VLW601

IP67 display and configuration unit

825B126D

Features

- Matched with the PTU51, PTU56, METER (4-wire ver.) and FLOWMETER sensor
- Connection cable Max. length between the VLW601 and the matched sensor is 20m
- Epoxy coated aluminum housing
- Display measurements and configurations across a 128x64 LCD display
- Mechanical protection: IP67
- Menu navigation and transmitter configuration by 4 push buttons
- 24Vdc, 24/115/230Vac VLW601 power supply to be specified when ordering
- Transmitter power supply: 24Vdc
- Max. power consumption 1,5W
- Working temperature -25°C ÷ +70°C

- ***Connecting to PTU51, PTU56, METER (4-wire vers.) and FLOWMETER ultrasonic transmitters***
- ***IP67 mechanical protection***
- ***Epoxy coated aluminum housing***
- ***24Vdc, 24/115/230Vac VLW601 power supply***
- ***The VLW601 powers the connected transmitter (24Vdc max.1,5W) and retransmits the 4÷20mA analog signal***

General

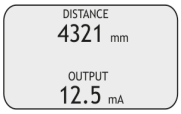
Suitable for applications where the level/flow transmitter is installed in a difficult to reach location. **VLW601** is a good solution for the matched compact level/flow transmitters remote viewing and configuration: **PTU51**, **PTU56**, **METER4x4x** or **METER8x4x (4-wire vers.)**, **FLOWMETER**.

Configuration and calibration

The **VLW601** module allows you to power and configure all the compatible transmitters (**PTU51**, **PTU56**, ecc.) without the use of other devices.
The module **VLW601** can be installed outdoors near the transmitter installation area, this is made possible by the **VLW601** small size and the **IP67** mechanical protection.
The unit **VLW601** ensures the galvanic separation between the power line and the 4÷20mA signal, in the AC power supply case (24/115/230Vac)
The **VLW601** module has a 128x64 matrix LCD.
Is possible to view the measure with:

- 1 value (big characters)

- 2 values (small characters)



OK - Configuration access
- Options confirmation
- Parameters values confirmation

- Parameters values selection
- Parameters scroll

- Parameters values modification

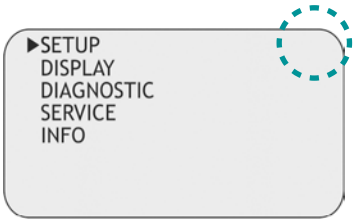
BK - Exit configuration
- Back to previous menu

The programming module **VLW601** has 4 buttons (Fig.12) that allows for all transmitter control and programming operational functions:

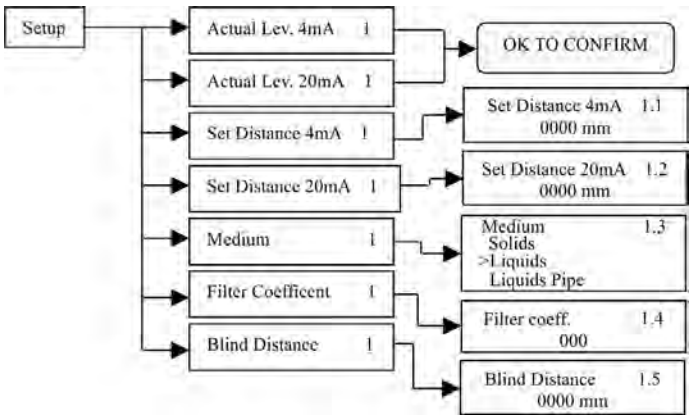
- From “RUN” mode: press OK to enter “PROGRAM” mode, press BK to quit
- Press to move the cursor on the parameter you want to use and confirm with OK
- To edit numbers, press to modify the digit shown in negative, press to edit the next digit, press OK to confirm and store the number.

Press BK to quit

In “PROGRAM” mode, to facilitate orientation in the programming menu, on display top right there is always a number, eg. “1”, this number is the menu or parameter index that’s displayed



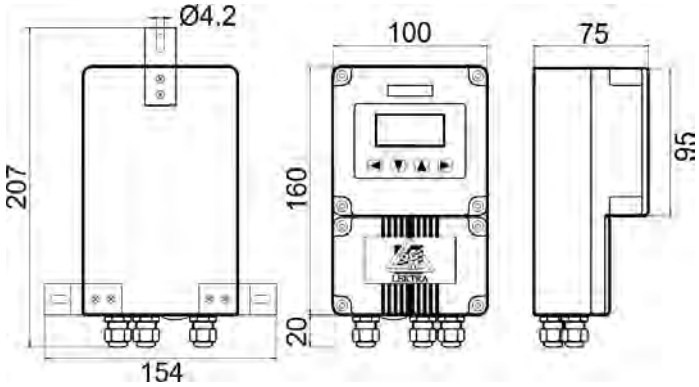
The operating manual allows an easy and fast start-up through the keyboard. Beside here, can see a **PTU51**/ **PTU56** SETUP menu structure small selection example.



