G34409943824

4 inputs / 4 outputs digital transceiver

Benefits

- **Integrated system.** Dupline® is the brand name for Carlo Gavazzi's 2-wire bus system.
- **Cost reduction.** The use of a bus system is a proven way to reduce installation costs – especially when the distance between I/O points are extensive.
- **Fast and easy installation.** Completely free topology, no special cable required, no screen or twist. It can go for 2 km and even further with repeaters.
- **Scalability.** New modules can be progressively integrated into the system according to the application needs.
- **Modularity.** The system is composed by many modules, powered by the bus, so that each installation can be precisely and easily sized.
- **Channel coding.** By GAP 1605 programming unit.

Description

The G34409943824 is a Dupline® 4-input and 4-output module suitable to any type of application. It is implemented in a H4 housing for a DIN rail installation.
Several modules can be connected to the same Dupline® 2-wire bus and thus the wiring to the controller can be significantly simplified.

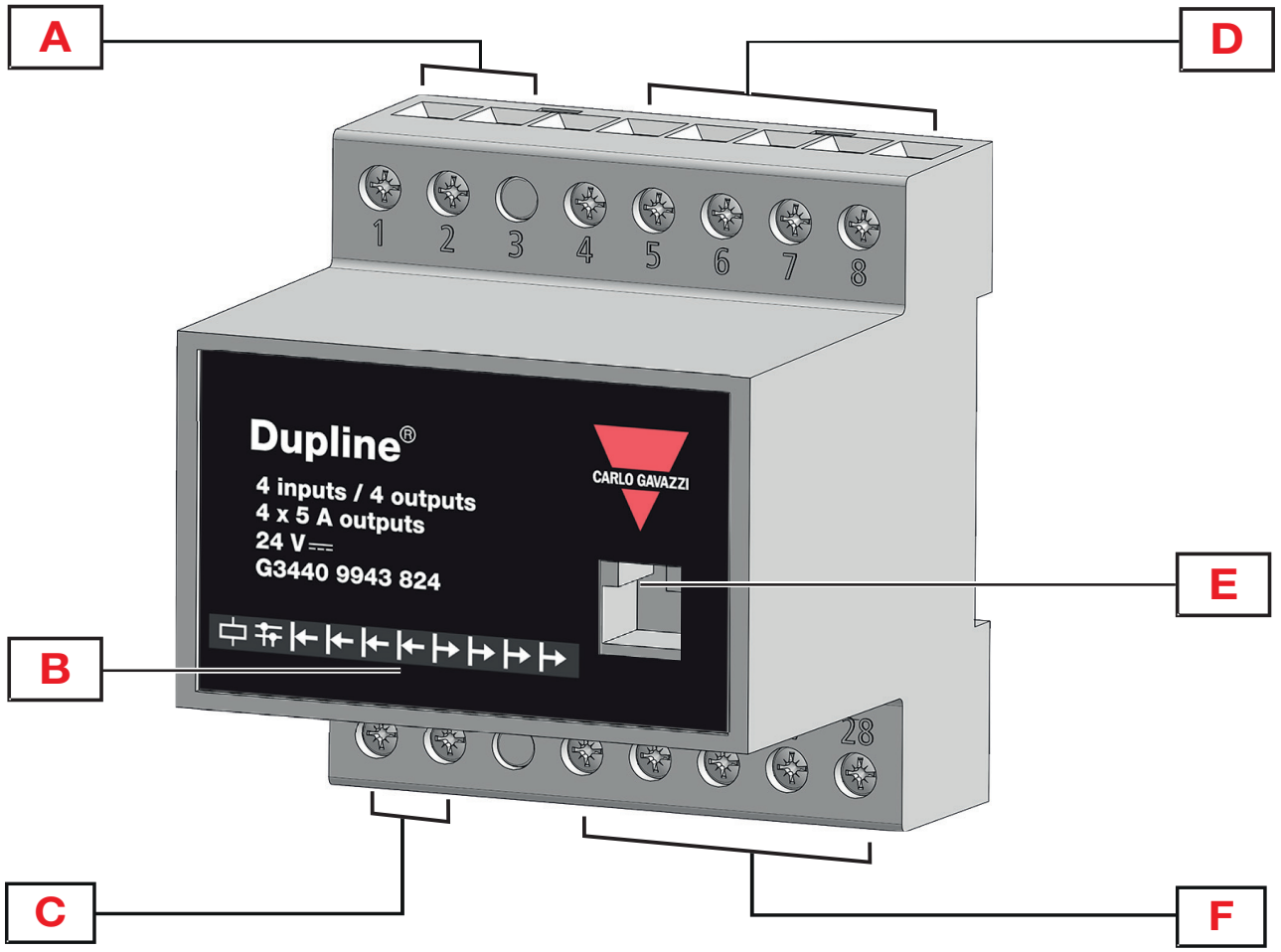
Applications

Dupline® is a bus system that offers unique solutions for a wide range of applications in industrial automation, water distribution, energy management, railway systems and many other areas.

Main features

- 4 input channels and 4 output channels
- 24 VAC/VDC power supply
- Relay load: 5 A / 250 VAC, 3A / 30 VDC
