

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.

Documented application contexts

Current control

Provide two documented 0/4-20 mA analog outputs.

Source mode

Drive an approved burden within the 550 ohm total limit.

Sink mode

Use a documented 10-30 V source and the HIMA burden equation.

Redundant output

Combine approved parallel outputs in the same mode with halved burden.

Engineering snapshot

TOPIC	VERIFIED INTERPRETATION
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.
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.
Shielding	The original cable drawing connects the cable screen to the earth bar.
Bipolar output	Special connectors use two modules for signed -20 to +20 mA output.

CONTROLLED USE

Do not mix source and sink connector modes; verify UQ, total burden, unused-channel jumpers and approved safety response. Source: HIMA Paul Hildebrandt GmbH + Co KG, F 6705 (9912) Overview Data Sheets, pp. 1-3