Mechanical dimensions

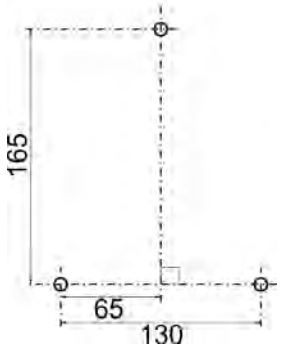
Drawing Dimensions

Dimensions in mm



Drilling plan

Dimensions in mm



VLW601 connections and configurations

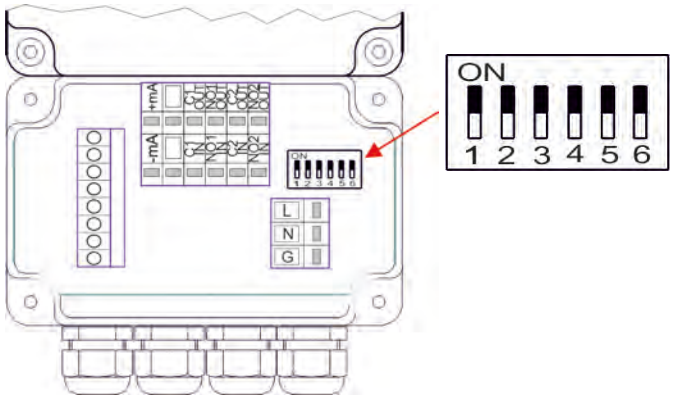
The **VLW601** has a six positions dip-switch for setting the electrical connection to the transmitter.

It is important to do the configuration before making the electrical connection.

There are 3/4 PG9 glands for cable entry.

Electrical connections is via plug-in

The connection to **METER**, **FLOWMETER**, **RPL** and **RWL** is made through **MC601** module (option **B** of **VLW601** accessories).

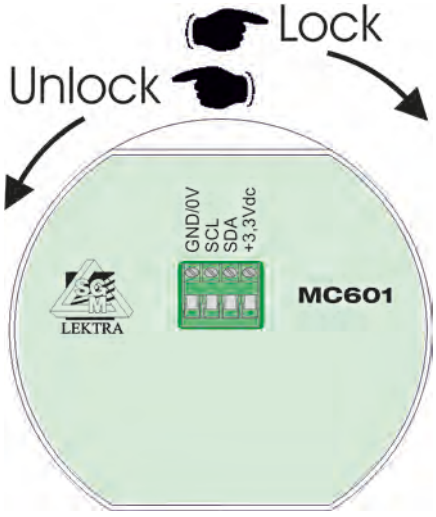


MC601 connection module

MC601 is inserted in place of **VL601** programmig module. Unscrew the transparent cap an turn the display clockwise to mount it, or anticlockwise to remove it, as indicated in the right figure.

The electrical connections is via screw terminals.

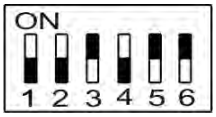
It i s possible to use the same cable to connect the MC601 signals, the 4÷20mA analogic signal and 24Vdc transmitter power supply.
For 2-wire connection use 6x0,25mm^2 shielded cable and for 4-wire connection use 8x0,25mm^2 shielded cable



PTU51 e PTU56

For **PTU51** and **PTU56** connection set up the dip-switch as indicated below:

