

Base unit - NLC-050-024D-06I-04QRD-05A - 2701043

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24 V DC Nanoline base unit. Equipped with 6 digital input and 4 relay output channels. Additional I/O channels can be added using a maximum of three I/O extension modules. Optional communication modules provide network or serial connectivity. Optional Operator Panel provides user interface. Programming is via nanoNavigator.

Your advantages

- An operator panel can be integrated in the basic unit or installed remotely on a panel as an option
- Intuitive programming language with options for flowcharts and ladder diagrams
- Basic unit has integrated digital inputs, relay outputs, and analog inputs, including high-speed counters

Key Commercial Data

| | |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| GTIN | |
| GTIN | 4046356325363 |
| Weight per Piece (excluding packing) | 311.900 g |
| Custom tariff number | 85371098 |
| Country of origin | India |

Technical data

Note

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

Dimensions

| | |
|--------|----------|
| Width | 80.5 mm |
| Height | 103.5 mm |
| Depth | 60 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -25 °C ... 85 °C |
| Permissible humidity (operation) | 90 % |

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Technical data

Supply

| | |
|-----------------------------|---|
| Power supply connection | Screw connection |
| Supply voltage | 24 V DC (Power available to the I/O and Communications modules) |
| Supply voltage range | 19.2 V DC ... 30 V DC |
| Max. current consumption | 250 mA |
| Typical current consumption | 150 mA |

Software interfaces

| | |
|------------------|----------------------|
| Programming tool | nanoNavigator 1 or 2 |
|------------------|----------------------|

Digital inputs

| | |
|-----------------------------------|---------------------------|
| Input name | Digital inputs |
| Description of the input | EN 61131-2 type 1 NPN/PNP |
| Connection method | Screw connection |
| Number of inputs | 6 |
| Typical response time | 60 µs (on) 70 µs (OFF) |
| Nominal input voltage U_{IN} | 24 V DC |
| Nominal input current at U_{IN} | 5 mA DC (On) |
| Input voltage range "0" signal | 0 V DC ... 5 V DC |
| Input voltage range "1" signal | 15 V DC ... 30 V DC |

Digital outputs

| | |
|--|---------------------------------------|
| Output name | Relay output |
| Output description | Relay output |
| Connection method | Screw connection |
| Number of outputs | 4 |
| Protective circuit | Short-circuit and overload protection |
| Maximum output current per channel | 5 A |
| Maximum output current per module / terminal block | 20 A |
| Maximum output current per module | 5 A |
| Nominal load, ohmic | 600 W (@ 24 ohms) |

General

| | |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

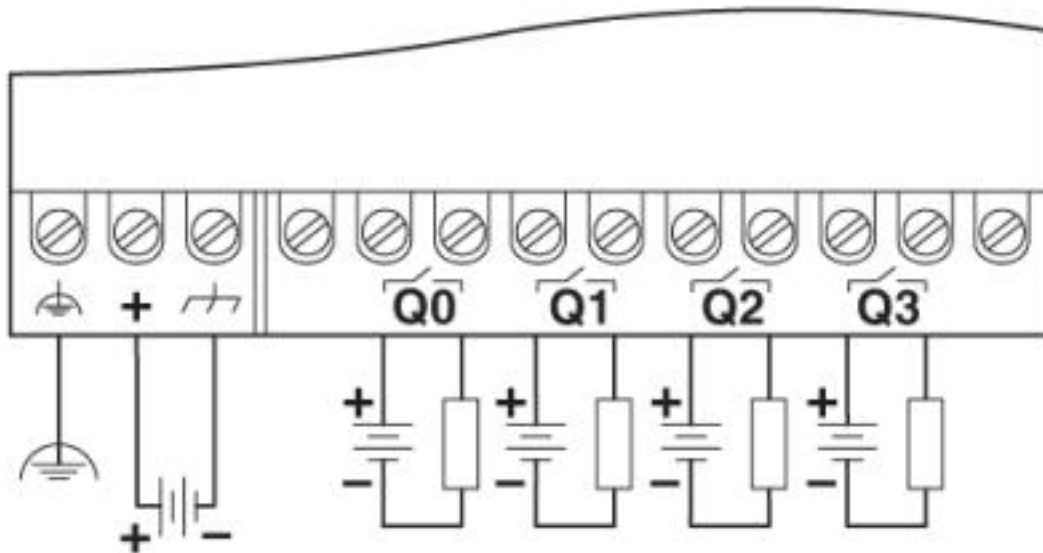
Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

