

TAMONA

#### Range of application and description

PG-3 is versatile change-over switch for use in vehicles with Liquified Petrolem Gas (LPG) whose parameters to be adjusted during installation. The microprocessor of the switch lets the installer or driver set required configuration. The electronic keys protect PG-3 outputs from possible mistakes in connection. Front panel has 5 LEDs (yellow, red and 3 green) and two control buttons. The switch memorizes last settings.



Performance modes "PG-3"

The switch has two main modes: for engine with injector and with carburettor.

#### Injector performace mode:

"Automatic".
The car engine starts on petrol (yellow LED is on, green LED blinks) and, after acceleration, at certain RPM which is set with potentiometer, switches to LPG. Yellow LED is off, green LED is on



• terts and works on LDC (groot

The car engine starts and works on LPG (green LED is On).

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The car engine starts and works on LPG (yellow LED is On).

#### Carburettor performance mode:

Petrol and LPG feeding is cut off.

"LPG". The car engine starts and works on.

# PG-3 programming modes:

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Performance mode.
Starting on LPG.
Petrol cut-off delay.
Petrol-LPG switching mode.
Sensitivity threshold of switching.
Sensor of LPG level in tank.
Default (factory's) settings.

### Programming mode entering

In order to enter programming mode, turn ignition Off , push the button "P" and turn ignition On holding it pressed for about 5 sec. Red LED is blinking. When red LED is On programming mode is activated. Release the button "P". PG-3 is on mode 1.

Parameter's setting changing

Push the button "G".

Programming mode switching

Push the button "P". The sequence is circular, i.e. mode 1 follows mode 7.

Programming mode exit

Turn ignition Off.

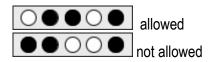
## **LED status explanation:**

 $\odot$  - OFF • - ON • - Blinks

1. Performance modes.

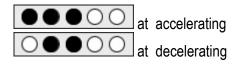


2. Starting on LPG.

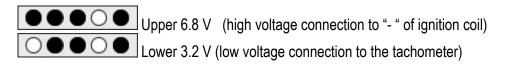


3. Petrol cut-off delay.

## 4. Petrol-LPG switching mode.



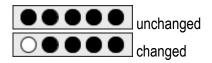
5. Sensitivity threshold of switching.



## 6. Sensor of LPG level in tank.



7. Default (factory's) settings.



### LPG mode features.

If engine stops, LPG feeding stops automatically in 2 sec.

## Tank filling indication with level sensor A.E.B. 1050

$\bigcirc \bigcirc \bullet \bullet \bullet \bullet$	full 100%	0,0 0,2 V
$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	full 75%	0,2 1,0 V
$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	full 50%	1,0 2,0 V
$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	full 25%	2,0 2,9 V
$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	full 15%	2,9 3,4 V
$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	less 15%	more 3,6 V

### Tank filling indication with level sensor

	HANA	A.E.B. TOMASETTO
○○●●● 100%	0 Ω	90 Ω
○○●●○ 75%	27.5 Ω	67.5 Ω
○○●○○ 50%	55.0 Ω	45.0 Ω
○●○○○ 25%	82.5 Ω	22.5 Ω
○●○○○ 0%	110 Ω	0 Ω

### Gas mode features

The blinking of green LED indicates that there is not enough LPG in tank (if the system has multivalve and appropriate sensor). In case that engine stops, LPG feeding stops automatically in 2 sec.

### Main features

Supply	+12 V DC
Consumption current	less 0,5 A
Commutable current inut pulses amplitude	less 3 A
Input pulses amplitude	max. 300 V
Weight	ab. 170 g.

## Transportation and storage

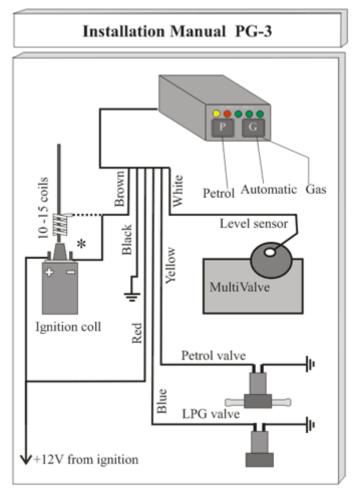
All kinds of transportation are applicable. At transportation of PG-1, avoid mechanical damage, precipitation and aggressive environment. Ambient temperature should be within -50 oC and +50 oC.

### Warranty

The manufacturer provides 12 months warranty term from installation day if installation was fulfilled properly, according to Clause 3, and conditions according to Clause 5 were observed.

## **Checklist**

Main unit -1, wire harness -1, bracket -1, female disconnector Q250 - 4, ring terminal - 1, screws -2, Owner's Manual (English) - 1, package -1



Tamona, Lithuania, LT-08303 Vilnius, Ateities st. 10, Tel./Fax: +370 5 2712488, Tel.: +370 698 23436, E-mail: tamona@tamona.lt, web: WWW.TAMONA.LT