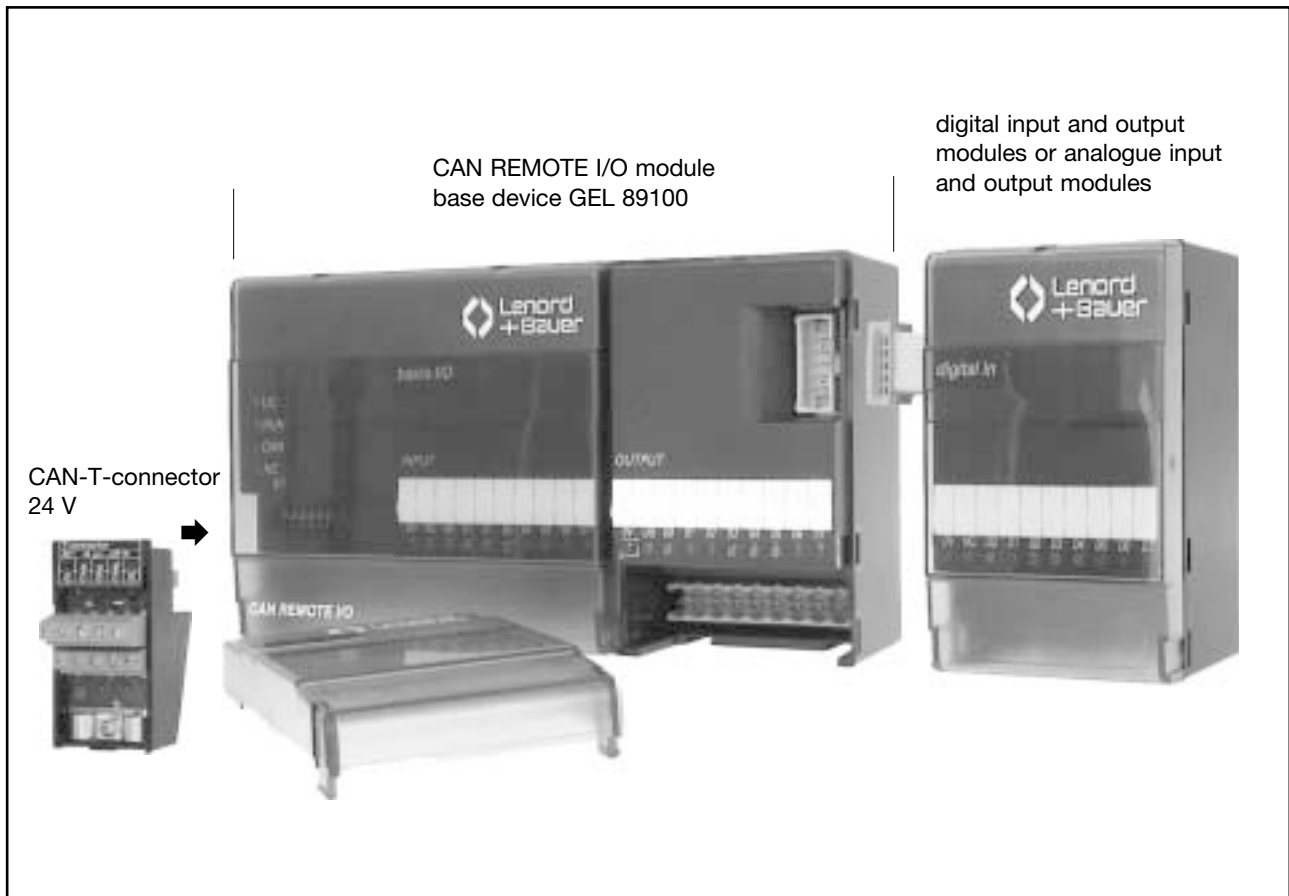


CAN REMOTE I/O module
Base device GEL 89100
with input and output modules



Technical information

Version 08.01



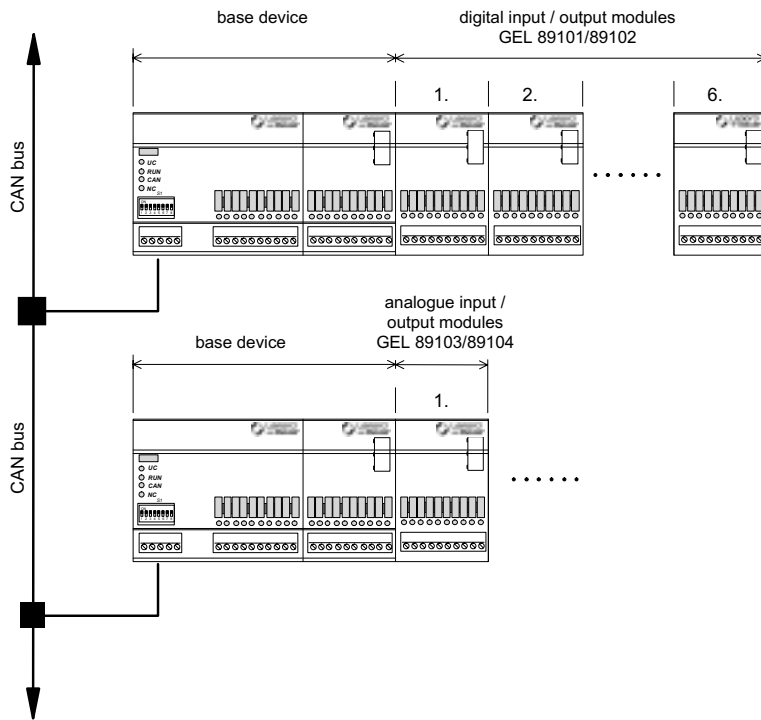
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...automates motion

Concept

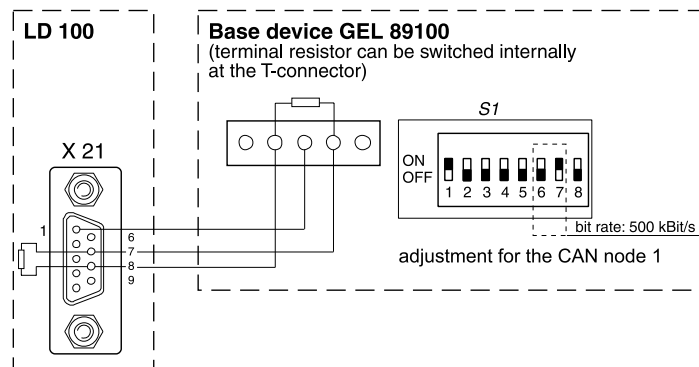
System presentation



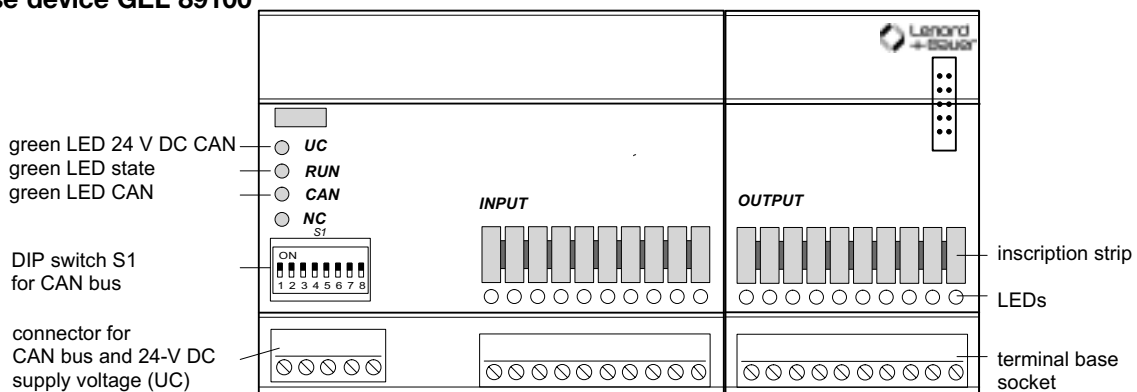
Concept

For the decentralized automation technique CAN REMOTE modules offer the flexibility required for interlinked systems. I.e. the user can take single modules and put them together to a system which he needs for the application he has in mind and – if market requirements change – he can adapt his system accordingly. The base device has got 8 digital inputs 24 V DC and 8 digital outputs 0.5 A/24 V DC and can be extended by 6 modules which can be lined up. Each extension module offers up to 8 digital or analogue inputs or outputs (not more than 2 analogue output modules are possible). Consequently, up to 64 bus terminals per each node are practicable, 16 thereof being located at the base device and up to 48 analogue or digital inputs and outputs which can be freely mixed.

