

System Components

Power Supply Unit NT 471

Power supply unit in Racksyst plug-in board design



Racksyst power supply
unit NT 471

Application

The NT 471 module is an extremely compact power supply unit built as a Racksyst plug-in board. It is designed to supply a complete rackful of 4 HP or 7HP Racksyst transmitters (including supply unit) with a voltage of 24 VDC, in an industrial environment.

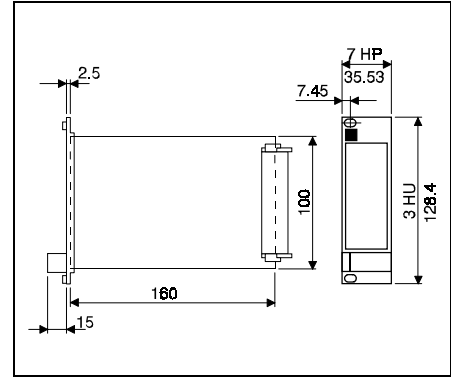
Endress + Hauser

Nothing beats know-how



Installation

Install in a rack outside hazardous areas. Ensure that the necessary contact protection is provided, observe the permissible ambient temperatures, and avoid excessive humidity which can result in condensation forming on the printed circuit board.



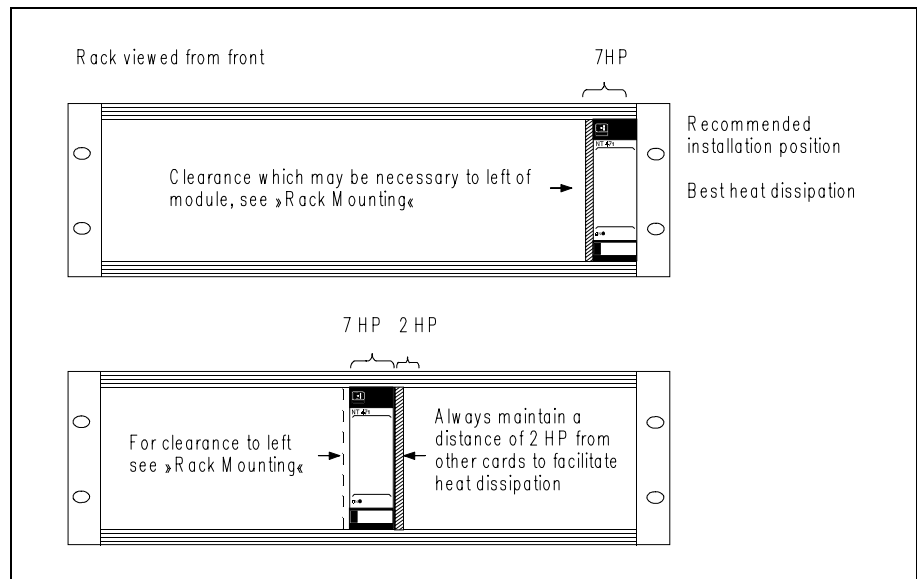
Dimensions in mm of the Racksyst power supply unit NT 471 plug-in card

Rack Mounting

We recommend that the module is installed on the right-hand side of the rack (viewed from the front), since this is the best position for the heat dissipation.

- A distance of min. 1 HP must be maintained to the left of the power pack NT 471 for every Endress+Hauser Racksyst with an intrinsically safe input, a min. 2 HP distance from an instrument of another manufacturer.

- Spacing is not required to the left for an Endress+ Hauser Racksyst card with a non- intrinsically safe signal input.



