

Operating and Observing  
**Operator Terminal GEL 8810**  
for GEL 8000 and GEL 8100

MOTIONLINE

**LENORD+BAUER**

Technical information

version 11.04



# Hardware description

## Technical data

### Concept

The operator terminal was designed as a control and display unit for up to 31 Controllers of the series GEL 8000 and GEL 8100.

It permits to edit and visualize nominal values and machine parameters and to display actual values. The interface software can be adjusted by Lenord+Bauer upon request.



The touch sensitive keyboard is highly user-friendly, since its 18 mm x 18 mm shortstroke keys can be labelled in accordance with the user's requirements. A large LCD guarantees a good legibility, even if the lighting conditions are bad. The LCD of the GEL 8810 0XX has a background lighting as additional feature. The user can adjust the contrast according to his individual requirements.

### Design

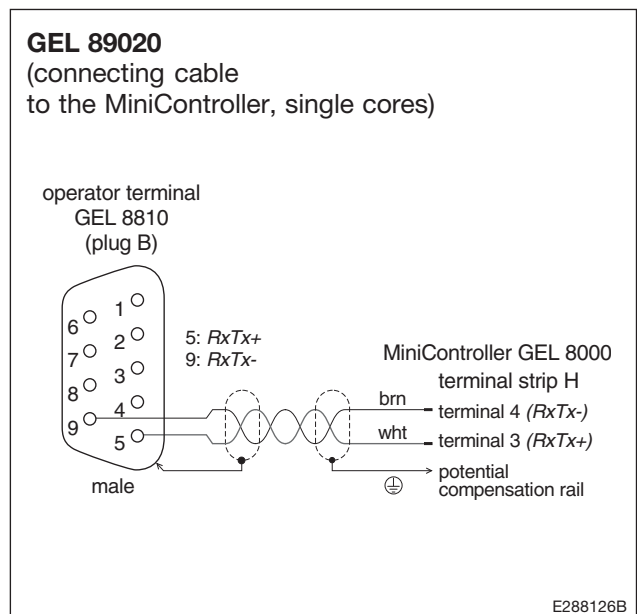
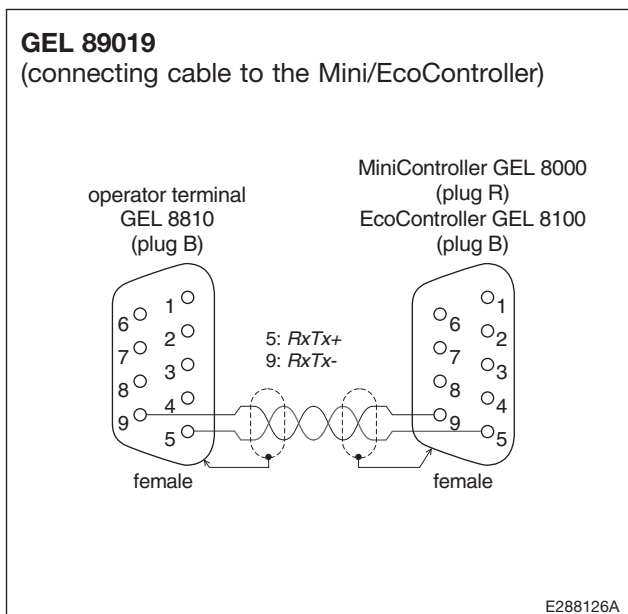
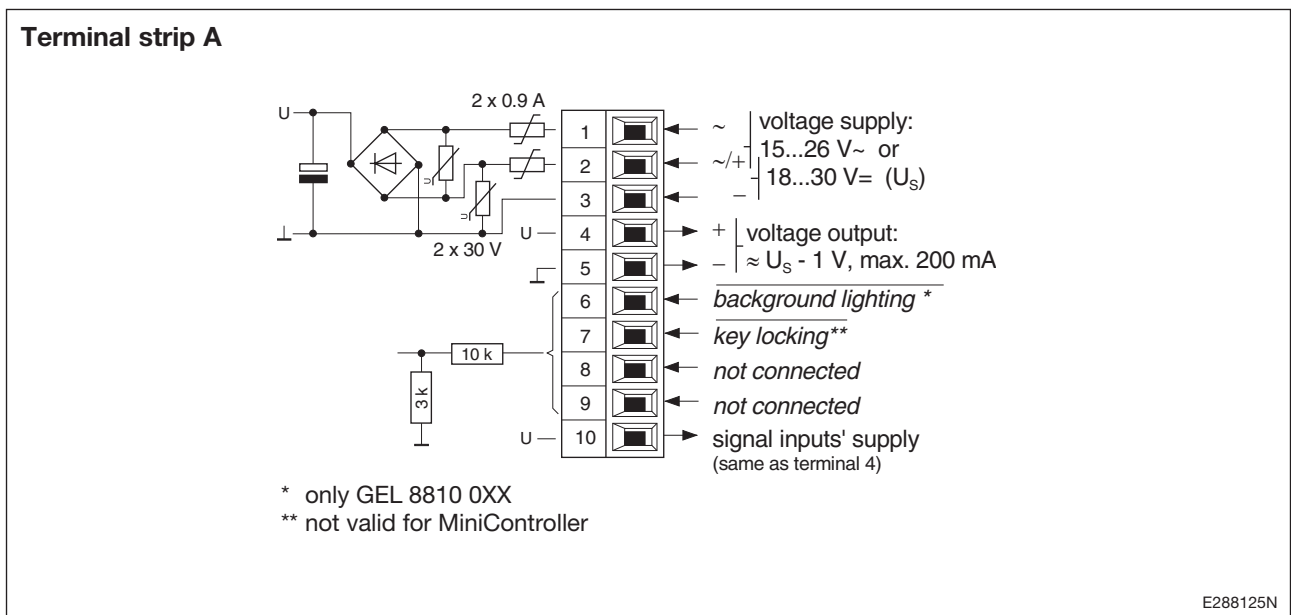
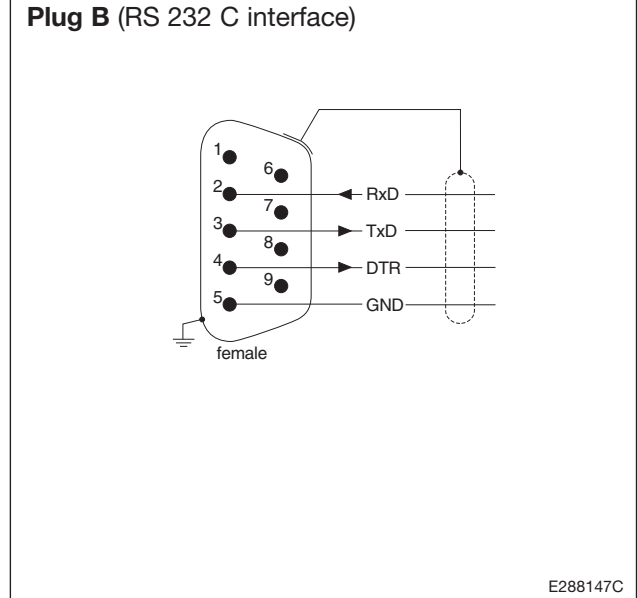
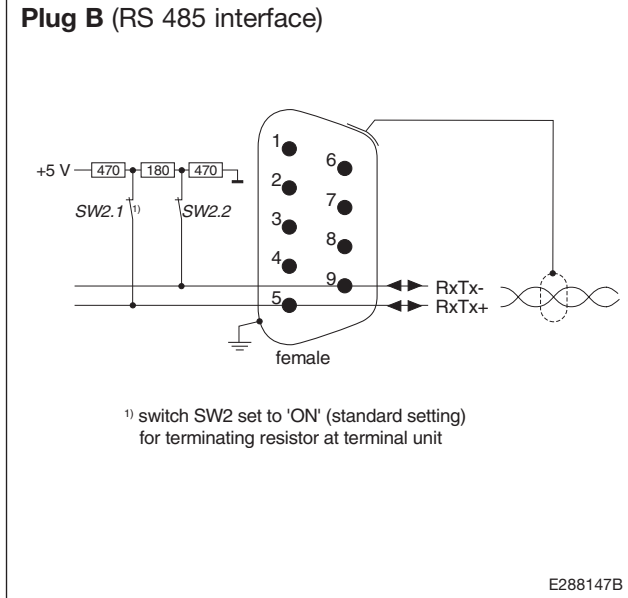
The housing of the operator's terminal is made of iron plate and was designed for being used in a control panel, its front size being 160 mm X 160 mm and a front-to-back size of 57 mm.

### Serial Interfaces

Two serial Interfaces, i. e. RS 232 or RS 485, are available.

