

## Base unit - NLC-055-024D-08I-04QRD-05A - 2700464

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24 V DC Nanoline base unit. Equipped with 8 digital inputs, 2 analog (0-10 V) inputs 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	 4 046356 576611
GTIN	4046356576611
Weight per Piece (excluding packing)	336.500 g
Custom tariff number	85371098
Country of origin	India

### Technical data

#### 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 %

#### Interfaces

Interface	Operator Panel
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### Technical data

#### Interfaces

Connection method	RJ45/COMBICON
Interface	RS-232
Connection method	Slot 1
Interface	USB
Connection method	Slot 1

#### 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 3 or above
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#### Digital inputs

Input name	Digital inputs
Description of the input	EN 61131-2 type 1 NPN/PNP
Connection method	Screw connection
Number of inputs	8
Typical response time	20 ms (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	External protection required
Nominal output voltage	24 V DC
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)

#### Analog inputs

Description of the input	Analog input
Number of inputs	2

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## Technical data

### Analog inputs

Connection technology	Screw connection
A/D converter resolution	12 bit (monotonic)
Limit frequency (3 dB)	1 Hz (3 dB)
Type of protection	Transient voltage suppression
Measuring principle	Successive approximation
Voltage input signal	0 V DC ... 10 V DC
Input resistance of voltage input	20 kΩ
Input filter	Digital

### Counter inputs

Number of inputs	2
Input frequency	6 kHz

### General

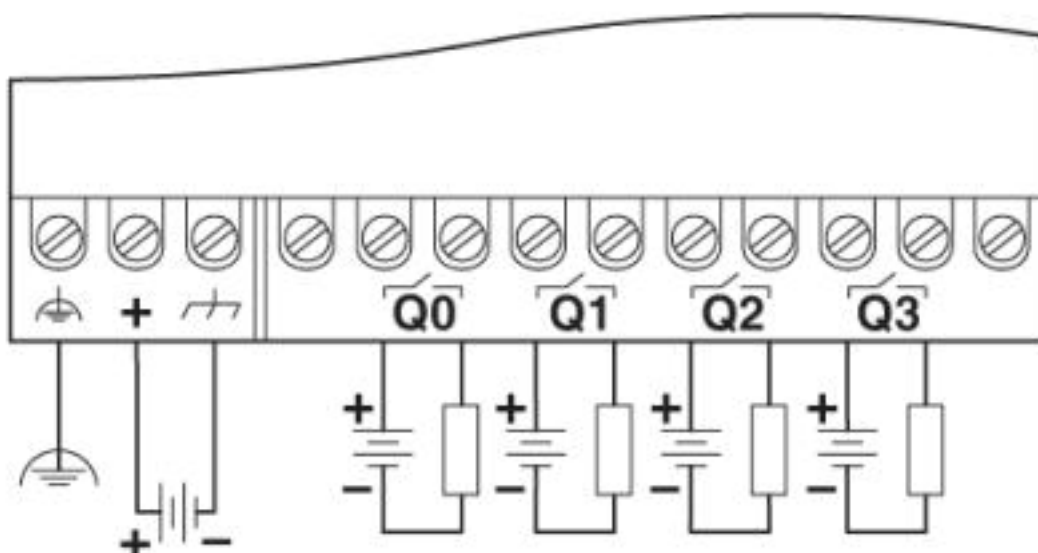
Mounting type	DIN rail mounting
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### Environmental Product Compliance