Connection example LD 100 and base device GEL 89100

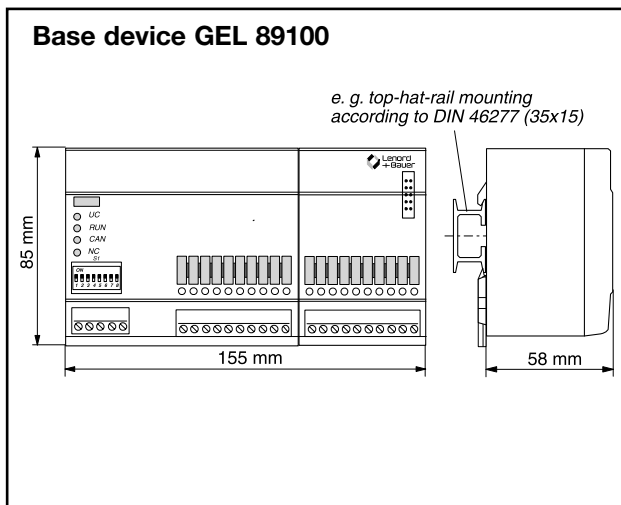


Base device GEL 89100



GEL 89100

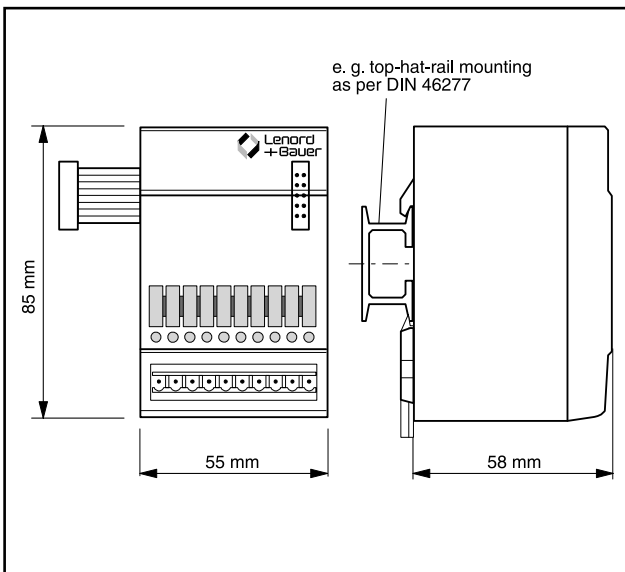
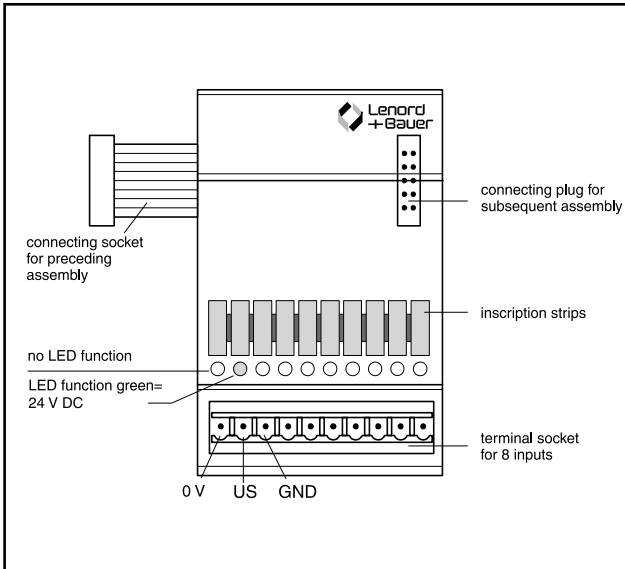
Base device



Digital inputs	8
input voltage	0 ... 24 V DC
limit values	-30 ... +30 V DC
for signal = 0	< + 5 V DC
for signal = 1	> + 14 VDC
typical input resistance	3.9 kΩ
typical input current at signal = 1	6 mA
input delay time	0.6 ms
Digital outputs	8
supply voltage (US)	+ 24 V DC
limit values	+18 ... + 30 V DC
max. output current (signal = 1)	0.5 A
total load capacity	4 A
min. switching current	100 μA
Output delay time	
for signal 0->1	600 μs
for signal 1->0	800 μs
Potential separation	
inputs/outputs <-> logic	yes
I/Os <-> I/Os	no
Supply voltage (UC)	+24 V DC
limit values	+18 ... +30 V DC
protection class	IP 40
EMC	IEC 801
Ambient temperatures	
in operation	-25 °C ... + 70 °C
storage	-40 °C ... +85 °C
weight	360 g
size	155 x 85 x 58 mm
CAN bus	CANopen
bus node address	1 ... 63
CAN bus bit rate	1MBit/s
	500 kBit/s
	125 kBit/s
	20 kBit/s