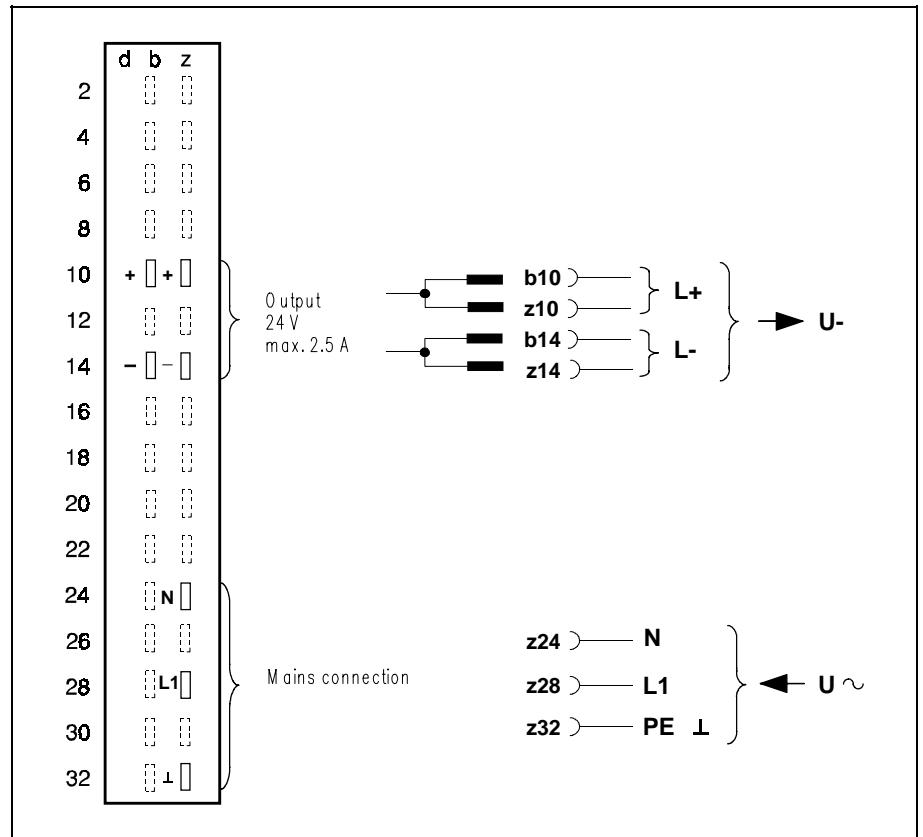
Rack installation options for the Racksyst plug-in board power supply unit NT 471

Electrical Connection

The supply unit NT 471 features a male multi-point connector in accordance with DIN 41 612, Type F. Refer to next figure for pin assignments and wiring of the female multi-point connector in the rack.

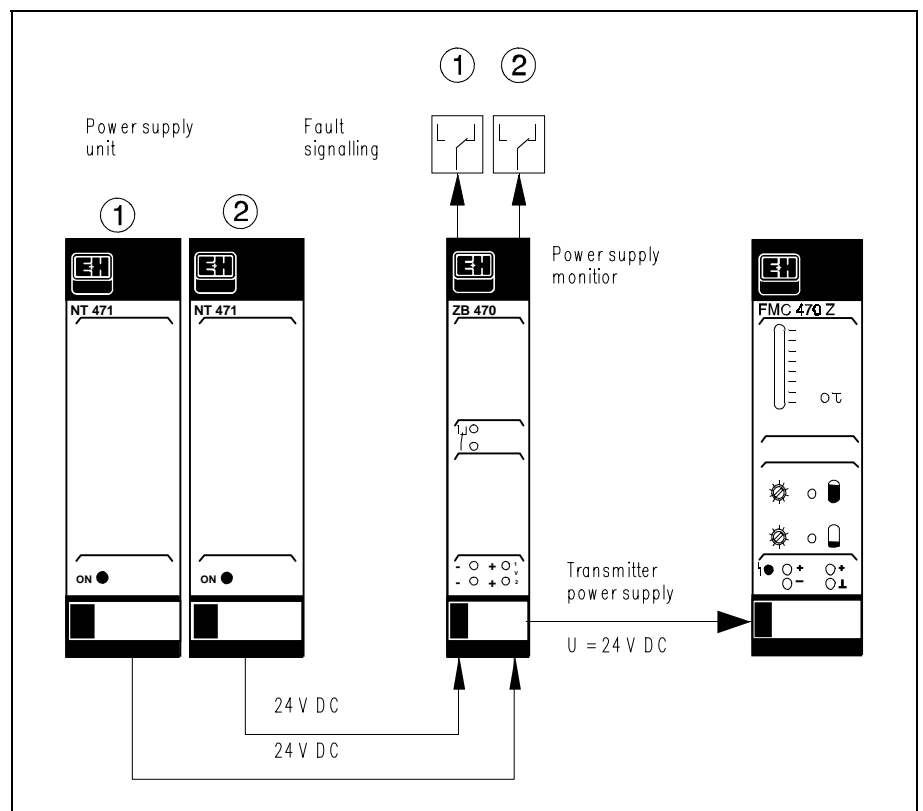
A special fuse protection facility for the mains supply is not necessary since a fine-wire fuse is integrated in the power supply unit.

