

Choke  
N120 LCP3000EZ  
Data Sheet



# product GUIDE



**SIEMENS**

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## Choke N120



### Product and Applications Description

The bus devices' working voltage is transmitted via the same cable as the data telegrams. The choke N 120 protects these data telegrams from

being terminated on the bus line by the power supply. The choke picks up the working voltage on the two outer printed conductors of the data rail and feeds it to the two inner printed conductors via an induction. The working voltage is directly fed to the DIN-rail's two outer printed conductors by a power supply unit N 123. Via the built-in reset switch (operation > 20s) the bus devices are set to their default setting (i.e., the bus devices return to their default setting with the recurring working voltage). This is done by short-circuiting the bus line and switching off the working voltage.

## 5WG1 120-1AB01

The choke resistance is low-ohmic for the direct current of the working voltage. As information is transformed to alternate current for transmission on the *instabus* system, the resistance of the choke N 120 is high-ohmic. Therefore, the working voltage does not affect the information signal.

### Application Programs

Requires no application programs.

## Technical Specifications

### INPUT VOLTAGE

- Rated voltage: 29V DC (28... 30V DC )
- Rated current: 500 mA

### CONTROL ELEMENTS

Slide switch for resetting the bus devices connected to the line (operation > 20 s)

### DISPLAY ELEMENTS

One red LED for indicating when the slide switch is set to reset-position

### CONNECTIONS

- Power supply:  
pressure contacts on data rail (outer printed conductors)
- Bus line, pressure contacts on data rail (inner printed conductors)

### PHYSICAL SPECIFICATIONS

- Polymer casing
- N-system DIN-rail mounted device, width: 2 SUs (1 SU = 18 mm)
- Weight: approx. 105 g (4oz)
- Installation: rapid mounting on DIN EN 50022-35 x 7,5 rail

### ELECTROMAGNETIC COMPATIBILITY

Complies with Part 15 of the FCC rules pursuant to the limits for a Class A digital device.

### ENVIRONMENTAL SPECIFICATIONS

- Ambient temperature operating: 23... 113°F (-5... +45° C)
- Maximum ambient temperature range: -13... 158°F (-25... +70° C)
- Relative humidity (non-condensing): 5% to 93%

### LISTINGS AND CERTIFICATIONS

UL listed (E173 174)  
UL 916, Energy Management  
Equipment Accessory

CSA certified(pending)

CE marked complies with EMC regulations (residential and non-residential buildings), and low voltage regulations.

EIB certified.

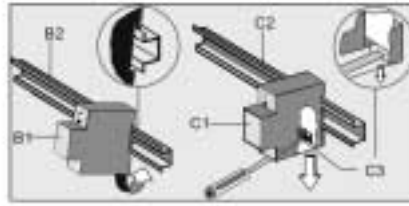
## Location and Function of the Display and Control Elements



- A1 Reset position
- A2 Reset switch
- A3 Operating position
- A4 Type plate
- A5 LED for indicating reset position (LED on)

### Installation Instructions

The device may be used for permanent interior installations in dry locations within distribution boards.



## Mounting

### General description

The N-system DIN-rail device can be installed to N-system distribution boards, surface or flush mounted, or to any DIN-rail EN 50022-35 x 7,5 available that has a data rail glued to it.

The connection to the bus line is established by clicking the device onto the DIN-rail (with glued-in data rail). Take care that the type plates of all devices on a DIN-rail can be read in the same direction, guaranteeing the devices are polarized correctly.

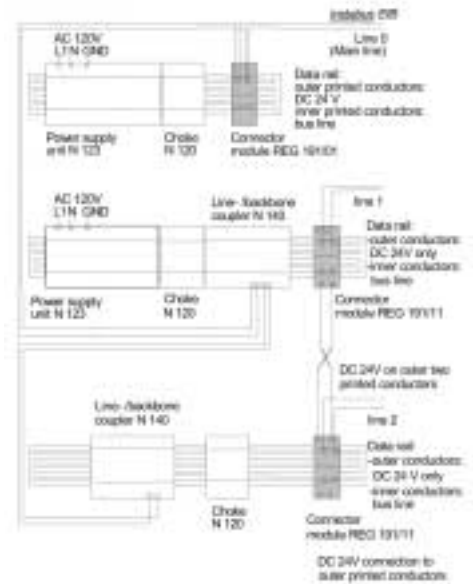
### Mounting the Choke unit N 120 to a DIN-rail

- Slide the DIN-rail device (B1) onto the DIN-rail (B2) and swivel back the DIN-rail device until the slide clicks into place audibly.

### Dismounting DIN-rail devices

- Remove all connected wires
- Press down the slide (C3) with a screwdriver and swivel the DIN-rail device (C1) from the DIN-rail (C2).

## Typical circuit



## WARNING

- Disconnect and lock off power before installing or working on the device. Free DIN rail areas with plugged-in data rails must be covered with covers, order no. 5WG1 192-8AA01.
- The device must not be opened. A faulty device should be returned to the local Siemens sales office or distributor.
- The device must be mounted and commissioned by a factory trained person.
- The prevailing safety rules must be observed! Mount in dry locations only!

**Choke  
N120**

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