## Technical data

supply voltage	18 ... 30 V DC, 15 ... 26 V AC
power consumption	approx. 0.7 A with background lighting, approx. 0.35 A without background lighting
<b>Interfaces</b>	
bit rate	to the PC 19,200 Baud, 9,600 Baud (EcoController), 4,800 Baud (MiniController), 8 data bits, even parity, 1 stop bit
<b>Logic inputs</b>	
level	low: 0 ... + 5 V ; high: +15 ... + 30 V
<b>Climatic application classes according to DIN 40040</b>	
ambient temperature range	0 °C ... + 50 °C
storing temperature range	-20 °C ... +80 °C
relative air humidity	up to 95%, non condensing
<b>EMC (observance of the assembly instructions is mandatory)</b>	
electromagnetic emissions	EN 61000-6-3
electromagnetic immunity	EN 61000-6-2
The GEL 8810 apparatus complies with the EU Directive EMC 89/336 EEC and therefore the CE mark was affixed to it.	
<b>Display</b>	
display	LCD with 4 lines each having 20 digits, with yellow background lighting in the GEL 8810 0XX
line height	9 mm (dot matrix 8 x 5)
line length	120 mm
<b>Housing</b>	
material	iron plate, powder coated
weight	approx. 0.5 kg
<b>Protection class according to DIN 40050</b>	
front	IP 65 (GEL 8810 0XX) or IP 54 (GEL 8810 AXX)
back	IP 20



# Type code, Dimensioned drawing

## Type code

8810	-	-	-	description
				<p><b>1 software types</b> communication software for EcoController GEL 81XX</p> <p><b>2</b> EcoController GEL 81XX communication software for MiniController GEL 8010</p> <p><b>3</b> MiniController GEL 8010 communication software for MiniController GEL 8080/85</p> <p><b>5</b> MiniController GEL 8080/85 software types 1... 3 combined</p> <p><b>6</b> communication software for MiniController GEL 8010 incl. option: start/stop keys</p> <p><b>hardware interfaces</b></p> <p><b>0</b> RS 485</p> <p><b>D</b> galvanically separated RS 485</p> <p><b>E</b> galvanically separated RS 232 C (upon request)</p> <p><b>background lighting</b></p> <p><b>0</b> IP 65 with background lighting</p> <p><b>A</b> IP 54 without background lighting</p>

## Available types

**GEL 8810 0 D 1** IP 65, background lighting, galvanically separated RS 485, communication software for EcoController GEL 81XX

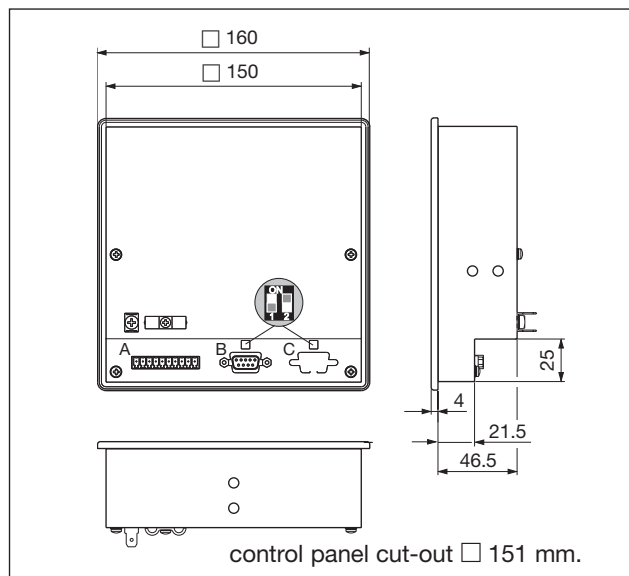
**GEL 8810 0 D 2** IP 65, background lighting, galvanically separated RS 485, communication software for MiniController GEL 8010

**GEL 8810 0 D 3** IP 65, background lighting, galvanically separated RS 485, communication software for MiniController GEL 8080/85

**GEL 8810 0 D 5** P 65, background lighting, galvanically separated RS 485, communication software for Eco- and MiniController, flash memory

**GEL 8810 0 D 6** IP 65, background lighting, galvanically separated RS 485, communication software for MiniController GEL 8010, incl. option: start/stop keys

## Dimensioned drawing



**GEL 8810 A 0 2** IP 54, RS 485, communication software for MiniController GEL 8010

**GEL 8810 A 0 3** IP 54, RS 485, communication software for MiniController GEL 8080/85

**GEL 8810 A 0 6** IP 54, RS 485, communication software for MiniController GEL 8010, incl. option: start/stop keys

## Accessories

connecting cable to the Eco/MiniController, 2.5 m GEL 89019

connecting cable to the MiniController (single cores), 2.5 m GEL 89020

mains transformer GEL 7923