COMBA-EX

Figure: COMBA-EX-4K1A1

- Robust and safe multi channel signal converter and display unit in connection with transducers of Kirchgaesser company
- Possible transducers (max. 4):
  - PEM-EX-C (pressure) and/or
  - TEM-EX-C (temperature) and/or
  - MID-EX-C (small flow) and/or
  - MID-EX-GC (high flow)
- Connection of the transducers with Hirschmann surface mounted connector type G4 and special pre-fabricated connection cable type VCG
- Automatic detection of the connected transducers (type and measuring range)
- No parameterizing or programming required for operation
- Signal output: each with 5 - 15 Hz, potential-free
- Electrical connection with plug-in terminals
- Power supply: 10.0 VDC .. 13.5 VDC
- Marking according to directive 94/9/EC: I M2 Ex ia I

Ordering information **COMBA-EX**

10	**No. of measuring points**	
	4	4 measuring points
	9	Special version, to be specified

20		**Electrical connection**	
		K	Plug-in terminals and two cable glands M28x1.5
		Y	Special version, to be specified

30			**Transducer connection**	
			1	Hirschmann surface mounted connector type G4
			9	Special version, to be specified

40				**Output signal**	
				A	Frequency 5 - 15 Hz, potential-free
				Y	Special version, to be specified

50					**Special equipment**	
					1	Standard
					9	Special version, to be specified

Complete order code:

COMBA - EX - | | | | | |

Note!
The connection cable with a length of max. 30 m is not a part of the package and has to be ordered separately.

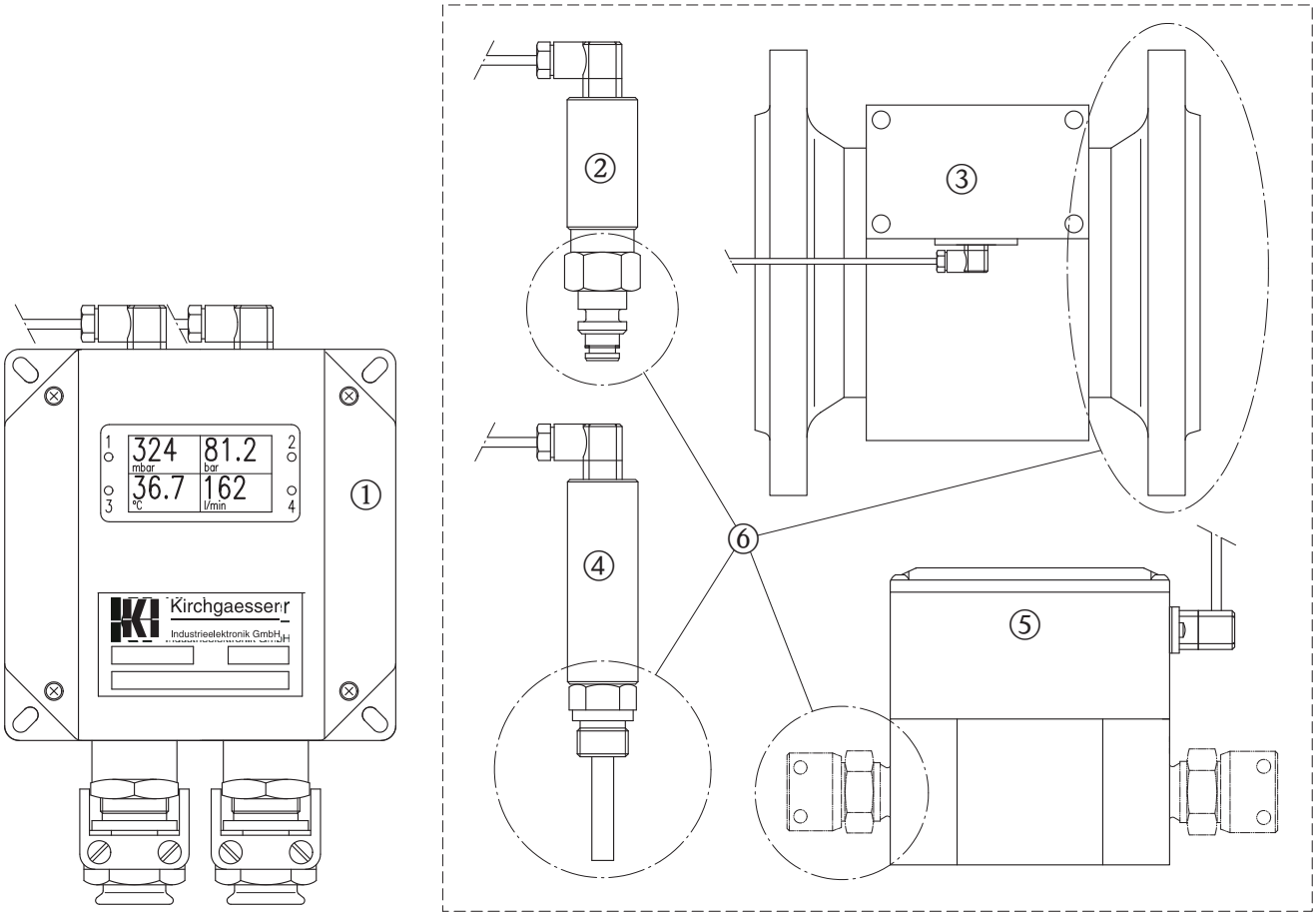
The following pre-fabricated connection cables are available:

