Code: CE114200 Revision: B

# **Product Description**

Nexto Series is a powerful and complete Programmable Logic Controller (PLC) with unique and innovative features. Due to its flexibility, smart design, enhanced diagnostics capabilities and modular architecture, Nexto PLC can be used for control systems in medium and high-end applications or in high speed machinery.

NX8000 module provides up to 30 W, delivered to Nexto Series modules through backplane rack. The module has an isolated 24 Vdc input with an internal fuse protection accessible through the module's side cover. Due to its internal high-efficiency switching power supply, NX8000 presents a compact size and high output power.



Its main features are:

- High-efficiency switching power supply
- 30 W of output power
- 24 Vdc input voltage
- Internal fuse protection
- Protection against polarity inversion
- Protection against voltage surges
- Compact size
- Fanless design (no moving parts inside)
- Module diagnostics via LEDs

# **Ordering Information**

### Included Items

The product package contains the following items:

- NX8000 module
- Connector block
- Installation guide

## **Product Code**

The following code should be used to purchase the product:

| Code   | Description                     |
|--------|---------------------------------|
| NX8000 | 30 W 24 Vdc Power Supply Module |

Code: CE114200 Revision: B

## **Related Products**

The following products must be purchased separately when necessary:

| Code    | Description               |
|---------|---------------------------|
| AL-1535 | Power Supply 24 Vdc 2.5 A |
| AL-1536 | Power Supply 24 Vdc 5 A   |

## Innovative Features

Nexto Series brings to the user several innovations in utilization, supervision and system maintenance. These features were developed focusing a new experience in industrial automation.



**IF Product Design Award 2012:** Nexto Series was the winner of iF Product Design Award 2012 in industry + skilled trades group. This award is recognized internationally as a seal of quality and excellence, considered the Oscars of the design in Europe.

Code: CE114200 Revision: B

# **Product Features**

|   | NX8000  |
|---|---|
| Backplane rack occupation               | 2 sequential slots  |
| Nominal input voltage                   | 24 Vdc  |
| Maximum output power                    | 30 W  |
| Maximum output current                  | 6 A   |
| Input voltage                           | 19.2 to 30 Vdc  |
| Maximum input current                   | 2 A   |
| Typical efficiency                      | 92 % @ 24 Vdc   |
| Maximum input voltage interrupt time    | 10 ms   |
| Redundancy support                      | No  |
| One Touch Diag (OTD)                    | No  |
| Electronic Tag on Display (ETD)         | No  |
| Protections                             | Protection against polarity inversion   |
|   | Input short-circuit protection with internal fuse   |
|   | Output protection against short-circuit and overcurrent                                   |
|   | Input protection against voltages below the minimum input voltage with automatic recovery |
| Isolation                               |   |
| Input to output                         | 1000 Vac / 1 minute   |
| Input to protective earth               | 1500 Vac / 1 minute   |
| Input to functional earth               | 1500 Vac / 1 minute   |
| Status and diagnostics indication       | Via LEDs  |
| Hot swap support                        | Yes   |
| Wire size                               | 2.5 mm <sup>2</sup>   |
| IP level                                | IP 20   |
| Operating temperature                   | 0 to 60 °C  |
| Storage temperature                     | -25 to 75 °C  |
| Operating and storage relative humidity | 5 to 96 %, non-condensing   |
| Conformal coating                       | Yes   |
| Standards                               | IEC 61131-2   |
|   | CE, Electromagnetic Compatibility (EMC) and Low-Voltage Directive (LVD)                   |
| Module dimensions (W x H x D)           | 36.00 x 114.63 x 115.30 mm  |
| Package dimensions                      | 42.00 x 122.00 x 147.00 mm  |
| Weight                                  | 400 g   |
| Weight with package                     | 450 g   |

### Notes

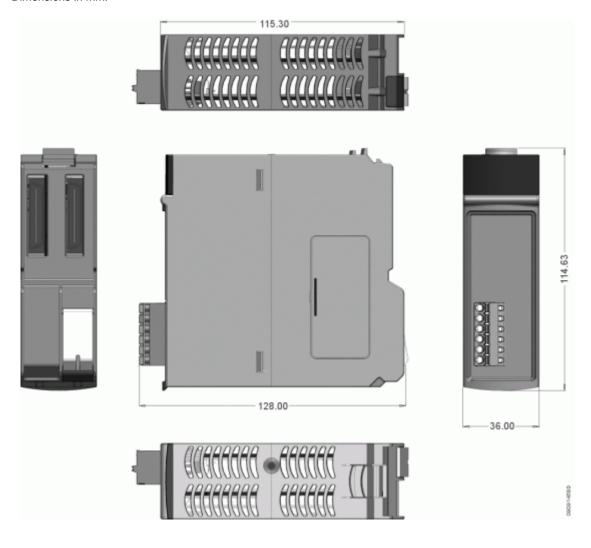
One Touch Diag (OTD): The power supply module NX8000 has a diagnostic switch on top, but with no diagnostics functionality.

