

# Smart Dupline® Dupline Generator Type SH2DUG24



- 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	Mounting	Supply: 15 to 30 VDC
2 DIN	DIN-rail	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-
<b>Note:</b> 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

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

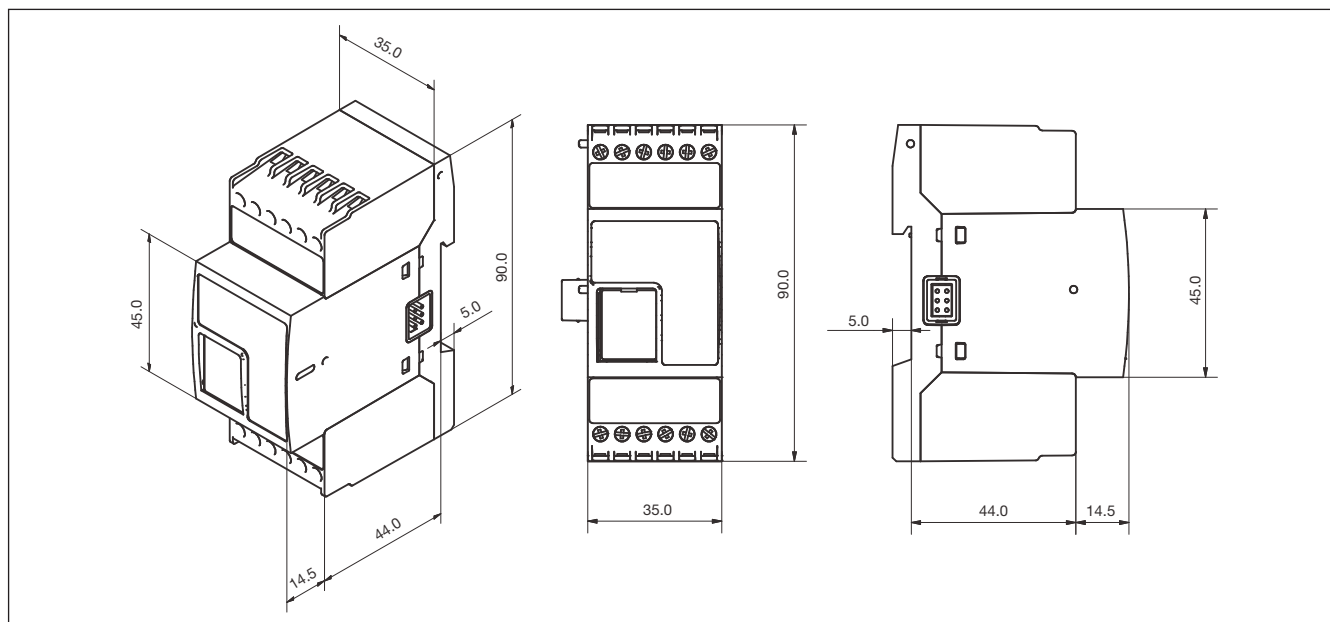
## HS Bus Specifications

<b>Bus type</b>	RS485 high speed bus
<b>Protocol</b>	Internal proprietary protocol
<b>Number of slave</b>	Max 7
<b>Connection</b>	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.
<b>Addressing method</b>	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

<b>Green LED: ON.</b> ON: Supply ON OFF: Supply OFF	<b>Bus</b> OFF: no communication is present on the HS bus ON: communication error on HS bus Flashing: communication OK on HS bus
<b>Yellow LEDs</b> <b>Dupline® bus</b> 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

