

F6705

2-fold safety-related digital-to-analog current output module

The F 6705 converts two digital values to individually isolated 0/4-20 mA current outputs. The HIMA data sheet documents source and sink modes, automatic module tests and integrated safety shutdown.

2 OUTPUTS

Two individually isolated analog current channels.

CURRENT

0/4-20 mA output range.

MODE

Source or sink operation with the correct cable connector.

SAFETY

Integrated isolation, shutdown and automatic tests.

INTERFACE	HIMA RECORD
Safety basis	HIMA lists requirement class AK 1-6, safety isolation and integrated shutdown.
Module tests	D/A linearity, output cross-talk and safety shutdown are automatically tested.
Output scaling	Manufacturer scale: zero code = 0 mA; code 3840 = 20 mA.

EXACT-MODEL BOUNDARY

Do not mix source and sink connector modes; verify UQ, total burden, unused-channel jumpers and approved safety response.

MANUFACTURER BASIS

HIMA Paul Hildebrandt GmbH + Co KG, F 6705 (9912) Overview Data Sheets, pp. 1-3

Factual operating values

PARAMETER	HIMA DATA
Output range	0/4-20 mA
Resolution	12 bit; 4095 steps
Source burden	Maximum 550 ohm including line resistance
Sink burden	Maximum (UQ - 10 V) / 21.2 mA
Source voltage UQ	10-30 V in sink mode
Basic error	Maximum 0.2% / 40 microampere at 25 C
Operating error	Maximum 0.4% from 0 to +60 C
Cable length	Maximum 1000 m; burden dependent
Electric strength	250 V against analog GND

Plug variants

Z 7126 / 6705 / C.. variants;
match the source/sink installation.

Redundant output

Summed channel currents
require half the admissible
burden and the same mode.

Unused channel

HIMA requires a jumper on
unused channels to avoid module
error messages.

INTERPRETATION

These are manufacturer-stated module values, not a substitute for the installed safety design, cable-plug variant or cabinet acceptance record.

DOCUMENT CONTROL

HIMA Paul Hildebrandt GmbH + Co KG, F 6705 (9912) Overview Data Sheets, pp. 1-3