- LED indication for power supply, Dupline® bus, inputs and outputs

Structure

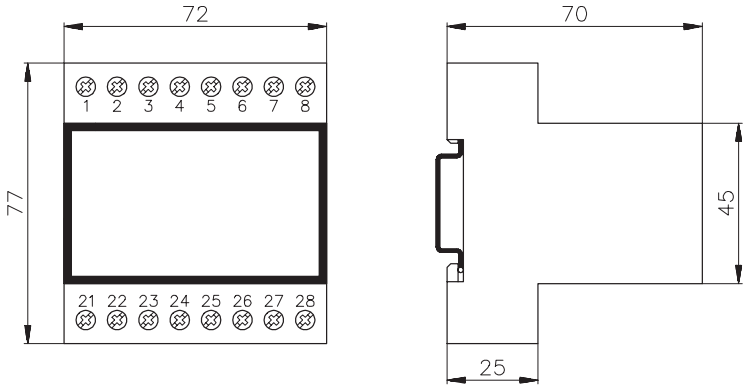


Element	Component	Function
A	Dupline® terminals	Dupline® terminals connection
B	Information LED	
	Green LED (Power supply)	ON: Power supply ON OFF: Power supply OFF
	Yellow LED (Dupline® bus)	ON: Communication on the Dupline® bus OFF: No communication on the Dupline® bus
	4 red LEDs (IN1, IN2, IN3, IN4)	Input contact status ON: Input closed OFF: Input open
	4 red LEDs (OUT1, OUT2, OUT3, OUT4)	Output contact status ON: Output closed OFF: Output open
C	Power supply terminals	Power supply
D	Input terminals	Input terminal connection
E	RJ12 connector	For Dupline® channels programming
F	Output terminals	Output terminal connection

Features

General

Material	Noryl
Dimensions (HxWxD)	4-DIN module
Weight	250 g
Protection degree	Front: IP40; Screw terminal: IP20
Terminal	14 screw-type; Section: 1.5 mm² maximum; Torque: 0.4-0.8 Nm
Pollution degree	2 (IEC 60664-1. Par. 4.6.2)



Environmental

Operating temperature	-40° to 50°C (-40°F to 122°F)
Storage temperature	-50° to 85°C (-58°F to 185°F)
Humidity (not condensing)	20 to 90% RH

Compatibility and conformity

Electromagnetic compatibility (EMC) - immunity	EN 61000-6-2
Electromagnetic compatibility (EMC) - emissions	EN 61000-6-3
Approvals	CE

Power Supply

Power supply	AC: 24 VAC ±15% DC: 24 VDC ±20%
Rated operational power	AC: 5 VA DC: 5 W

