H 7022

H 7022: Test Signal Bypass

- The H 7022 is connected between the F 6705 and the MTL Ex Isolating Drivers (e.g. 4045C, 4046C, 5045C and 5046C) to bypass the test signals of the F 6705.
- The H 7022 is designed for DIN rail mounting.

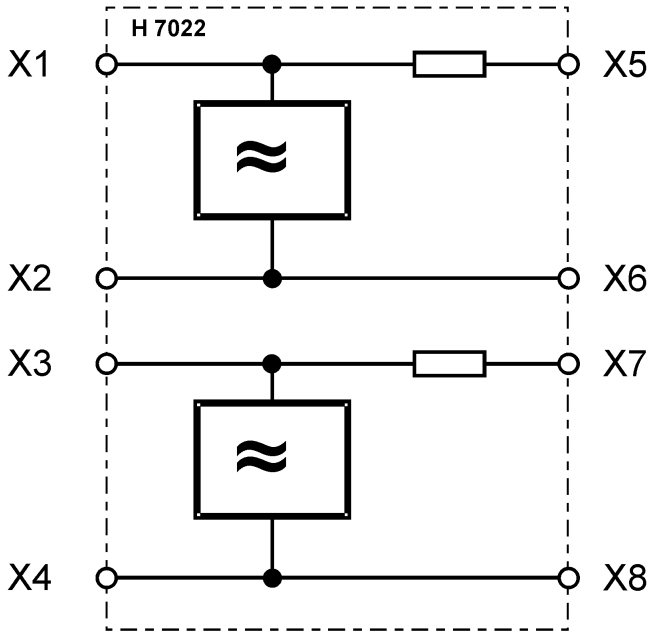

Figure 1: Block Diagram

The MTL Isolating Drivers alter the pulse quality of the F 6705 test signals (< 1 ms). This effect can cause the F 6705 to malfunction. The Test Signal Bypass prevents the alteration of the test signals.

In the Control Panel of the system, set noise blanking (No. of cycles) to 1 (Standard), see ELOP II online help. The defualt setting (noise blanking = 1) tolerates a first output error during settling time.

The structure of the Test Signal Bypass avoids that fault currents flow through the bypass.

The HART handhelds can still be used for communicating with a connected actuator.

A HART multiplexer can only be used if it does not connect terminal b6 and terminal b22 of one or several F 6705 to one another, see Figure 3.

Technical Data

Load resistance	220 Ω
Time constant of high-pass filter	1.3 ms
Ambient temperature	0...+60 °C
Degree of protection	IP 00
Dimensions	60.8 x 33.6 mm
Mounting	on 35 mm DIN-Rail
Weight	approx. 130 g
Mounting position	horizontally or vertically

Terminals and Cross Sections

X1...X4	Inputs	4-pole terminal row, 2.5 mm^2
X5...X8	Outputs	4-pole terminal row, 2.5 mm^2

Mechanical Design and Dimensions

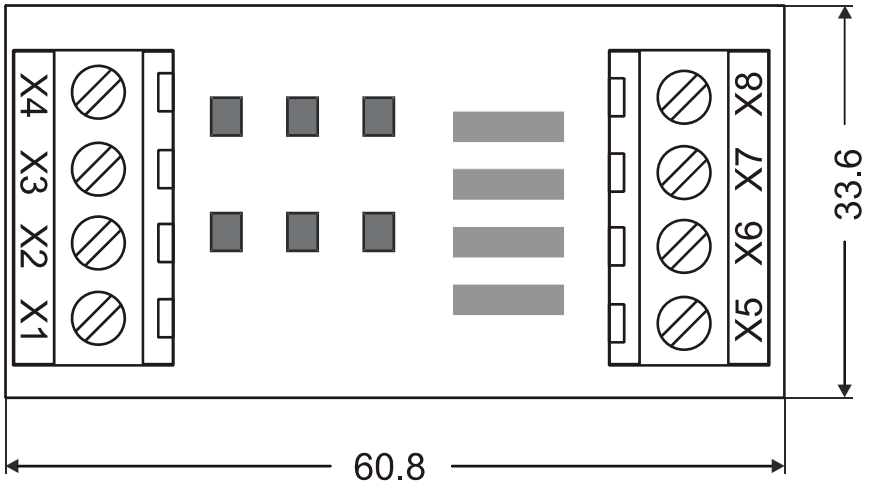

Figure 2: Dimensions of the H 7022

Application

To connect MTL Isolating Drivers to the F 6705 module, the Test Signal Bypass is connected between F 6705 and MTL Isolation Drivers, as described below.

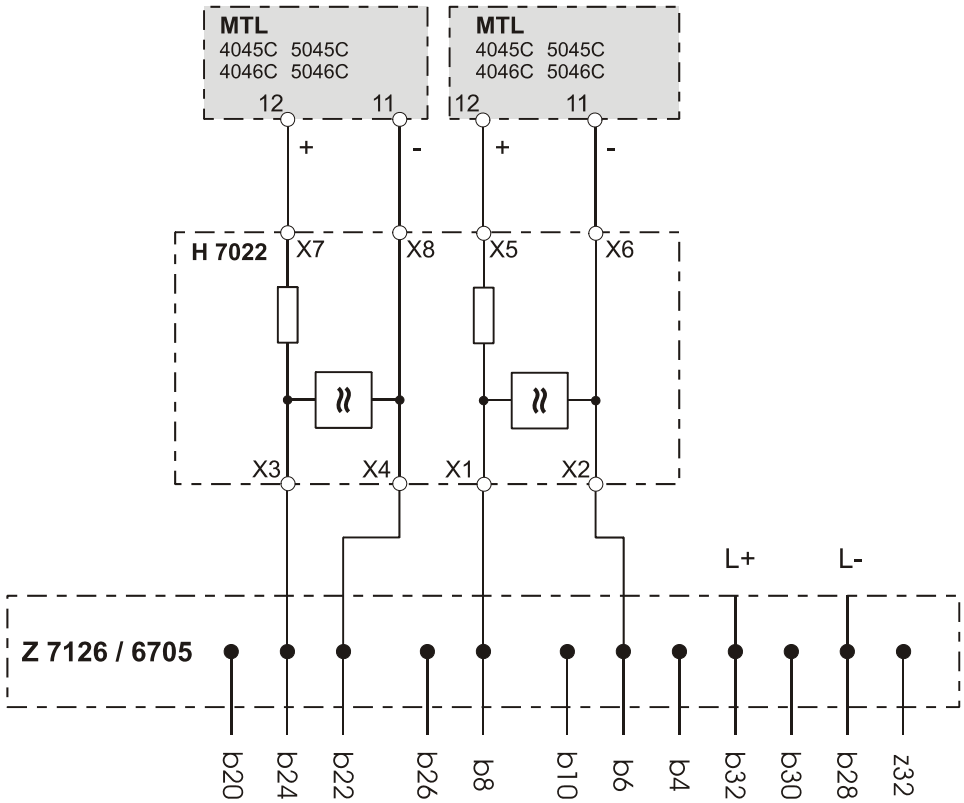

Figure 3: Cable Plug Z 7126 / 6705 connected to H 7022 and MTL Isolating Drivers