Pin assignment:
Viewing the contact blades of the NT 471 or the connection side of the female multi-point connector in the rack



Connection of power supply unit NT 471

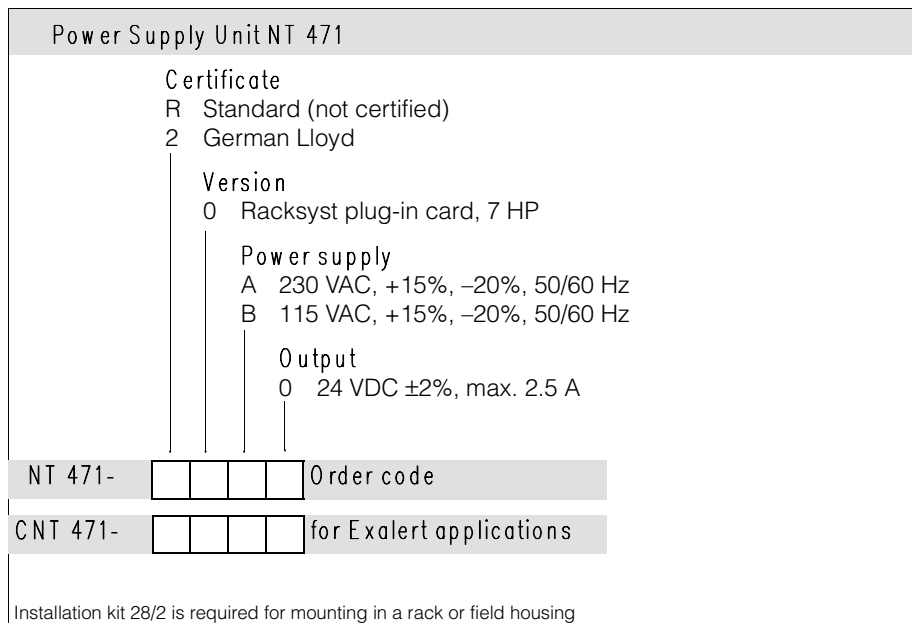
Redundant current supply and fault signalling with two power supply units. NT 471 and one power supply monitoring module ZB 470.



Technical Data

- Mechanical Design
7 HP Racksyst plug-in card (Europa)
to DIN 41 494, Part 2 and Part 4,
for dimensions see page 2
- Connector:
Male multi-point connector to
DIN 41 612, Part 3, Type F (32-pole)
- Protection Class DIN 40 050:
Front panel IP 20, Plug-in board IP 00
- Weight: 0.4 kg
- Permissible ambient temperature
Operation: 0...70°C
Storage temperature: -25°C...+85°C
- Safe separation of inputs and outputs
(PELV) to VDE standards 0160; 0805;
and 0106, Part 101
- Electromagnetic compatibility
Interference emission to EN 50 081-2
Interference immunity to EN 50 082-2
and Namur industrial standard
- Line voltage: 230 VAC, +15%, -20%
45...66 Hz, switchable to
115 VAC, +15%, -20%, 45...66 Hz
with integrated line fuse
- Output
24 VDC \pm 2%, residual ripple 50 mV_{pp}
- No-load, overload and short-circuit-
proof - after remedy of the fault, the
unit automatically switches back to
normal operation
- Current: 0...2.5 A
- Output power: 60 W
- Efficiency: typically 84%

Product Structure



Supplementary Documentation

- Racksyst
System Information SI 008F/00/e
- Assembly Racks FXG 1
Technical Information TI 224F/00/e
- Power supply unit monitor ZB 470
Technical Information TI 005/00/e

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