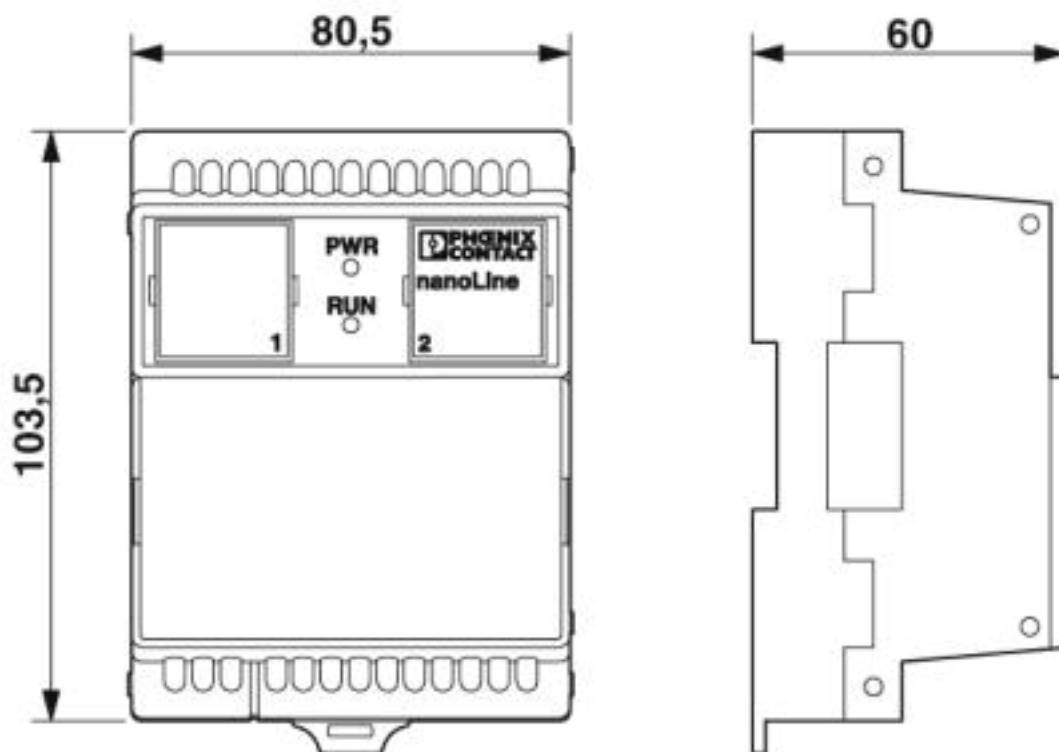
Drawings

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Connection diagram



Dimensional drawing



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27250300 |
|------------|----------|

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.1 | 27250300 |
| eCl@ss 5.0 | 27242700 |
| eCl@ss 5.1 | 27242700 |
| eCl@ss 6.0 | 27242200 |
| eCl@ss 7.0 | 27242216 |
| eCl@ss 8.0 | 27242216 |
| eCl@ss 9.0 | 27242216 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001417 |
| ETIM 3.0 | EC001417 |
| ETIM 4.0 | EC001417 |
| ETIM 5.0 | EC001417 |
| ETIM 6.0 | EC001417 |
| ETIM 7.0 | EC001417 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 43172015 |
| UNSPSC 7.0901 | 43201404 |
| UNSPSC 11 | 43172015 |
| UNSPSC 12.01 | 43201404 |
| UNSPSC 13.2 | 39122329 |
| UNSPSC 18.0 | 39122329 |
| UNSPSC 19.0 | 39122329 |
| UNSPSC 20.0 | 39122329 |
| UNSPSC 21.0 | 39122329 |

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

Approval details

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Approvals

| | | | |
|-----------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
|-----------|--|---|---------------|

| | | | |
|------------|--|---|---------------|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
|------------|--|---|---------------|

| | | |
|-----|--|---------------|
| EAC | | EAC-Zulassung |
|-----|--|---------------|

| | | |
|--------------|--|--|
| cULus Listed | | |
|--------------|--|--|

Accessories

Accessories

Communication module

nanoLC module - NLC-MOD-RS232 - 2701179



RS-232 connection for data transfer or software configuration

Option module - NLC-MOD-RS485 - 2701182



RS-485 connection for data transfer or software configuration

nanoLC module - NLC-MOD-USB - 2701195



Serial connection to PC's USB port for data transfer or software configuration

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Accessories

Communication module - NLC-COM-ENET-MB1 - 2701124



Ethernet communication module. Allows the Nanoline controller to be connected to an Ethernet, operating as a Modbus TCP Server.

Communication module - NLC-COM-GSM - 2701344



GSM communication module. Allows SMS messaging to and from the Nanoline controller when connected to the GSM network.

Cover

Covering hood - NLC-MOD-CAP-PXC - 2701292



Replacement cover for slot 2 in base unit.

Covering hood - NLC-MOD-CAP - 2701289



Replacement cover for slot 1 in base unit.

Extension module

I/O extension module - NLC-IO-06I-04QTP-01A - 2701072



I/O extension module for use with Nanoline base unit. Equipped with 6 digital input and 4 PNP digital output channels. A maximum of three I/O extension modules can be attached to a base unit.

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Accessories

I/O extension module - NLC-IO-06I-04QTN-01A - 2701085



I/O extension module for use with Nanoline base unit. Equipped with 6 digital input and 4 NPN digital output channels. A maximum of three I/O extension modules can be attached to a base unit.

I/O extension module - NLC-IO-03I-04QRD-05A - 2701328



I/O extension module for use with Nanoline 24 V DC base unit. Equipped with 3 digital input and 4, 5 A relay output channels. A maximum of three I/O extension modules can be attached to a base unit.

I/O extension module - NLC-IO-4AI - 2701098



I/O extension module for use with Nanoline base unit. Equipped with 4 analog input channels. A maximum of three I/O extension modules can be attached to a base unit.

Option module - NLC-MOD-RTC - 2701153



Real-time clock

Mounting material

Mounting kit - NLC-OP1-MKT - 2701140



Mounting kit

Operator interface

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Accessories

Operator terminal - NLC-OP1-LCD-032-4X20 - 2701137



User interface for Nanoline controllers. Mounts directly on the base unit. Can be mounted remotely using the mounting kit.

Programming cable

Cable - NLC-PC/SERIAL-CBL 2M - 2701234



Cable, serial, 9-pos. D-SUB to RJ11/12

Cable - NLC-PC/USB-CBL 2M - 2701247



Cable, serial