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

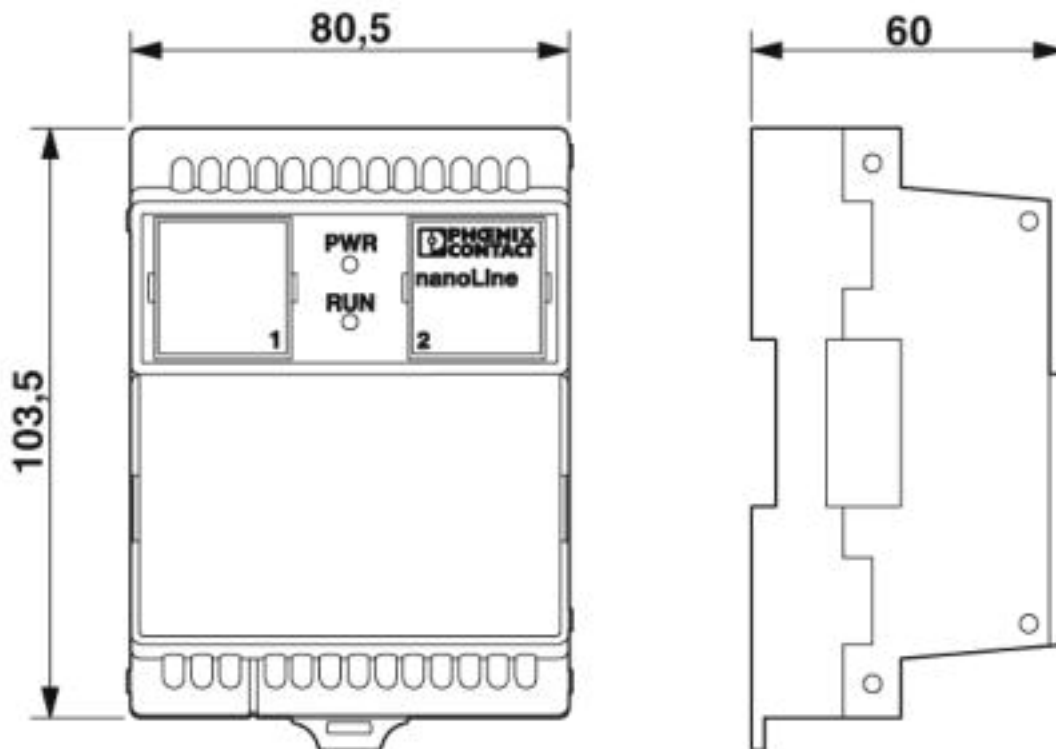
## Drawings

Connection diagram



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Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 4.0	27250300
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
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## Classifications

### UNSPSC

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

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#### Approvals

UL Listed / EAC / EAC

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#### Ex Approvals

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### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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EAC		EAC-Zulassung
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EAC		RU *- DE.A*30.B.00238
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## Accessories

### Accessories

Communication module

## Base unit - NLC-055-024D-08I-04QRD-05A - 2700464

### Accessories

nanoLC module - NLC-MOD-RS232 - 2701179



RS-232 connection for data transfer or software configuration

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Option module - NLC-MOD-RS485 - 2701182



RS-485 connection for data transfer or software configuration

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nanoLC module - NLC-MOD-USB - 2701195



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

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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.

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Communication module - NLC-COM-GSM - 2701344



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

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### Cover

## Base unit - NLC-055-024D-08I-04QRD-05A - 2700464

### Accessories

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



Replacement cover for slot 2 in base unit.

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Covering hood - NLC-MOD-CAP - 2701289



Replacement cover for slot 1 in base unit.

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### 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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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.

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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.

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## Base unit - NLC-055-024D-08I-04QRD-05A - 2700464

### Accessories

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.

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I/O extension module - NLC-IO-2AI-2AO-01 - 2701040



I/O extension module for use with Nanoline base unit. Equipped with 2 analog input (0...10 V DC, -10...+10 V DC, 0/4...20 mA) and 2 analog output (0...10 V DC, 0/4...20 mA) channels. A maximum of three I/O extension modules can be attached to a base unit.

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### Mounting material

Mounting kit - NLC-OP1-MKT - 2701140



Mounting kit

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### Operator interface

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.

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### Programming cable

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



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

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## Base unit - NLC-055-024D-08I-04QRD-05A - 2700464

### Accessories

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



Cable, serial

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