

CW-326

FAILURE INJECTION UNIT (FIU)



The Failure Injection Unit (FIU) serves to provoke physical failures, for example, to validate electronic control units. It is a further module belonging to the CW-300 series, that can be used to automate test environments on HiL test benches.

As many as 20 signal lines can be disconnected, connected together, connected to ground or to terminal 30, by means of a control CAN. A protective function with current limitation prevents damage occurring to the test specimen.

The open design in the top-hat rail housing (45 mm to DIN) offers the user a quick and easy solution to automate procedures in test bench technology.

PERFORMANCE CHARACTERISTICS

- 20 signal lines or 10 bus systems
- Control via CAN bus
- Provoke physical failure: Open circuit, short-circuit to ground, short-circuit to terminal 30, short-circuiting of signals
- Selective or simultaneous control of channels
- Top-hat rail housing for quick and easy installation
- Easy to extend and scale

FAILURE INJECTION

Number	20 signal lines
Signal voltage	Max. 45 VDC
Current	Max. 1 A at without failure injection
Current limitation	10 Ohm through connection, limitation at 2 A Response time < 1 ms emergency shutdown at 1 W

CAN-INTERFACE

Number	1
Type	ISO 11898-2 (highspeed), CAN-protocol version 2.0 A and 2.0 B, supports SAE J1939 (29-bit-identifier)
Data rate	50, 100, 125, 250, 500, 800 and 1000 kbit/s
Termination	120 Ohm, optional activation via jumper

POWER SUPPLY

Supply voltage	7 VDC to 30 VDC
Current consumption	70 mA at 12 VDC

ENVIRONMENTAL CONDITIONS

Temperature range operation	-20 °C to +65 °C
Temperature range storage	-20 °C to +85 °C
Relative humidity	35 % to 85 %, non-condensing

GENERAL INFORMATION

Housing	45mm-DIN-top-hat rail housing
Dimensions (LxWxH)	100 mm x 108 mm x 50 mm
Weight	150 g

FURTHER DEVICES CW-300 SERIES

CW-301 CAN controlled Power Supply	CW-325 Bus and Signal multiplexer
CW-310 Wheel Speed Pulse Conditioning	CW-327 A/D-Converter
CW-311 Wheel Speed Unit Simulation	CW-328 Current Measurement Interface
CW-321 Power Relay-Interface	CW-329 Relay Control
CW-322 20-Fold Signal Relay-Interface	CW-390 High Load Relay up to 35 A
CW-323 D/A-Converter	CW-391 High Load Relay up to 70 A
CW-324 Current Sink	CW-392 High Load Relay with integrated current measurement