- VCG-01 (length 1 m) part no.: 2640001
- VCG-05 (length 5 m) part no.: 2640005
- VCG-10 (length 10 m) part no.: 2640010
- VCG-20 (length 20 m) part no.: 2640020
- VCG-30 (length 30 m) part no.: 2640030

Supplementary documentation:

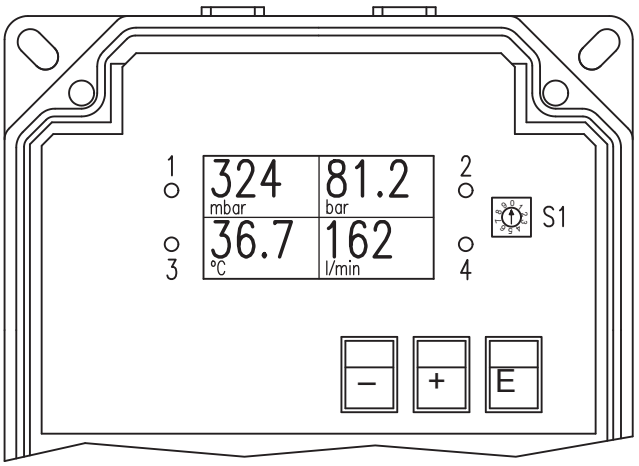
- Operating instructions MID-EX-C*: **ba052100a1** (german/english)
- Operating instructions MID-EX-GC*: **ba050000a1** (german/english)
- Operating instructions PEM-EX-C*: **ba054000a1** (german/english)
- Operating instructions TEM-EX-C*: **ba055000a1** (german/english)

Measuring system:



- The measuring system consist of the multi channel signal converter and display unit COMBA-EX ① and selectable transducers PEM-EX-C ② (pressure), TEM-EX-C ④ (temperature), MID-EX-C ⑤ (small flow) and/or MID-EX-GC ③ (high flow).
- The transducers are available with different process connections ⑥, for further details please take a look at the respective product information.

Display and operation:



- The measurands of the max. 4 transducers are shown on the big LC-display, the associated LEDs indicate the correctly connected transducers.
- There is no operation required. The switch S1 activates the simulation mode, the key buttons [–], [+] and [E] are prepared for further software extensions.

Technical data (general):

