COMPACT 4 CYLINDER	180/700054/A
WIRING LOOM VSI-3 DI 48P BROWN MAIN	191/150002/B
WIRING LOOM VSI-3 DI COMPACT 32P BLACK 3 CYL	191/151003/A
WIRING LOOM VSI-3 DI COMPACT 32P BLACK 4 CYL	191/151004/A

AFC info & wiring loom diagrams:

- Technical info and diagrams can be found on the Prins website: https://www.prinsautogas.com/en/vsi-3-di-info
- Grey and black connector wiring harness are combined in the black connector wiring harness.
- Other important changes:
 - The relay output from the grey connector (A1) is moved to the brown connector (F4). For now, this wire is optional (wiring module), but will be standard in the near future.
 - F1 [Black connector] for HPP actuator connection is no more available. J2 [Brown connector] has 2 trigger levels in the AFC-3.0 DI compact, making it possible to always use J2 for the fuel pump PWM or HPP actuator control reading.



