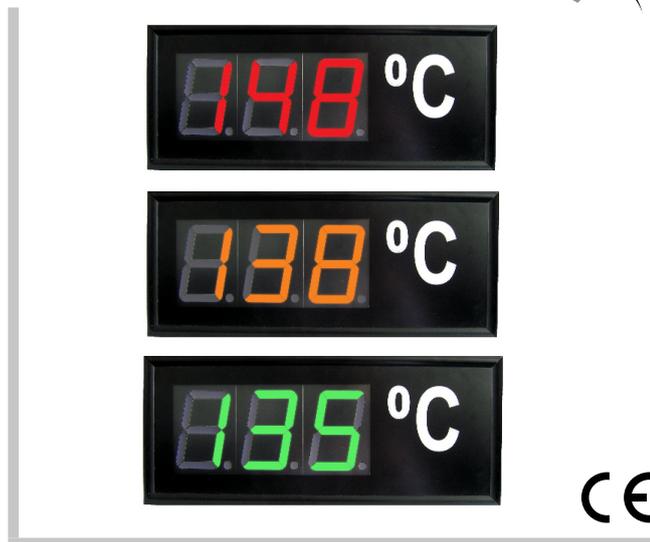


NUMERICAL DISPLAY PANEL DL21 TYPE

NEW



CE

APPLICATION

The three-colour DL21 numerical display is destined to display parameters: read out from external devices or given through RS-485. The DL21 advantage is its three-colour display (green, red and orange) on which the colour of displayed parameter can be freely programmed and can change depending on values set by the user.

This display panel finds a large application in office rooms, public utilities (e.g. information about temperature, humidity), production halls - information about production machine state, number of made pieces, energy consumption) etc. The DL21 display has two RS-485 communication interfaces in MODBUS standard destined to:

- connect external devices,
- configure the display or introduce displayed values.

The display enables the connection of 10 external devices and to apply it as a local point of data acquisition. It can co-operate with external devices as „master” or „slave”. The basic execution of the display includes 3 digits and a space destined to place the unit. It is also possible to execute the display in the configuration definite by the user.

TECHNICAL DATA

| | |
|--|---|
| Read-out field | 3 digits, height = 100 mm ■ accessible colours: green, red and orange ■ green and red colours can be lighted simultaneously |
| Power consumption | < 15 VA |
| Communication: | |
| - interfejs | 2 × RS-485 galvanically separated |
| - transmission protocol | MODBUS RTU |
| - serviced functions | 3, 16, 17 |
| - data format | 8n1, 8n2, 8e1, 8o1 |
| - baud rate [kb/s] | 2.4, 4.8, 9.6, 14.4, 19.2, 28.8, 38.4, 57.6, 76.8, 115.2 |
| - maximal time to begin the answer | < 100 ms. |
| Reaction against decays and supply recovery: | preservation of configuration data |
| Protection grade ensured by the housing acc. EN 60529 | IP40 and IP10 on terminal side |
| Dimensions | 482 × 196 × 42 (see Fig. 1) |

Environmental and rated operating conditions:

| | |
|-----------------------|------------------------|
| - working temperature | - 20...23...50°C |
| - storage temperature | - 25...75°C |
| - relative humidity | 25... 95% |
| - supply | 100...230...253 V a.c. |
| - supply frequency | 40...50...60 Hz |
| - working position | any |

Standards fulfilled by the display panel

Electromagnetic compatibility:

- noise immunity acc. to EN 61000-6-2
- noise emission acc. to EN 61000-6-4
- resistance against supply decays acc. to EN 61000-6-2

Safety requirements acc. EN 61010-1 standard:

- isolation ensured by the housing: basic
- isolation between circuits: basic
- installation category: III
- pollution grade: 2
- maximal phase-to-earth working voltage:
 - 300 V for supply circuits,
 - 50 V for other circuits.

EXTERNAL AND ASSEMBLY DIMENSIONS

The DL21 numerical display is closed in a panel made of aluminium sections ensuring the IP40 protection grade (IP 10 from the connection terminal side). The housing design enables the mounting on a wall or its suspension. Moreover, there is the possibility to adjust the display panel mounting angle.

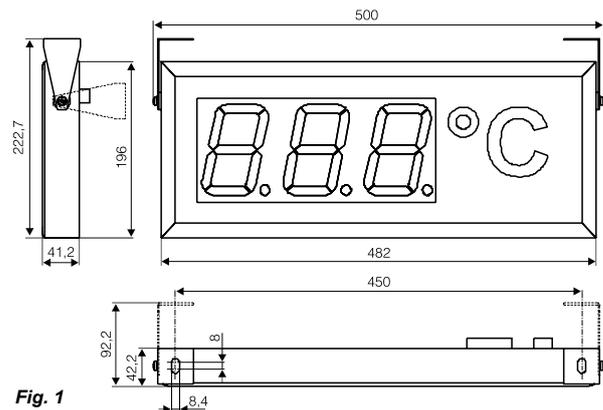


Fig. 1

ELECTRICAL CONNECTIONS

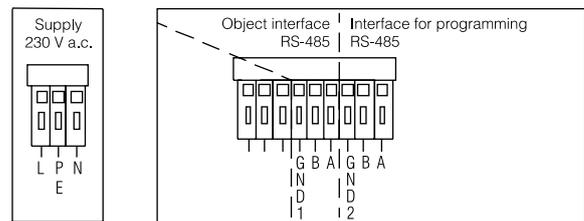


Fig. 2

ORDER CODES

| NUMERICAL DISPLAY PANEL | DL21 - | XX | X |
|--|--------|----|---|
| Display panel execution: | | | |
| standard..... | | 00 | |
| custom-made..... | | XX | |
| Acceptance tests: | | | |
| without an extra quality inspection certificate..... | | 8 | |
| with an extra quality inspection certificate..... | | 7 | |
| acc. to customer's requirements..... | | X | |

X - the code number will be settled by the manufacturer.

EXAMPLE OF ORDER

Code: **DL21 - 00 7** means:

- DL21** - numerical display panel of DL21 type
- 00** - standard execution
- 7** - delivered with an extra quality inspection certificate