

Gateway NCE.

INTRODUCTION

NCE is used as a gateway in Lindinvent's system setup for climate control and protective ventilation.

FUNCTION

The gateway connects up to 2 communication loops (CAN) of control units to the superior system. One loop can consist of up to 100 nodes, considering the number of functions activated, speed, and the total length of the loop.

- CAN1 connection is normally used, while CAN2 is recommended to be left available for future system expansions.
- Adjustable communication speed is provided.
- Control units that cooperate are usually connected on the same physical loop.
- A system setup with multiple NCEs allows for the installation of large systems of CAN loops.
- By routing zone types between CAN loop 1 and 2, cooperation between nodes on different loops is permitted.

USER INTERFACE

Settings are made in a menu via its terminal function or via user panel DHP.

SYSTEM SOLUTIONS

With LINDINTELL: Communication with the NCE is established over TCP/IP with Lindinvent's central unit using the LINDINTELL software.

Without LINDINTELL: Communication with the NCE is established over Modbus RTU or Modbus TCP. A maximum of 100 nodes should be mirrored per NCE. Unique CAN IDs should be used over both loops.

LINDINTELL

LINDINTELL is the system software for optimization, overriding, and free programming installed on Lindinvent's central unit.

TECHNICAL SPECIFICATIONS

General

Dimensions (mm): 200 x 130 x 48 (LxWxH)
 Material: Enclosure in polystyrene
 Net weight: 0.4 kg
 Color: RAL 9003
 IP rating: Enclosure holds IP53
 Temperature limits:
 Operation: 0°C to 40°C; <85% RH
 Storage: -20°C to 50°C; <90%

Communication

2 x CAN loops: [20], 50, 100 kbit/s
 Ethernet: TCP/IP LINDINTELL or Modbus-TCP
 RS-232 or RS-485: Modbus-RTU
 IrDA: IR via DHP and FakeTerminal application

Connections

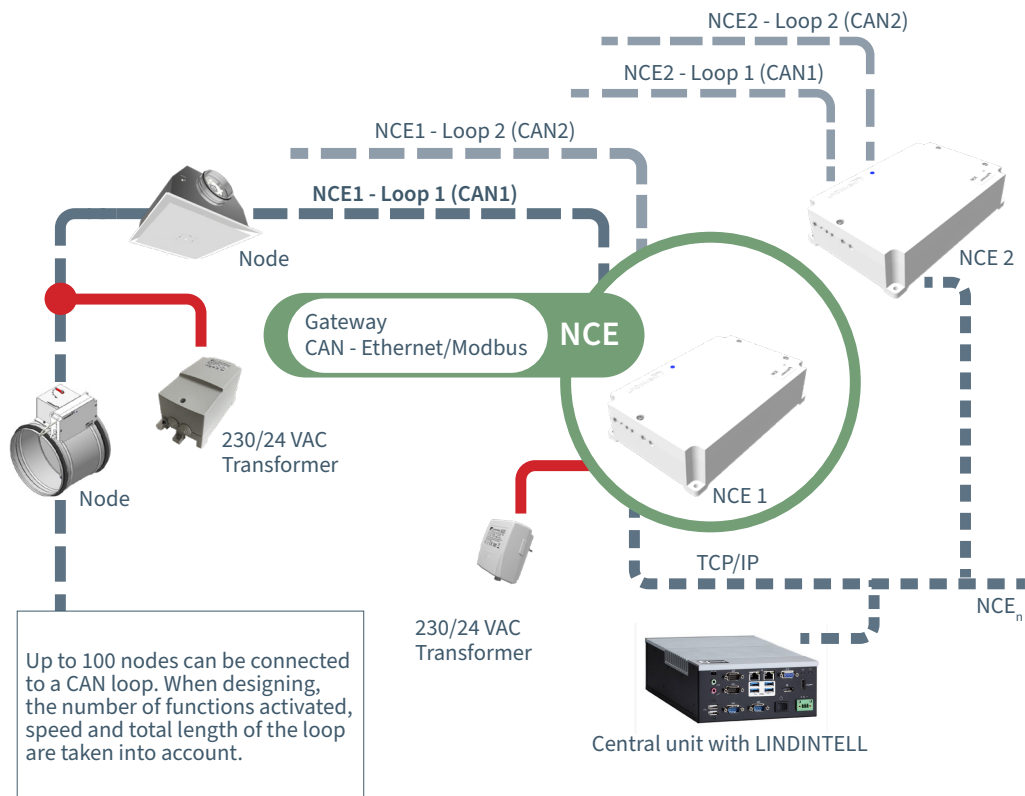
Input Signals
 Analog input, 3 (0-10 VDC)
 Digital input, 3 +5V pull-up or +0-5 V

Output Signals

Analog output, 8 (0-10 VDC)

Power System

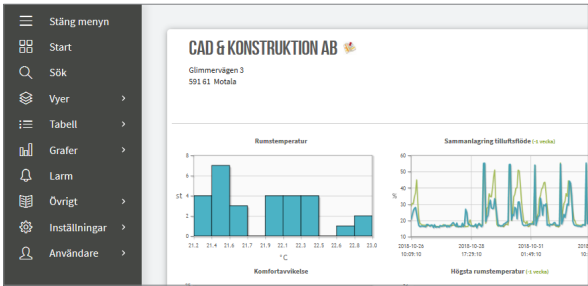
Supply voltage: 24 VAC
 Power: 3.8 VA
 CE marking: Complies with EMC and Low Voltage Directive



System Diagram with NCE: Each included NCE functions as a gateway between the communication loop of nodes and Lindinvent’s central unit with the LINDINTELL system software.

VISUALIZATION TOOL LINDINSPECT®

LINDINSPECT® is a web-based tool included in the LINDINTELL system software. It provides users with a structured environment for visualization, analysis, and management of everything from control units to complementary systems for comfort and sustainable energy use in buildings. LINDINSPECT® logs flows and sets alarm flags for deviations according to specified guidelines.



Detail from the LINDINSPECT® home page where equipment in the building can be visualized and managed.

COMPLEMENTARY PRODUCT DOCUMENTATION

Documents are accessible on the product page for NCE at www.lindinvent.com

Document	Comment
Installation Instruction	See the external connection diagram. External screw holes for mounting.
Commissioning Instructions	Settings for network connection.
Maintenance Instructions	Considered maintenance-free.
External Connection Diagram	Shows how equipment connects to the NCE.
Environmental Product Declaration	Assessed by Byggarubedömningen in Sweden.
Modbus List	Not applicable.
AMA Text	Available for download via the product’s homepage.