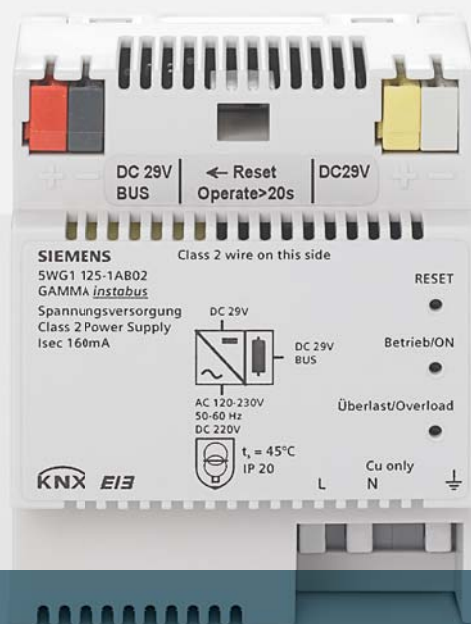


SIEMENS



The world-
wide standard
for home and
building
control



Reliable power supplies for all electrical power requirements

KNX powered by existing emergency power supply system

Convenient and flexible installation

The range of N 125 power supplies from Siemens offers currents of 160 mA, 320 mA and 640 mA. All of them use the same housing, ensuring easy interchange and therefore fast and convenient upgrading of power supply to the building systems. Two 640 mA power supplies can be connected in parallel, thus delivering 1,280 mA to a maximum of 128 bus users in one line. Both power supplies can be installed in the same control panel – with no need for observing a certain clearance between the lines. What's more, every N 125 is capable of powering consumers via the built-in DC 29 V power pack.

No extra battery required

All N 125 models operate not only on AC 102...253 V, but also on DC 176...270 V. This means that the power supplies are also suited for use in plants equipped with a central battery for backup, e.g. for emergency lighting. An existing emergency power supply system can also be used for powering the bus. The N 125 ensure that status, warning and alarm messages can always be forwarded via bus, even in the event of a general power failure or when operating in emergency mode.

Highlights

- Flexible exchange plus fast and easy upgrading – thanks to identical housings
- Straightforward installation – thanks to parallel connection, with no need for observing minimum clearances between the different power supplies
- Very versatile – owing to broad range of input voltage of DC 176...270 V (e.g. suited for power supply in emergency mode (DC 220 V))
- Compact supply permits additional infeed of KNX loads

Reliable power supply in all situations

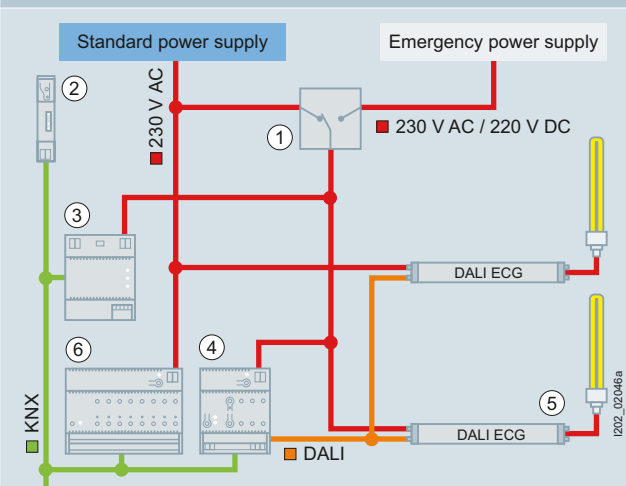
Application: Emergency lighting with security power supply

In normal operation, a central program checks automatically the operational readiness of the lamps and electronic ballasts of the emergency lamps. Fault status messages are forwarded to the building automation and control system. While in normal operation the emergency lamps can be included in the automatic general lighting system, faults or failures of automatic equipment or systems in emergency mode for general lighting, or a DALI power failure, are not allowed to impact security lighting in emergency mode.

