PULSE DUPLICATOR

H 910
02.04.08 MC
REV. 01

ADI 312 Eng.

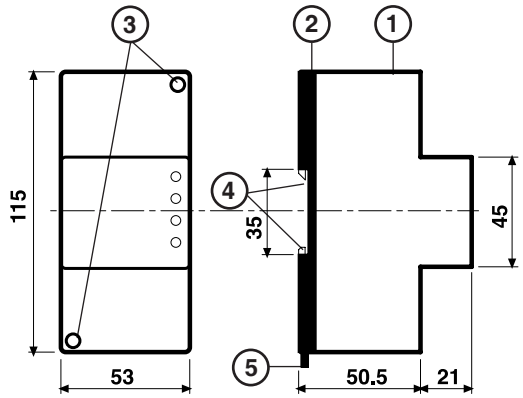
- **1 input signal**
- **2 parallel output signals**
- **Power supply 230 V~; DIN rail mounting**

CE

1. APPLICATION

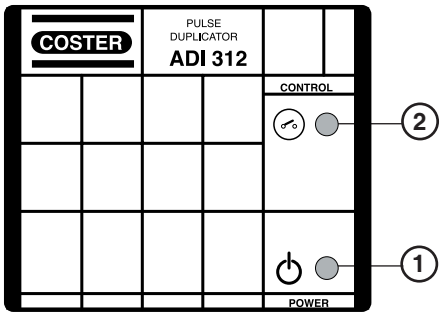
Used to convert an input signal from a pulse transmitter into two parallel signals destined:
e.g.: – to an integrator (IEB) for the recording and display of the data sent
– to a controller for measuring the flow and its limits (min. and max.).

2. OVERALL DIMENSIONS



1 – Protective cover for electronic components
2 – Base with transformer, relay and terminal blocks
3 – Screws for securing base and cover
4 – DIN rail securing elements
5 – DIN rail release lever

3. FACIA



1- Presence of voltage in network
2- Switch closed LED

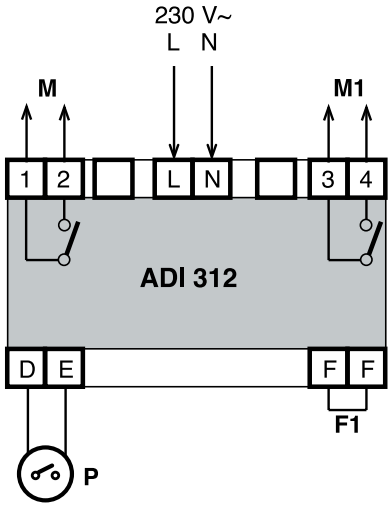
4. TECHNICAL DATA

Power supply	230 V ~ ± 10%
Frequency	50…60 Hz
Consumption	2 VA
Protection	IP40
Radio disturbances	VDE0875/0871
Vibration test	with 2g (DIN 40 046)
Voltage-free output contacts N.O.:	
Maximum switched voltage	125 V ~
Maximum switched current	0,5 A
Pulses	
minimum duration of pulse	50 msec
minimum interval between pulses	500 msec
Construction standards	Italian Electrotech. Committee (CEI)
Case	DIN 3E module
Mounting	on DIN 35 rail
Materials:	
Base	NYLON
Cover	ABS
Ambient temperature:	
Operating	0…45 °C
Storage	– 25…+ 60 °C
Ambient humidity	Class F DIN 40040
Weight	0.31 kg
Features of pulses input	
power	12 V–
Maximum current	1mA (F1 closed)
resistance switch max	1.5 kΩ (F1 closed)
maximum duration of pulse	20 ms
minimum interval between pulses	600 ms

5. INSTALLATION

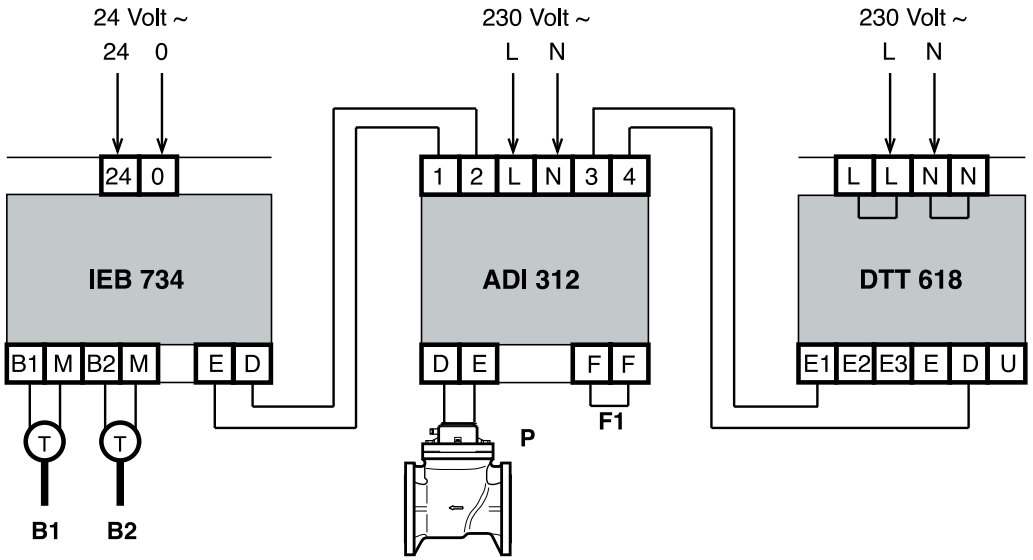
The controller must be installed in a dry location that meets the ambient limits given under TECHNICAL DATA.
If installed in spaces classified as “Hazardous” it must be mounted in a cabinet for electrical appliances constructed according to the regulations in force for the type of danger concerned.
The controller can be mounted on a DIN rail and installed in a standard DIN enclosure.

6. WIRING DIAGRAM



P – Pulses input
M – First parallel output
M1 – Second parallel output
B1 – Detector t° flow metering
B2 – Detector t° return metering
P – Volumetric meter pulse transmitter
F1 – Do not change from condition in which supplied.

EXAMPLE OF ELECTRIC WIRING



7. ELECTRICAL CONNECTIONS

Proceed as follows :
- Separate base from cover (loosen the securing screws)
- Mount the base on the DIN rail and check that it is firmly anchored by the securing elements
- Carry out the wiring according to the diagram and in compliance with current electrical regulations and using:
  – 1.5 mm² cables for power supply.
  – 1 mm² wire for incoming and outgoing signals.
- Switch on power (230 V~) and check its presence at terminals L and N.
- Remove power, replace cover on base/terminal block and secure it with the two screws supplied (2.3) .

You are advised not to insert more than two cables in a single terminal of the controller and, if necessary, to use an external junction box.

8. OPERATION

ADI 312 converts an incoming On-Of signal into two On-Off output signals.

Amendment to data sheet

Data	Revision No.	Page	Section	Amendment description
02.04.08 MC	**01**	1	4. Technical data	Pulse data entered

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