

Profibus Node Number Programmer for MK4P / IK4P sensors



Code 85169 Edition 09-2014

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A Profibus slave address is normally changed by using a Class 2 Master via the Set Slave Address (SAP 55) command.

If you do not have a Class 2 Master 2 or the master is not enabled for this operation, or if address change is blocked on the transducer, the Profibus Node Number Programmer lets you assign (and possible unblock) a new Profibus address to Gefran MK4-P and IK4-P transducers.

2. INSTALLATION and CONNECTIONS

- a. Disconnect the transducer from the bus and from the power supply
- b. Connect the Profibus M12 cable (CAV195 optional) to the Profibus Node Number Programmer and to the transducer.
- c. Connect the M8 power cable (CAV196 optional) to the *Profibus Node Number Programmer* and to the transducer.
- d. Connect the power supply (PKIT629 optional) to the Profibus Node Number Programmer.
- e. Connect the power supply to the line.

3. USE

- a. After the power supply is connected to the line, the *Profibus Node Number Programmer* and the transducer light up (Profibus Node Number Programmer display with indication "---" and green LED flashing on the transducer)
- **b**. After initialization and recognition are done, the *Profibus Node Number Programmer* display shows the current address of the transducer in hexadecimal format.
- c. Turn the rotary switches to select the address you want.
 The value is shown in hexadecimal format (see table).
 The range of permitted addresses is 1 to 125 (01..7D, in hexadecimal format).
- d. If you do not want to block future changes of the transducer address:
 - i. Briefly press the R button (W= WRITE) to send the new address.
 - ii. The indication "--." on the display signals the start of the operation.

Notes:

- Any block of changing the currently active address is automatically disabled.
- If the new selected address matches the current one, or if it is not valid, pressing of L and R button is ignored.
- e. If you want to block future changes of the transducer address:
 - i. press and hold the L button (L= LOCK) on the programmer.
 - ii. keeping the L button pressed, briefly press the R button (W= WRITE) to send the new address.
 - iii. The indication "-.-." on the display signals the start of the operation.
 - iv. Release the L button.

Notes:

- If the new selected address matches the current one, or if it is not valid, pressing of L and R button is ignored.
- f. When the operations are done, the display shows the new address assigned to the transducer in hexadecimal format.
- g. Switch off power to the programmer.
- h. Disconnect the cables from the transducer and from the programmer.
- i. Reconnect the transducer to the bus and to the power supply.

4. NOTES

The *Profibus Node Number Programmer* recognizes and lets you change the address only of Gefran MK4-P and IK4-P transducers.

The transducer, unless ordered by the configurator, is supplied by default with address of 125 (0x7D) and address change block disabled.

If the address change block has been enabled (for example via a Class 2 Master on a Gefran MK4-P or IK4-P transducer), the only way to change the address is via the *Profibus Node Number Programmer*.

With the *Profibus Node Number Programmer* you can also enable (or not), for safety reasons, the address change block during the address change procedure.

By enabling the address change block, you can prevent accidental address changes during normal use of the transducer.

5. IMPORTANT

ALWAYS use the programmer as described above. The only connection allowed is directly to a Gefran MK4-P or IK4-P transducer.

NEVER connect the Profibus Node Number Programmer to an active Profibus network

| Dec | Hex |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 01 | 17 | 11 | 33 | 21 | 49 | 31 | 65 | 41 | 81 | 51 | 97 | 61 | 113 | 71 |
| 2 | 02 | 18 | 12 | 34 | 22 | 50 | 32 | 66 | 42 | 82 | 52 | 98 | 62 | 114 | 72 |
| 3 | 03 | 19 | 13 | 35 | 23 | 51 | 33 | 67 | 43 | 83 | 53 | 99 | 63 | 115 | 73 |
| 4 | 04 | 20 | 14 | 36 | 24 | 52 | 34 | 68 | 44 | 84 | 54 | 100 | 64 | 116 | 74 |
| 5 | 05 | 21 | 15 | 37 | 25 | 53 | 35 | 69 | 45 | 85 | 55 | 101 | 65 | 117 | 75 |
| 6 | 06 | 22 | 16 | 38 | 26 | 54 | 36 | 70 | 46 | 86 | 56 | 102 | 66 | 118 | 76 |
| 7 | 07 | 23 | 17 | 39 | 27 | 55 | 37 | 71 | 47 | 87 | 57 | 103 | 67 | 119 | 77 |
| 8 | 08 | 24 | 18 | 40 | 28 | 56 | 38 | 72 | 48 | 88 | 58 | 104 | 68 | 120 | 78 |
| 9 | 09 | 25 | 19 | 41 | 29 | 57 | 39 | 73 | 49 | 89 | 59 | 105 | 69 | 121 | 79 |
| 10 | 0A | 26 | 1A | 42 | 2A | 58 | ЗA | 74 | 4A | 90 | 5A | 106 | 6A | 122 | 7A |
| 11 | 0B | 27 | 1B | 43 | 2B | 59 | 3B | 75 | 4B | 91 | 5B | 107 | 6B | 123 | 7B |
| 12 | 0C | 28 | 1C | 44 | 2C | 60 | 3C | 76 | 4C | 92 | 5C | 108 | 6C | 124 | 7C |
| 13 | 0D | 29 | 1D | 45 | 2D | 61 | 3D | 77 | 4D | 93 | 5D | 109 | 6D | 125 | 7D |
| 14 | 0E | 30 | 1E | 46 | 2E | 62 | 3E | 78 | 4E | 94 | 5E | 110 | 6E | 126 | 7E |
| 15 | 0F | 31 | 1F | 47 | 2F | 63 | 3F | 79 | 4F | 95 | 5F | 111 | 6F | | |
| 16 | 10 | 32 | 20 | 48 | 30 | 64 | 40 | 80 | 50 | 96 | 60 | 112 | 70 | | |

Address conversion table (Decimal – Hexadecimal)



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