In that mode, the security power supply of KNX and DALI and the N 125/x2 power supplies ensure that communication is maintained: Since emergency power supply delivers the bus voltage, status and error messages can still be sent via bus. If the N125/x2 is constantly powered by the security power supply, or in the event of a general power supply failure when changeover to the security power supply takes place within 100 ms, the KNX bus users can also be powered without interruption should the general power supply fail. For that purpose, the N 125/x2 feature integrated buffering, ensuring interruption-free changeover.

Application: Security power supply and KNX/DALI gateway with status message in emergency mode

Normal operation



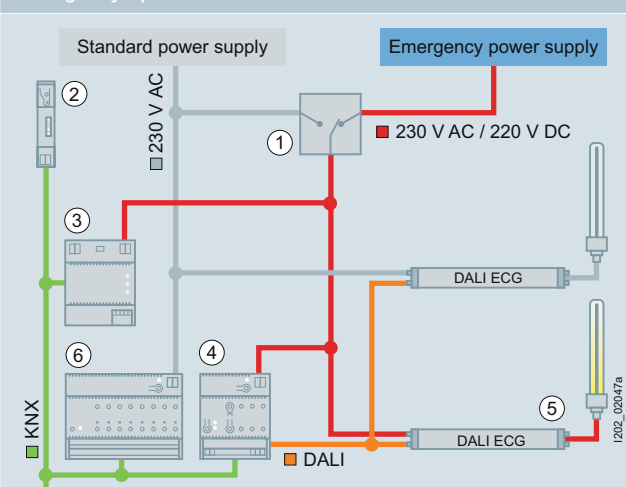
- Lighting control with DALI
- Feedback of error messages and of failure of lighting and ballasts to the building automation and control system
- Monitoring of the number of operating hours for exchanging lamps

Key*

- 1 Changeover equipment
- 2 KNX line coupler
- 3 KNX power supply
- 4 KNX/DALI gateway
- 5 Security lamp
- 6 KNX binary input

*Possible combination of components

Emergency operation






- Parameterization of dim level in emergency mode of DALI ballasts via KNX/DALI gateway
- Integrated buffering of KNX power supply ensures interruption-free changeover to emergency mode
- Status messages can be forwarded in emergency mode since KNX and DALI still receive power

Key*



- 1 Changeover equipment
- 2 KNX line coupler
- 3 KNX power supply
- 4 KNX/DALI gateway
- 5 Security lamp
- 6 KNX binary input

*Possible combination of components

Technical specifications

				
	N 125/02	N 125/12	N 125/22	
Enclosure data				
Modular installation devices for mounting on TH35 mounting rail acc. to EN 60715	✓	✓	✓	
Dimensions				
• Dimensions (1 MW = 18 mm)	4 MW	4 MW	4 MW	
Bus connection				
Integrated choke	✓	✓	✓	
Bus connection via contact system to data rail	✓	✓	✓	
Bus connection via bus terminal	✓	✓	✓	
Outputs				
Rated operational voltage	50...60 Hz	AC V 120 ... 230 DC V 220	120 ... 230 220	120 ... 230 220
Output voltage, DC	V	29	29	29
Output current	mA	160	320	640
Additional unchoked output for 29 V DC, for powering a second bus line via an external choke (e.g. N 120/02)	✓	✓	✓	

Selection and ordering data

Type	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS* / P. unit	PG	Weight per PU approx.
								kg
	N 125/02	N 125/02 power supply units integrated choke, 160 mA additional unchoked output, DC 29 V	A	5WG1 125-1AB02		1	1 ST 030	0,298
5WG1 125-1AB02								
	N 125/12	N 125/12 power supply units integrated choke, 320 mA additional unchoked output, DC 29 V	A	5WG1 125-1AB12		1	1 ST 030	0,298
5WG1 125-1AB12								
	N 125/22	N 125/22 power supply units integrated choke, 640 mA, additional unchoked output, DC 29 V	A	5WG1 125-1AB22		1	1 ST 030	0,298
5WG1 125-1AB22								

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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly

growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

“We are the preferred partner for energy-efficient, safe and secure buildings and infrastructure.”