GEL 89104

Analogue output modules



Analogue outputs	2
Supply voltage (UC)	+24 V DC
limit values	+18... +30 V DC
protection class	IP 40
max. power consumption	2 W
max. power consumption logic	180 mW
signal ranges	0 ... + 10 V, 0 ... 20 mA
resolution	12 bits
value per increment	2.55 mV / 4.89 μ A
typical transient period (90%) per channel	70 ms
short-circuit strength output	sustained short-circuit
type of protective circuit	metal- oxyde-varistors
Potential separation	
supply<-> Logic and CAN	yes
output<-> Logic and CAN	yes
output<-> output	no
Ambient temperatures	
in operation	-25 °C ... + 70 °C
storage	-40 °C ... + 85 °C
size	55 x 85 x 58 mm

Article nos.:

GEL 89100	base device CAN REMOTE I/O module
GEL 89101	digital input module
GEL 89102	digital output module
GEL 89103	analogue input module
GEL 89104	analogue output module
GEL 89105	CAN-T-connector 24 V

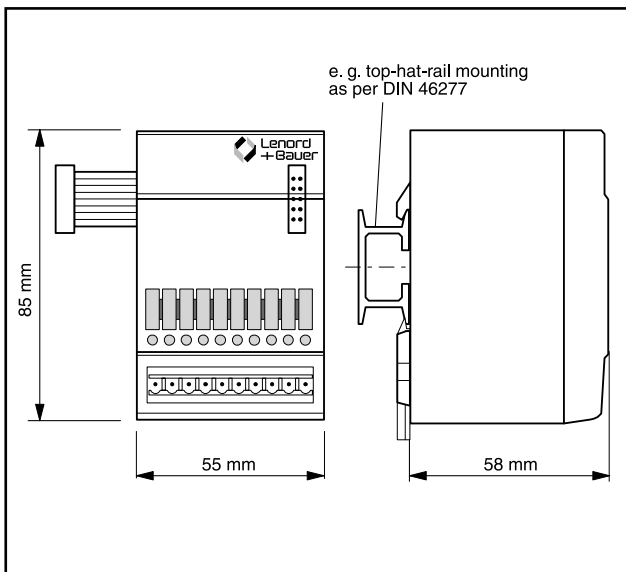
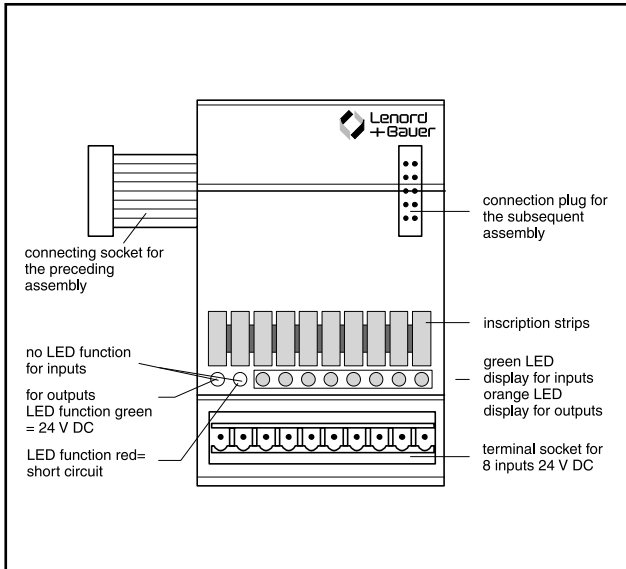
Must be ordered too!

GG 89.05	5-pole counter plug
GG 89.10	10-pole counter plug

Subject to technical modifications and typographical errors.
For the latest version please visit our web site : www.lenord.de.

