LARGE SIZE ALPHANUMERIC DISPLAYS DA1 TYPE

CE

APPLICATIONS

Alphanumeric displays are destined to display messages inside buildings and can be applied:

● in selling points to display publicity, price lists, information for customers,
● in banks to display information about: exchange rate, interest rate, publicity, information for customers,
● in concert halls, museums as information about repertoire, informative or welcoming boards for visitors,
● as informative boards in different offices (e.g. Marketing Departments),
● in railway and bus stations or airports as informative boards for travellers,
● in office building halls, as publicity or informative boards destined to display publicity or parameters, e.g. about the weather,
● in office buildings of production plants to display information about the production state (e.g. number of produced pieces, temperature, pressure, etc.),
● in the judiciary as informative boards.

Situated in a visible place, information helps in the efficient work in industrial communication, logistics, automation, selling and control technology.

These alphanumeric displays are offered in three colours of the read-out field: red, green or yellow. They co-operate with external measuring devices equipped with RS-485 interface with MODBUS RTU protocol. It is possible to visualise the technological process and transmit messages from devices.

The basic version of these displays signs includes two lines of 20 characters, or three lines of 24 characters in the text version or a graphical field of 16×120 points or 32×144 points.

Custom-made display boards can be specially designed for other applications.

In such a case, different number heights and character resolutions in one board can be worked out after agreement with customers.

TECHNICAL DATA

Power consumption:

DA1-01	≤ 60 VA
DA1-02	≤ 90 VA
DA1-03	≤ 60 VA
DA1-04	≤ 125 VA

Read-out field:

DA1-01	Text, 2 lines of 20 characters each
DA1-02	Text, 3 lines of 24 characters each
DA1-03	Graphical, 16×120 points
DA1-04	Graphical, 32×144 points

Communication:

- serial interface (DA1 → PC)	RS-485 and/or RS232
- serial interface (DA1 → measuring device)	RS-485
- transmission protocol	MODBUS RTU

Reaction against decays and supply recoveries	preservation of configuration data
Protection grade ensured by the housing	IP 40
Dimensions	depending on execution (see fig.2)

Reference conditions and rated operating conditions:

- working temperature	0...23...55°C
- storage temperature	- 20... 75°C
- relative humidity	25... 95%
- voltage supply	100...230...240 V a.c.
- frequency	45...50...60 Hz
- external magnetic field	0...40...400 A/m
- working position	any

Standards fulfilled by DA1 display-systems:
Electromagnetic compatibility:

- immunity	EN 61000-6-2
- emission	EN 61000-6-4
- resistance against supply decays	EN 61000-6-2

Safety requirements:
acc. to EN 61000-1:2002(U) standard

- insulation ensured by the housing	basic
- insulation between circuits	basic
- installation category	II
- pollution level	2
- maximal phase-to-earth working voltage:	
- for supply	300 V
- for interface circuit	50 V

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OVERALL AND MOUNTING DIMENSIONS

The housing of the DA1 alphanumerical displays is made of aluminium.
The safety degree ensured by the housing is defined as IP40.
The view of the board is shown on the fig.1.
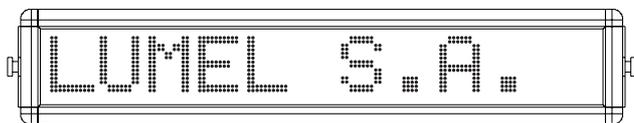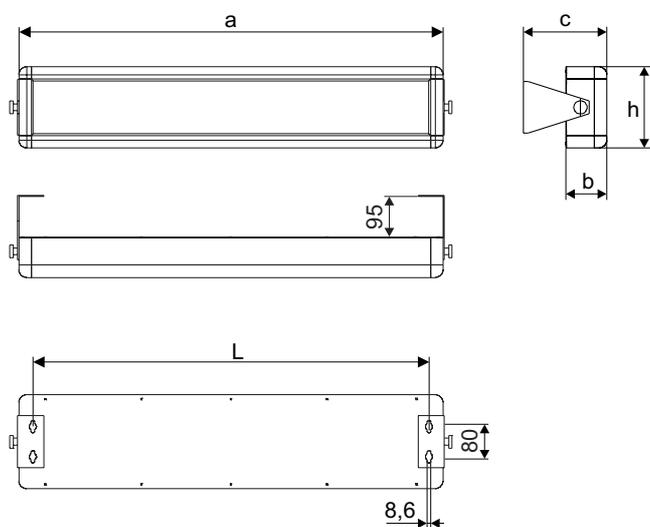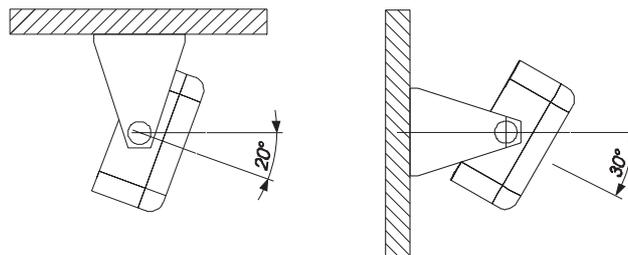Housing dimensions, depending on the execution are presented on the fig.2.

Fig. 1. DA1 board

Suspension of the board   Fixing of the board on the wall

Fig. 2 Board dimensions and spacing of holes and assembly holders.

Types of board	Read-out field	Board overall dimensions [mm]			Dimensions of assembly holders [mm]	
		a	b	h	c	L
01	2 lines of 20 characters	971	93.5	218	190.5	907
02	3 lines of 24 characters	1151	93.5	308	190.5	1108
03	graphical 16×120 points	971	93.5	218	190.5	907
04	graphical 32×144 points	1151	93.5	308	190.5	1108

EXECUTION CODES AND ORDERING

ALPHANUMERICAL DISPLAY	DA1	XX	X	X

Board type:

with text 2 × 20 characters (character height h = 60 mm)	**01**
with text 3 × 24 characters (character height h = 60 mm)	**02**
graphical 16 × 120 points	**03**
graphical 32 × 144 points	**04**
on order	**XX**

Colour:

red	**R**
green	**G**
yellow	**Y**

Interface for programming:

RS232	**0**
RS485	**1**
RS232+RS485	**2**
Ethernet	**3**
Profibus DP	**4**
CAN	**5**

ORDERING EXAMPLE

The code **DA1 01 R 2** means:

DA1 - alphanumerical display of DA1 type,

01 - execution with text 2 x 20 characters,

R - red colour displays,

2 - with RS232 and RS-485 interfaces.

Note: It is possible to order a board with built-in a light sensor