	ELEN, s.r.o., Lubochnianska 16, 080 06 Lubotice, Slovakia		
	DATASHEET		Datasheet No.:
Product name	Textual displays		12052401
Type / Model	TDU 99-16/xxx...H54		
Order code	(depends on the type of display)	Date of last revision:	24.05.2012



TDU 99-16/xxx...H54 series alphanumeric displays are programmable electronic devices for displaying static or moving textual information.

These displays are manufactured with high-brightness AlInGaP smd LED elements with lens, which ensure their good displaying properties and long lifetime. Their robust mechanical design makes them suitable to be used in demanding industrial or outdoor environments.

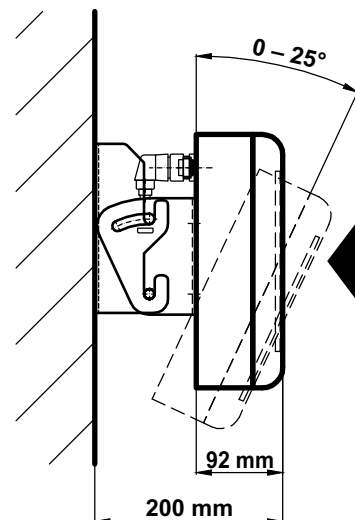
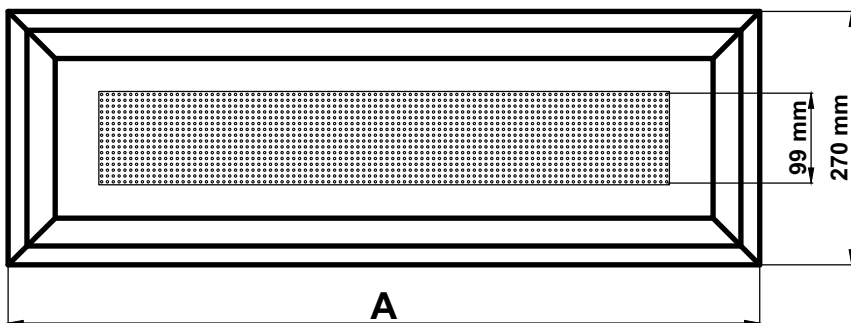
Software PC application for creating and programming text messages into display, or communication protocol description for programming the PLC control unit is also included with delivery.

Technical Specifications

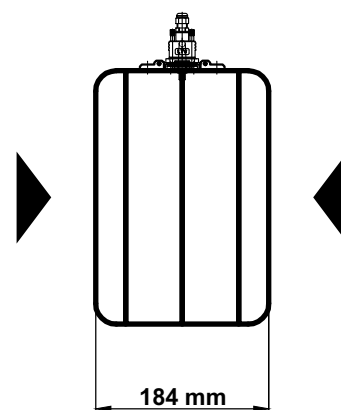
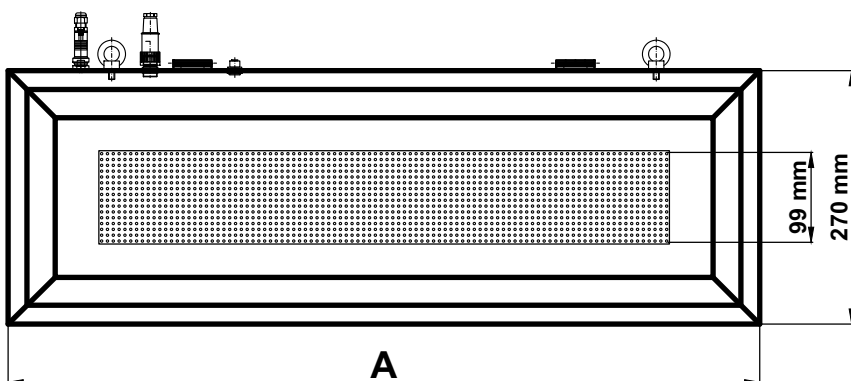
Character height	99 mm
Readability range	up to 40 m
Number of sides	1 or 2
Number of lines	1 (possibility to split 1 row into 2 smaller font text lines by software)
Row display matrix	16 x 96 – 240 dots, depending on the type of display
Number of characters in 1 row	12 – 30, depending on the type of display and used font (more characters are possible using smaller font, or splitting the row)
Color of displaying elements	yellow (590 nm) by default, red also available on request
Type of displaying elements	high-brightness AlInGaP smd PLCC LED diodes with lens, suitable for outdoor or indoor light conditions
Frame	robust anti-corrosive anodized aluminum frame, light, medium, or dark gray color powder paint coating
Front cover	anti-glare PERSPEX glass with optical filter, 5 mm thick
Class of protection	IP 54
Communication interface	serial RS232, RS485 with galvanic separation, Ethernet TCP/IP, Profibus DP, LonWorks® FTT-10, parallel, and others on request
Communication protocol	ELEN, Profibus DP, TCP/IP, LonTalk, and others on request
Data / mains connector	industrial grade, IP 65, type Binder, D-Sub 9-pin or RJ45 (depends on communication interface)
Power supply	230 VAC, 50 Hz (others on request, e.g. 24 VDC, ...)
Working temperature	-30°C ÷ +50°C

Dimensional drawing

Single-sided display



Double-sided display



Number of characters *	12	14	16	18	20	22	24	26	28	30
Row display matrix	16 x 96 dots	16 x 112 dots	16 x 128 dots	16 x 144 dots	16 x 160 dots	16 x 176 dots	16 x 192 dots	16 x 208 dots	16 x 224 dots	16 x 240 dots
Length of the A side	800 mm	900 mm	1 000 mm	1 100 mm	1 200 mm	1 300 mm	1 400 mm	1 500 mm	1 600 mm	1 700 mm

* Number of characters depends on used font.

More characters are possible using smaller font, or splitting the row into two text lines.

Options of communication interfaces (others on request)

	Type of connector (industrial grade, IP 65)
RS485, or RS232	Binder
Ethernet TCP/IP	RJ45
Profibus DP	D-Sub 9-pin
Service programming cable RS232	Binder – D-Sub 9-pin