

Smart Dupline® Dupline Generator Type SH2DUG24

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- Dupline® master channel generator
- 2-DIN housing
- Up to 7 SH2DUG24 can be connected on the same network, taking into consideration the sum of SH2DUG24, SH2MCG24 and SH2WBU230
- Connection to SH2WEB24 via internal bus or terminals via the high speed bus.

Product Description

The master channel generator SH2DUG24 provides the channel generator output drive for a "traditional" Dupline® network in a smart-Dupline® system, which is controlled by the Sx2WEB24.

Together with a Sx2WEB24, it substitutes a BH8-CTRLX-230, a BH8-CTRLZ-230 or a G38x0xx master generator. Each Sx2WEB24 can be connected up to 7 master channel

generators (the sum of SH2MCG24, SH2DUG24 and SH2WBU230 is 7) in order to have 7 Dupline® and smart Dupline® networks. All the devices are connected via an internal bus if they are in the same cabinet, or via terminals if they are mounted on different cabinets.

Each SH2DUG24 must have an address that has to be programmed using the Sx tool.

Ordering Key

SH 2 DUG 24

smart-house _____
 2-DIN housing _____
 Dupline generator _____
 Power supply _____

Type Selection

Housing

2 DIN

Mounting

DIN-rail

Supply: 15 to 30 VDC

SH2DUG24

Supply Specifications

Power supply	Overvoltage cat. II (IEC 60664-1, par. 4.3.3.2)
Rated operational voltage	15 to 24 VDC ± 20%
Operational voltage range	10 to 30 VDC (ripple included)
Rated operational power	6.5 W
Protection for reverse polarity	Yes
Connection	2xA1 (+) and 2xA2 (-) (2 pairs of terminals internally connected)
Power on delay	Typ. 4 s
Power off delay	1 s

Dupline® Specifications

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	4.5 V
Maximum Dupline® current	450 mA @ 25° 350 mA @ 40°
Terminal	D+ and D-
Note: The Dupline® bus is located on the upper connector and also on the local bus connector on the right side of the module.	

General Specifications

Installation category	Cat. II	Housing	
Dielectric strength Power supply to Dupline®	500 V AC for 1 min. (IEC60664-1, TAB. A.1)	Dimensions	2-DIN module
Fail-safe condition	If the SH2DUG24 loses the communication with the Sx2WEB24, the Dupline® output will be switched off.	Material	Noryl
Environment		Weight	150 g
Degree of protection		Approvals	cULus, according to UL60950
Front	IP 50	CE Marking	Yes
Screw terminal	IP 20	EMC	
Pollution degree	2 (IEC 60664-1, par. 4.6.2)	Immunity	EN 61000-6-2
Operating temperature	-20° to +50°C (-4° to 122°F)	- Electrostatic discharge	EN 61000-4-2
Storage temperature	-50° to +85°C (-58° to 185°F)	- Radiated radiofrequency	EN 61000-4-3
Humidity (non-condensing)	20 to 80% RH	- Burst immunity	EN 61000-4-4
LED's indication		- Surge	EN 61000-4-5
Bus LED	1 yellow	- Conducted radio frequency	EN 61000-4-6
Power LED	1 green	- Power frequency magnetic fields	EN 61000-4-8
Dupline® LED	1 yellow	- Voltage dips, variations, interruptions	EN 61000-4-11
Connection		Emission	EN 61000-6-3
Terminal	12 screw-type	- Conducted and radiated emissions	CISPR 22 (EN55022), cl. B
Cable cross-section area	Max. 1.5 mm ²	- Conducted emissions	CISPR 16-2-1 (EN55016-2-1)
Tightening torque	0.4 Nm / 0.8 Nm	- Radiated emissions	CISPR 16-2-3 (EN55016-2-3)

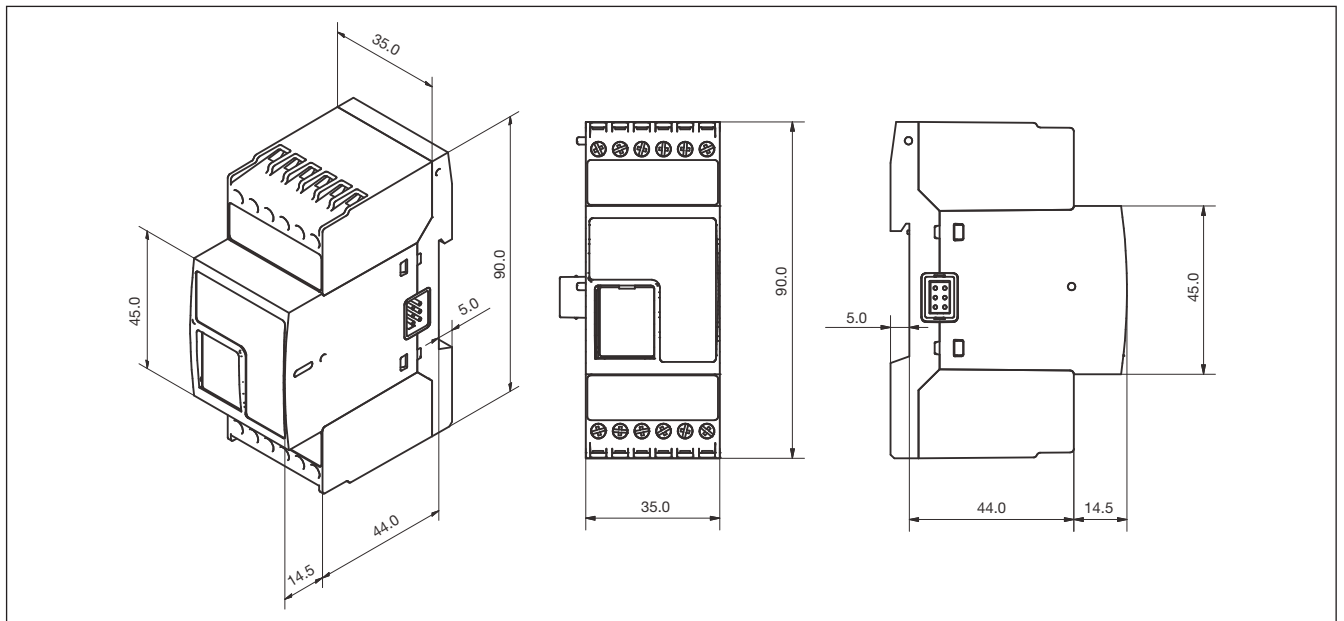
HS Bus Specifications

Bus type	RS485 high speed bus
Protocol	Internal proprietary protocol
Number of slave	Max 7
Connection	By local bus (left and right connectors) or terminals GND, A(-), B(+). T1, T2: termination inputs. They have to be short-circuited on the last module of the network. See wiring diagrams.
Addressing method	The address of the SH2DUG24 is defined in the Sx tool, and then assigned to it by the Sx2WEB24 according to the SIN.

LEDs Indication

Green LED: ON. ON: Supply ON OFF: Supply OFF	Bus OFF: no communication is present on the HS bus ON: communication error on HS bus Flashing: communication OK on HS bus
Yellow LEDs Dupline® bus ON: the Dupline® bus is working properly Flashing: there is a fault on the Dupline® bus OFF: the Dupline® bus is OFF or not connected.	

Dimensions



Wiring Diagrams

