Synchronizer Module
Type D 3212 4000

Dupline®
Fieldbus | Installationbus
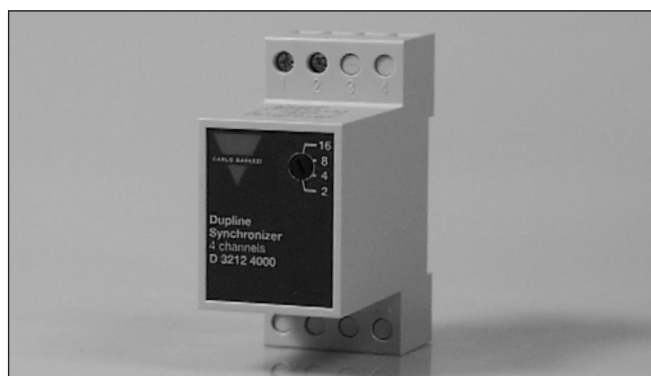
- **Multiplexer for analog modules**
- **2, 4, 8 or 16 multiplex addresses**
- **Multiplex addresses on channels A1 to A4**
- **H2-housing**
- **For mounting on DIN-rail (EN 50022)**
- **Supplied by Dupline®**

Product Description

Dupline® transmitter with multiplexing function for multiplexed transmission of analog signals. Applicable for transmitters and display with analog inputs and built-in demultiplexer (type D 6369 6475 or D 3429 61..). Increases the transmission capacity of a Dupline® system to max. 112 analog signals with 12 bit resolution or 3.5 BCD.
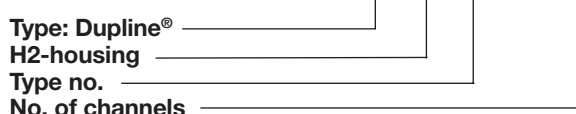
Ordering Key

D 3212 4000

Type: Dupline®
H2-housing
Type no.
No. of channels

Type Selection

Supply	Ordering no. 4 channels Synchronizer
By Dupline®	**D 3212 4000**

Code module*

* No code module required, as the synchronizer always transmits on channels A 1-4.

General Specifications

Environment	
Degree of protection	IP 40
Pollution degree	3 (IEC 60664)
Operating temperature	-20° to +50°C (-4° to +122°F)
Storage temperature	-50° to +85°C (-58° to +185°F)
Humidity (non-condensing)	20 to 80%
Mechanical resistance	
Shock	15 G (11 ms)
Vibration	2 G (6 to 55 Hz)
Dimensions	
Material	
(see "Technical Information")	H2-housing
Weight	75 g

Product Specifications

Dupline connections	
Signal	Terminal 1
Common	Terminal 2
Selector setting	Front switch
2 addresses	2
4 addresses	4
8 addresses	8
16 addresses	16
Multiplex frequency	1 pulse train

Supply Specifications

Power supply	Supplied by Dupline®
Reverse polarity protection	Yes
Rated operational current	≤ 300 µA
Power dissipation	≤ 10 mW

Mode of Operation

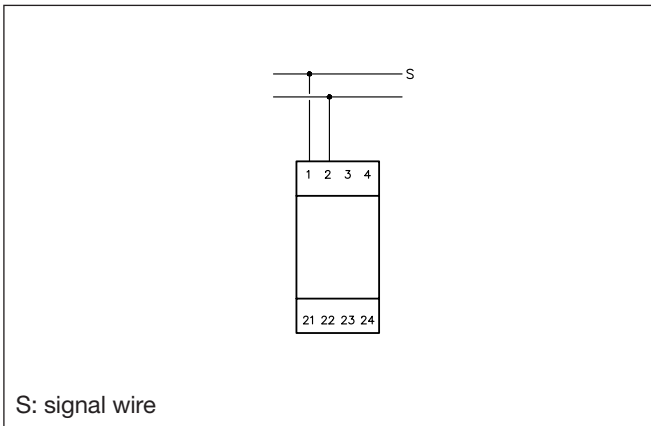Synchronizer for control of multiplexed analog modules in H4-housing.