Dupline®

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	5 V
Maximum Dupline® current	1.1 mA

Input specifications

Number of inputs	4
Type	Voltage-free contact, NPN
Input current	< 330 µA
Max. resistance of the close contact	200 Ω
Open loop voltage	< 3.3 VDC
Cable length	< 3 m
Response time	< 168 ms (128 Dupline® channels)

Outputs

Number of outputs	4
Load	Resistive load (cosϕ=1)
Max. switching voltage	AC: 250 VAC DC: 30 VDC
Max. current load	AC: 5 Amp (1250 VA) DC: 3 Amp (90 W)

Dielectrical strength

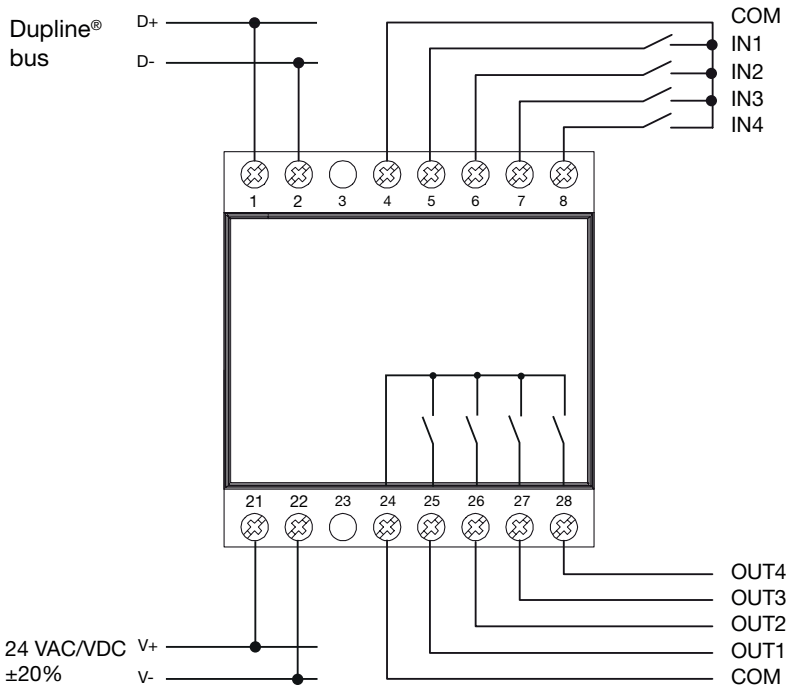
Power supply to input	4 KVAC for 1 min., 6 KV impulse 1.2 / 50 µs
Power supply to Dupline®	
Power supply to output	
Input to output	
Dupline® to input	
Dupline® to output	
Inputs from each other	Not insultated
Outputs from each other	

Dupline® channels programming

The G34409943824 module has to be connected to the SD2DUG24 Dupline® Master channel generator. Each input/output is coded individually by means of the GAP1605 programming unit set in single chiannel addressing mode. For the general procedure of coding, please refer to the related datasheet.

Default Dupline® channels	
Input 1	**A1**
Input 2	**A2**
Input 3	**A3**
Input 4	**A4**
Output 1	**A5**
Output 2	**A6**
Output 3	**A7**
Output 4	**A8**

Connection Diagrams



Terminals	Description
1	Dupline® bus (D+)
2	Dupline® bus (D-)
4	Inputs common terminal
5	Input 1
6	Input 2
7	Input 3
8	Input 4
21	Power supply (V+)
22	Power supply (V-)
24	Outputs common terminal
25	Output 1
26	Output 2
27	Output 3
28	Output 4

References

Further reading

Information	Document	Where to find it
G34409943824 manual	Installation manual	www.productselection.net/MANUALS/UK/G34409943824_IM.pdf

Order code

G34409943824

CARLO GAVAZZI compatible components

Purpose	Component name/code	Notes
Dupline® Master channel generator	SD2DUG24	
Programming unit	GAP1605	