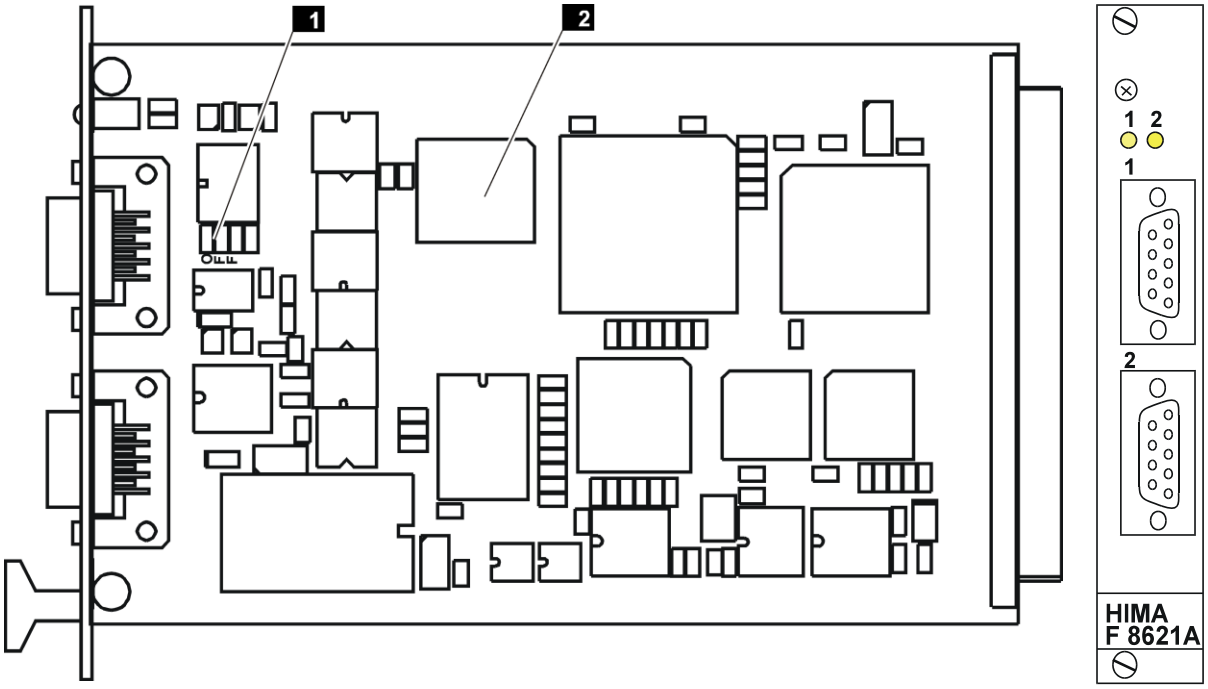
HIMA

F 8621A

CE

F 8621A: Coprocessor module

Use in: PES H41q/H51q beginning with OS 51 CB V6.0-6 (9808)



1 Switch S1...S4

2 EPROM with Operating System

Figure 1: F 8621A Coprocessor module

The coprocessor module has its own microprocessor HD 64180 and operates with a clock frequency of 10 MHz. It contains mainly the following functions:

- 384 kbyte static memory, CMOS-RAM and EPROM on two ICs; battery buffering of the RAMs on power supply monitoring module F 7131 (H51q)
- at H41q subrack battery buffering via buffer batteries on rear PCB
- 2 interfaces RS485 (half-duplex) with galvanic isolation and own communication processor. Transmission rates (set by software): 300, 600, 1200, 2400, 4800, 9600, 19200[1)], 57600 bps, or takeover of the values which are set on the CU via DIP switches
- Dual Port RAM for fast alternating memory access to the central module

i In central subracks of H51q systems the coprocessor module can be used only in the slots CM1 to CM3.

Space requirement	4 SU
Operating data	5 VDC / 360 mA

[1)] with restriction for serial Modbus connections

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When using the F 8621A, the following points must be observed:

- F 8621A and baud rate 19,2 kBit/s
  Interferences may occur if a baud rate of 19.2 kBit/s is used for serial Modbus connections via the F 8621A co-processor. For serial Modbus connections, HIMA recommends using baud rates of 9.6 kBit/s or 57.6 kBit/s for the F 8621A coprocessor, avoiding a baud rate of 19.2 kBit/s.
- F 8621A and HIPRO-S
  The mixed operation for safety-related communication via a coprocessor module F 8621A and, in parallel, via the communication module for Ethernet communication F 8627X is not admissible!
- F 8621A and F 8627(X) / F 8628(X)
  If a PROFIBUS-DP communication module F 8628 / F8628X or an Ethernet communication module F 8627 / F 8627X is used in addition to the coprocessor module F 8621A, the software function block HK-COM-3 (ELOP II V 3.5, BS 41q/51q V 7.08 (0214) and higher) with proper parameterization (see on-line help of the function block) has to be used.

Settings S1...S4 for RS 485

Interface 1:

	S1	S2
RS485	ON	OFF

Table 1: Interface 1

Interface 2:

	S3	S4
RS485	ON	OFF

Table 2: Interface 2

Settings differing from the ones given in the table are not admissible.

A process control system is connected redundantly via two redundant modules, each with a BV 7040.

An ELOP II bus is connected via a cable BV 7046.

Pin assignment of the interface RS485

Pin	RS485	Signal	Explanation
1	-	-	not used
2	-	RP	5 V decoupled with diodes
3	A/A’	RxD/TxD-A	Receive/send data A
4	-	CNTR-A	Control signal A
5	C/C’	DGND	Data reference potential
6	-	VP	5 V, plus pole supply voltage
7	-	-	not used
8	B/B’	RxD/TxD-B	Receive/send data B
9	-	CNTR-B	Control signal B

Table 3: Pin assignment of the interface RS485