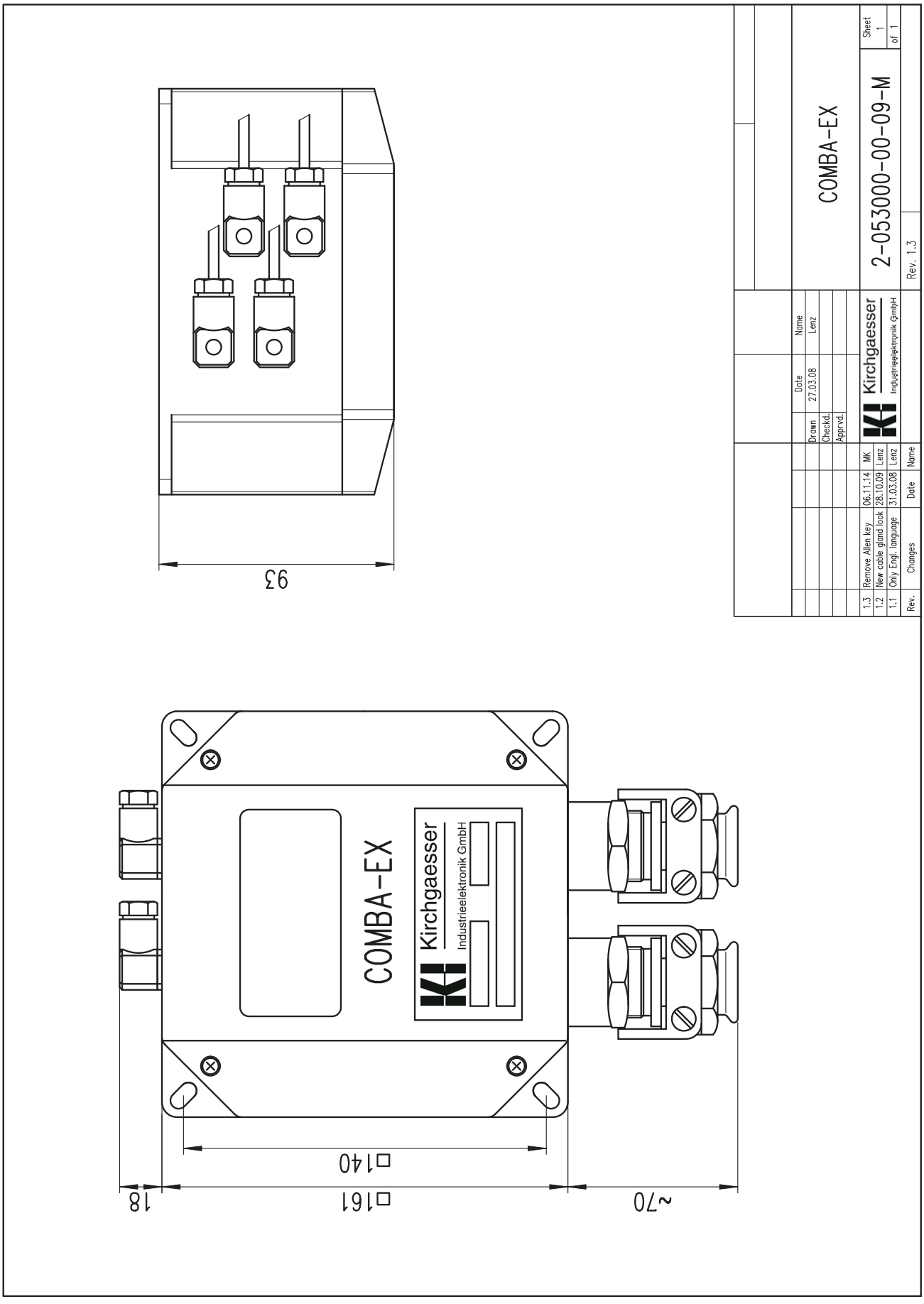
- Multi channel signal converter and display unit
- Connectable transducers:
  - PEM-EX-C (pressure) and/or
  - TEM-EX-C (temperature) and/or
  - MID-EX-C (small flow) and/or
  - MID-EX-GC (high flow)
- Automatic detection of connected transducers (type and measuring range)
- Protection according to EN 60529:
  IP 65
- Housing:
  Glasfibre-reinforced polyester, graphite added
- Weight:
  Approx. 2.5 kg
- Type of protection according to EN 60079-0:
  Ex ia I
- Ambient temperature:
  -20°C ≤ Ta ≤ +40°C

Tecnical data (electrical):

- Power supply:
  10.0 VDC ≤ Ui ≤ 13.5 VDC
- Current consumption
  - 80 mA, without external transducers
  - The total current consumption is higher due to the current consumption of the connected transducers.
- Frequency output
  - Supply voltage: max. 13.5 VDC
  - Output signal: 5 - 15 Hz, potential-free
- Internal inductances:
  Negligible
- Internal capacitances:
  Negligible

Note!
The device is approved and certified according to GB3836.1, GB3836.2 and GB3836.4 for the use in China mining, the certification numbers are **J2013327** and **J2013328**.

Dimension sheet:



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