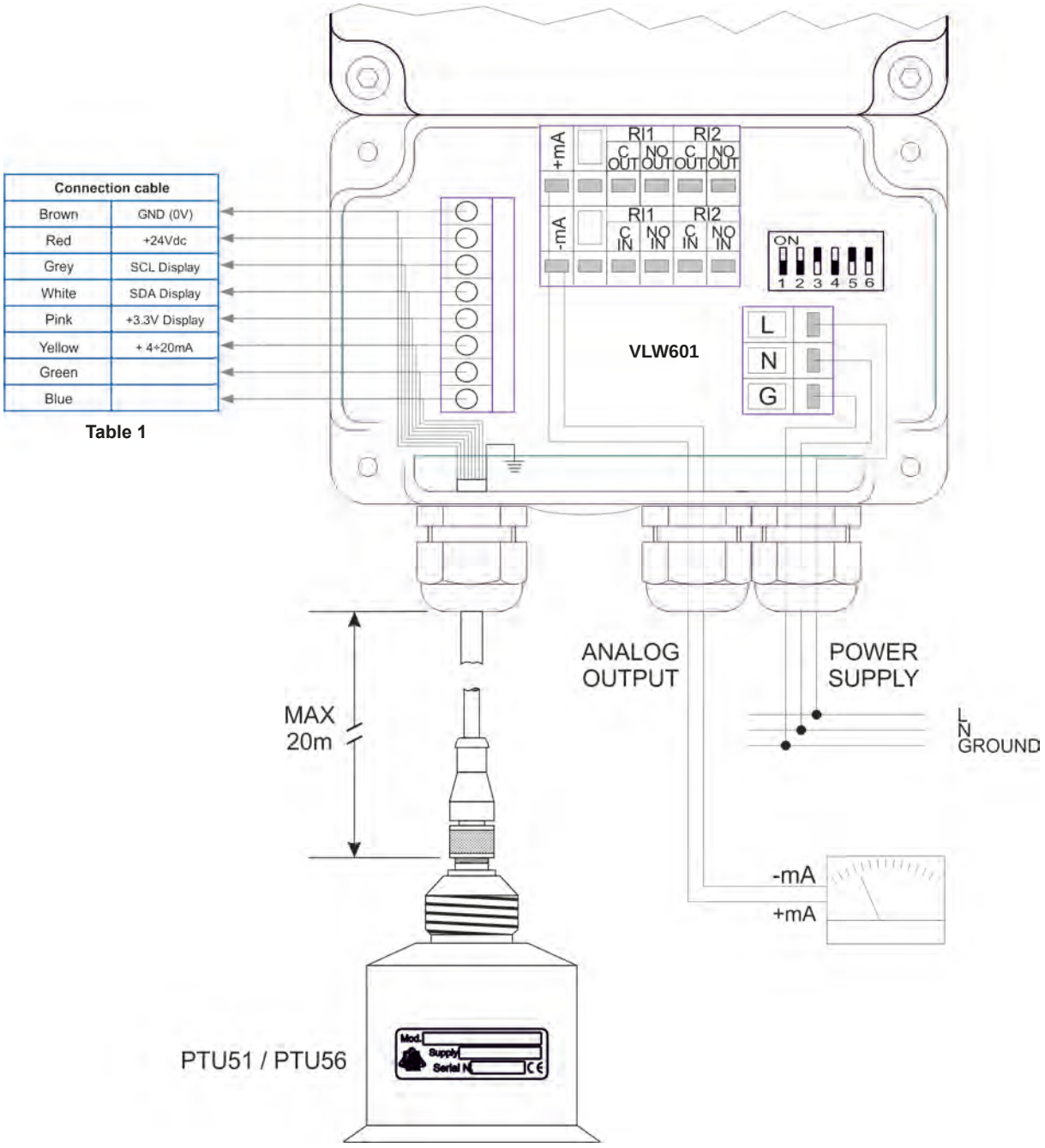
PTU51 PTU56	S1	S2	S3	S4	S5	S6
	ON	ON	OFF	ON	OFF	OFF



Here the wiring diagram for **PTU51** and **PTU56**.
In table 1 is indicated the color matching of the cable with the **IP68** or **IP69K** connector.

Connection cable	
Brown	GND (0V)
Red	+24Vdc
Grey	SCL Display
White	SDA Display
Pink	+3.3V Display
Yellow	+ 4÷20mA
Green	
Blue	

Table 1



4-wire METER and FLOWMETER

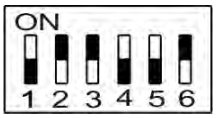
The 4-wire **METER** transmitters matched to **VLW601** have the following product code:

- **METER4x4x**: range 5m, 24Vdc power supply
- **METER8x4x**: range 8m, HART, 24Vdc power supply