GEL 89101/89102

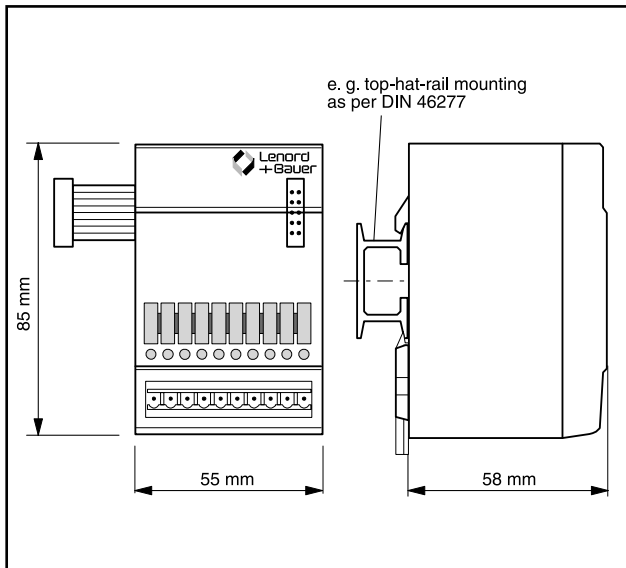
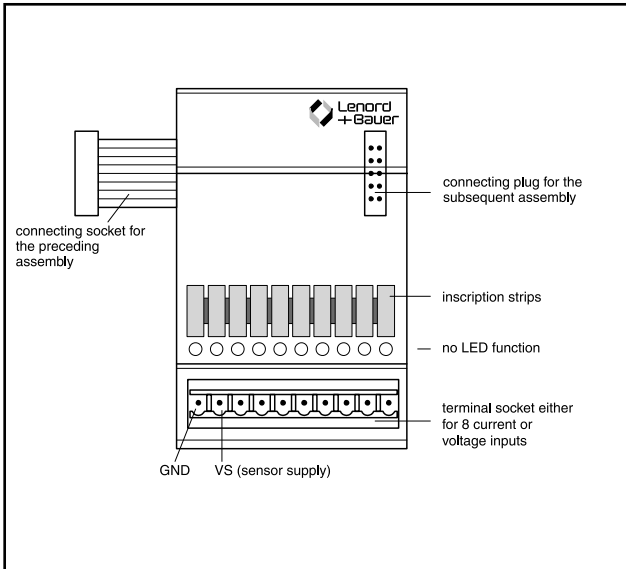
Digital input and output modules



Digital input modules GEL 89101	
digital inputs	8
input voltage	0 ... 24 V DC
limit values	-30 ... +30 V DC
for signal= 0	< + 5 V DC
for signal= 1	> + 14 V DC
typical input resistance	4 kΩ
typical input current at signal = 1	6 mA
typical input delay time	0.6 ms
adjustable via software	5.6 ms
power consumption	100 mW
Potential separation	
input<> logic	ja
input<> input	nein
Digital output modules GEL 89102	
digital outputs	8
Supply voltage (UC)	+24 V DC
limit values	+18... +30 V DC
typical power consumption	200 mW
max. output current (signal = 1)	0.5 A
current carrying capacity	4 A
min. switching current	100 μA
signal level of outputs without (load)	
signal = 0	max. 2 V DC
signal = 1	18 ... 30 V DC
Potential separation	
output <> logic	yes
output <> output	no
General data	
protection class	IP 40
Ambient temperatures	
in operation	0 °C ... + 55 °C
storage	-25 °C ... +70 °C
size	55 x 85 x 58 mm

GEL 89103

Analogue input modules



DIP switch S1/S2 adjustment

Every channel can be individually adjusted either as current or as voltage input.

Analogue input modules GEL 89103	
analogue inputs	8
power consumption logic	1.25 W
signal ranges	0 ... + 10 V, 0 ... 20 mA
input impedance	200 k Ω / 250 k Ω
Presentation of the input signal	
resolution	12 bits
nominal value	4000 units
value of LSB	2.5 mV / 5 μ A
voltage source for sensors (VS)	10 V DC / 5 mA
max. overload without destruction	\pm 30 V DC
Max. failure at 25 °C	
0 ... 55 °C	\pm 0.2 %
-25 °C ... + 70 °C	\pm 0.3 %
-25 °C ... + 70 °C	\pm 1.0 %
transformation time per channel	16.4 ms
input filter characteristics	first order
operating mode	Multiplex 8 auf 1
type of protection circuit	RC elements
Potential separation	
input <> logic	yes
input <> input	no
General data	
protection class	IP 40
Ambient temperatures	
in operation	-25 °C ... + 70 °C
storage	-40 °C ... + 85 °C
size	55 x 85 x 58 mm