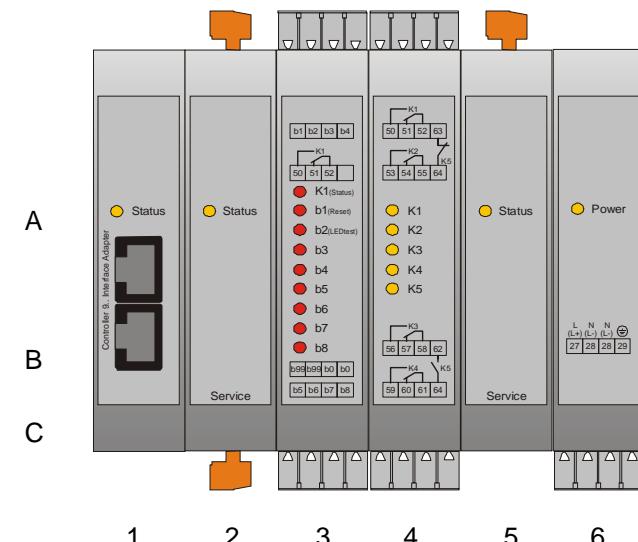


- A Status-LED (depending on the module)  
 B Connection interface for KFM controller 903 / 93  
 C Interface, only KFM-service (analogue input module)

- 1 Hardware expansion adapter (852610)
- 2 Analogue input module (8522..)
- 3 Binary input module with relay cont. (8523..)
- 4 Relay output module (8527..)
- 5 Analogue output module (8528..)
- 6 Power supply module (8525..)



### General description:

The modular hardware expansion modules are used to enlarge the built-in hardware of KFM-devices by adding additional in- and outputs.

For connection to external KFM-devices, e.g. controller series 903K or devices equipped with interface 99s610, module-sided the module 852610 is necessary, which connects all further modules. Optionally, a field bus adapter can be connected to the CPU module (interface "interface adapter").

Alternatively, expansion modules can be connected to independent DIN rail modules directly, e.g. module 852620 (only for data acquisition), data logger 834.. or modular malfunction alarm display 826..

### Module overview:

#### CPU- modules:

- 852610      Hardware expansion adapter for KFM-controller  
 852620      Independent module for data acquisition  
 852621      Freely configurable data processing module

#### Power supply modules:

- 852500      Power supply module 100-230V AC  
 852508      Power supply module 24V AC or DC

#### Analogue modules:

- 852220      Module with 2 analogue inputs Pt100 / stand. signal, range 0..400 / adjustable  
 852280      same as 852220, but range -200..+800 / adjustable  
 85228e4m8    Module with 4 anal. inputs stand. signal 0/4...20mA, range adj., connection M8 sockets  
 852820      Module with 2 analogue outputs 0/4...20mA

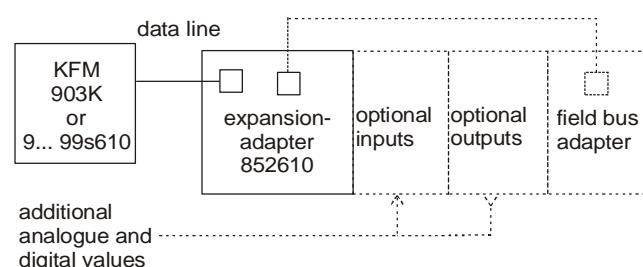
#### Digital modules:

- 8523801     Module with 8 binary inputs 230VAC,1 relay contact (pot. free changeover)  
 8523881     Module with 8 binary inputs 24VDC,1 relay contact (pot. free changeover)  
 852750      Module with 5 relay outputs (changeover, max. 250V 2A)

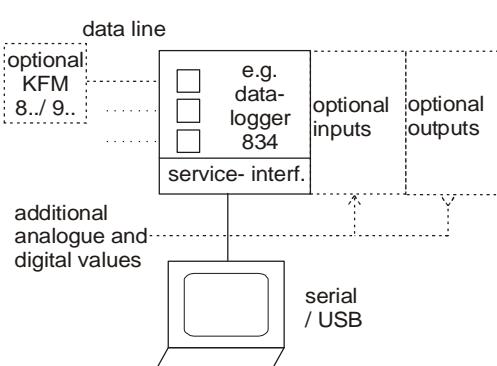
#### Device variants (last number):

- .0i1          Single-sided connection for internal bus connection only

#### Flowchart: with Hardware expansion adapter



#### with independent functional module



**Interfaces:**

1 x KFM-device 903K or 9.. 99s610 (only hardware expansion adapter 852610), connection via the supplied cable, 1x interface adapter

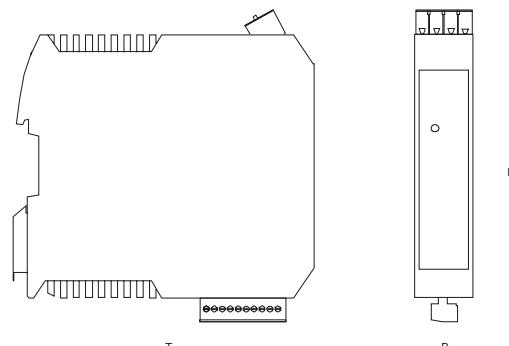
Only 8522..: 1 x TTL, protocol KFM 2.0, only for KFM- service

**Technical data:**

Mains connection:	100..250 VAC, about 12 VA, alternatively 24VDC, about 12 VA
optional: bin. inputs:	230 VAC, about 2 mA, alternatively 24VDC, about 2 mA
optional: anal. inputs:	<ul style="list-style-type: none"> <li>• Pt100/ standard signal, range 0..400 resp. -200..+800°C / adj.</li> <li>• Potentiometer 0...100/1000Ω / standard signal, range adjustable</li> </ul>
optional: relay output:	230 V / max. 2 A
optional: anal. output:	0/4..20mA (load<=500Ω) as control or signal output

**Other operating data:**

Housing:	for fastening to 35mm mounting rail
Installation orientation:	vertical, unlocking tab downwards
Type of protection:	IP20
Perm. ambient temperature:	0...60°C,
Nominal temperature:	20°C
Climatic category :	Relative humidity <= 75 % yearly average, no condensation, KWF to EN 60 529
EMC:	refer to EN 61326

**Installation dimensions ( each module)**

H= 124mm, B = 22,5mm, T = 116mm

**Wiring diagram:** (Example, valid for each delivered device is the wiring diagram on its casing only.)