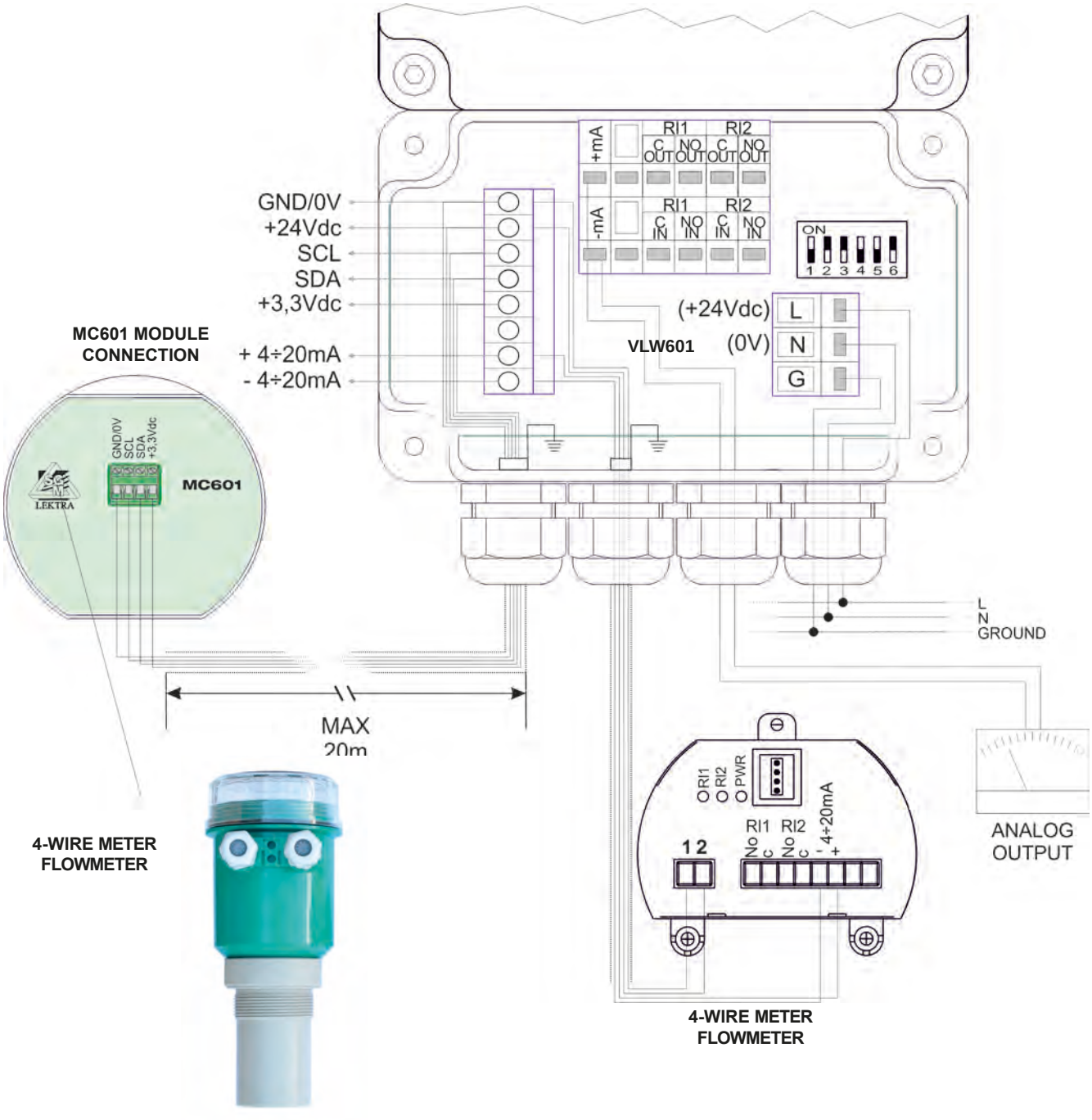
(**x** indicates a code option wich is not relevant; es.: METER4**F**4**H**, where **F** is the IP67 PC housing, and **H** is 2" fixing bolt optional accessory)

Set up the dip-switch as indicated below:

METER	S1	S2	S3	S4	S5	S6
	ON	OFF	OFF	ON	ON	OFF

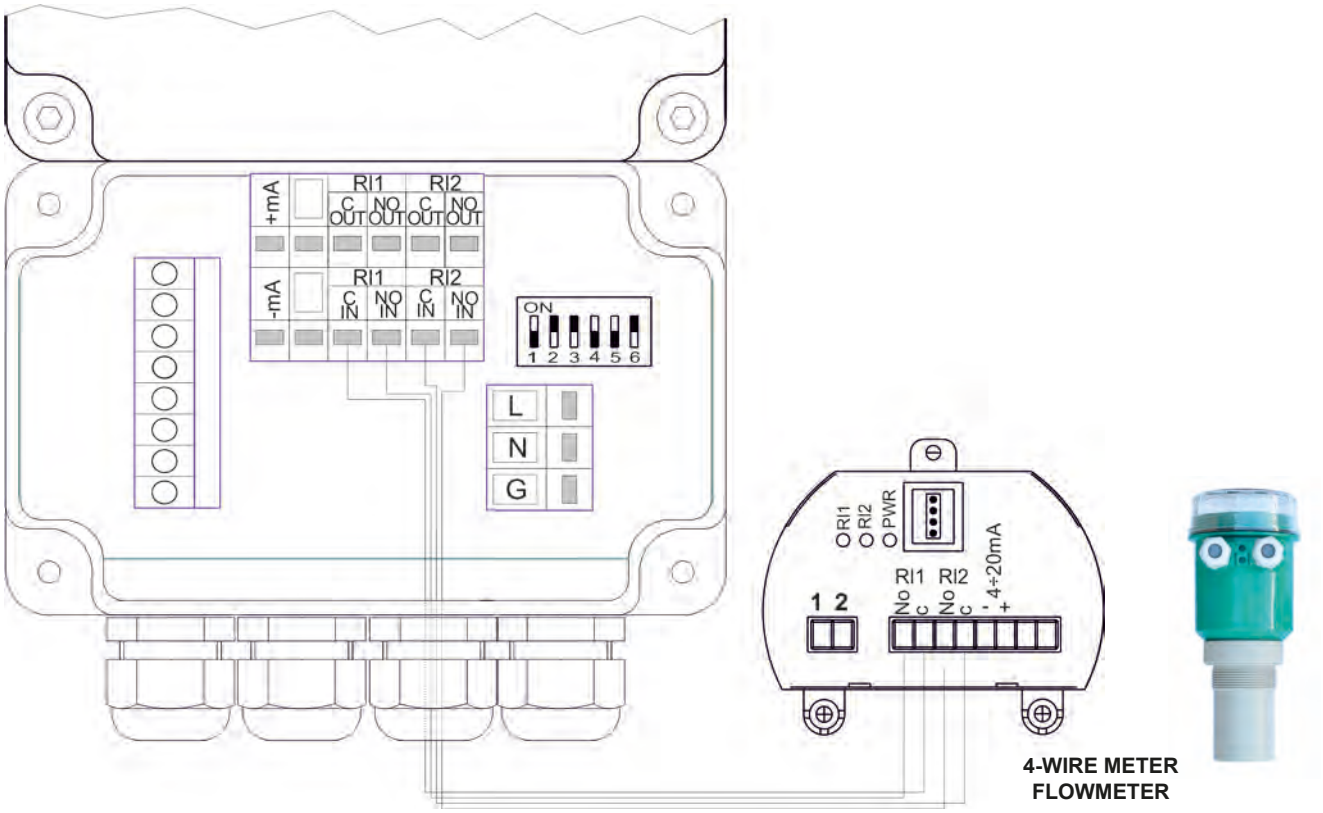


Here the wiring diagram for 2-wire **METER** and **FLOWMETER**



METER and FLOWMETER relay connection

Here the wiring diagram for 4-wire **METER** and **FLOWMETER** relays



4-WIRE METER FLOWMETER

Order code

VLW601	*Code*	Version
	A	Standard
	Z	Special

Code	Power supply
0	24Vac 50÷60Hz
1	115Vac 50÷60HZ
2	230Vac 50÷60Hz
4	24Vdc
9	Speciale

Code	Accessory
A	None
B	**MC601 module connection**
Z	Special

VLW601	A	2	A

Order coding Example

CE

Warranty

Products supplied by SGM LEKTRA are guaranteed for a period of 12 (twelve) months from delivery date according to the conditions specified in our sale conditions document.
SGM LEKTRA can choose to repair or replace the Product.
If the Product is repaired it will maintain the original term of guarantee, whereas if the Product is replaced it will have 12 (twelve) months of guarantee.
The warranty will be null if the Client modifies, repair or uses the Products for other purposes than the normal conditions foreseen by instructions or Contract.
In no circumstances shall SGM LEKTRA be liable for direct, indirect or consequential or other loss or damage whether caused by negligence on the part of the company or its employees or otherwise howsoever arising out of defective goods

Factory Test Certificate

In conformity to the company and check procedures I certify that the equipment:

VLW601 ..... Production and check date: .....

Serial n. .....

is conform to the technical requirements on Technical Data and it is made in conformity to the SGM-LEKTRA procedure

Quality Control Manager: .....

SGM-LEKTRA S.r.l. Via Papa Giovanni XXIII, 49 - 20090 Rodano (MI) - ITALY-
tel: ++39 0295328257 **fax:** ++39 0295328321
web: www.sgm-lektra.com **e-mail:** info@sgm-lektra.com