D 3212 continuously transmits binary values (addresses) on channels A1 to A4 as shown in the chart below. Every binary value enables the respective transmitters, receivers and displays in a system that uses multiplexed modules.

First, the transmitters/receivers on address 0 exchange data. In the following pulse train the transmitters/receivers on address 1 exchange data etc.

With this all modules set up to the same multiplex address exchange data for one pulse train on the channel groups they are coded for. The time until the same modules exchange data again depends on the setting of the selector switch at the front of the D 3212.The selector switch defines the number of multiplex addresses that are generated on channels A1 to A4.

Note: Multiplexed modules must not be used in systems where channel generators with 2 or 3 sequences are installed.
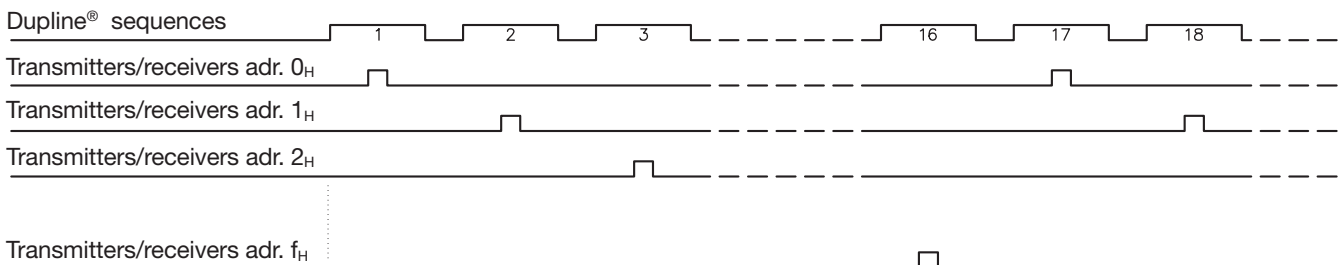
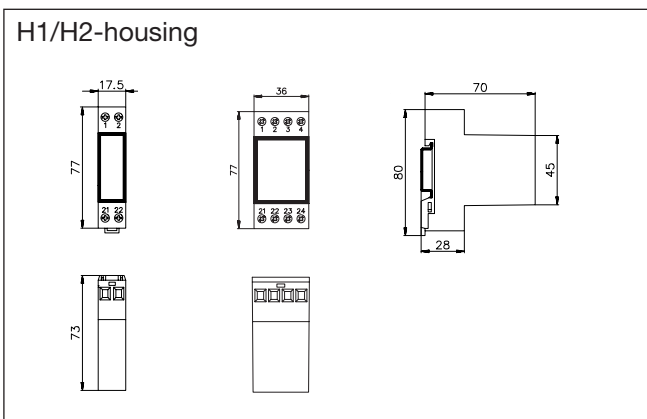Specifications are subject to change without notice (12.04.2007)
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Wiring Diagram

S: signal wire

Selector Setting

Selector setting				Binary value				Multiplex address
2	4	8	16	A1	A2	A3	A4	
				0	0	0	0	0
				0	0	0	1	1
				0	0	1	0	2
				0	0	1	1	3
				0	1	0	0	4
				0	1	0	1	5
				0	1	1	0	6
				0	1	1	1	7
				1	0	0	0	8
				1	0	0	1	9
				1	0	1	0	a
				1	0	1	1	b
				1	1	0	0	c
				1	1	0	1	d
				1	1	1	0	e
				1	1	1	1	f

Operation Diagram

Dupline® sequences

Transmitters/receivers adr. 0_H

Transmitters/receivers adr. 1_H

Transmitters/receivers adr. 2_H

Transmitters/receivers adr. f_H

Dimensions (mm)

H1/H2-housing

Accessories

DIN-rail   FMD 411

For further information refer to "Accessories".