**Conformal coating:** Conformal coating protects the electronic components inside the product from moisture, dust and other harsh elements to electronic circuits.

Code: CE114200 Revision: B

# **Physical Dimensions**

Dimensions in mm.



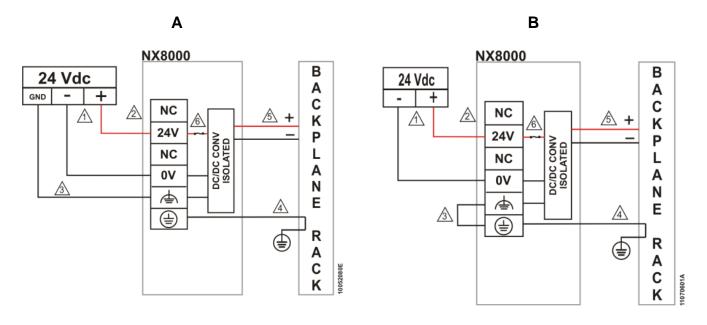
Code: CE114200 Revision: B

## Installation

### Electrical Installation

NX8000 must be placed on slot 0 of Nexto Series backplane rack. NX8000 requires 2 sequential slots, it means that NX8000 will occupy slots 0 and 1.

The following diagram shows NX8000's electrical installation.



#### **Diagram Notes**

- 1- The power supply is connected to terminals 24V and 0V. Use 2.5 mm² cables.
- 2- NC terminals: not connected.
- **3-** Ground from the external power supply is connected to terminal  $\triangleq$  as shown on the diagram A. If the ground of the external power supply is the same of the backplane rack, the terminal  $\triangleq$  must be only connected to the terminal  $\triangleq$ , as shown on diagram B. Use 2.5 mm² cables.
- 4- The module is grounded through Nexto Series backplane racks.
- 5- The module supplies Nexto Series modules through the connection to the backplane rack.
- 6- Input protection with internal fuse, accessible through the module's side cover.

### Mechanical Assembly

Information and orientations about correct mechanical installation can be found at Nexto Series User Manual - MU214600.

Code: CE114200 Revision: B

# Maintenance

Altus recommends that every module connection must be checked and dust or any kind of dirt located at the module enclosure must be removed at least every 6 months.

Fuse replacement procedure is described on Nexto Series User Manual - MU214600.

## **Diagnostics LEDs**

DG

| Green color | Description                               | Causes   |
|-------------|---|--|
| On          | Input voltage above minimum input voltage | Normal condition   |
| Off         | Input voltage below minimum input voltage | Input voltage below minimum input voltage, open fuse or hardware failure |

#### PW

| Green color | Description                  | Causes   |  |
|-------------|------------------------------|--|--|
| On          | Power supply operational     | Power supply module is able to supply Nexto backplane rack and connected modules |  |
| Off         | Power supply not operational | Input voltage below minimum input voltage, open fuse or hardware failure         |  |

## Manuals

For further technical details, configuration, installation and programming of Nexto Series, consult the table below.

This table is only a guide of some relevant documents that can be useful during the use and maintenance of NX8000. The complete and updated table containing all documents of Nexto Series can be found at Nexto Series User Manual – MU214600.

| Document code | Description                                      | Language   |
|---------------|--|------------|
| CT114000      | Série Nexto – Características Técnicas           | Portuguese |
| CE114000      | Nexto Series – Technical Characteristic          | English    |
| CS114000      | Serie Nexto – Especificaciones y Configuraciones | Spanish    |
| MU214000      | Manual de Utilização Série Nexto                 | Portuguese |
| MU214600      | Nexto Series User Manual                         | English    |
| MU214300      | Manual Del Usuario Serie Nexto                   | Spanish    |