

NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



12 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.

Commercial Data

Item number	2700486
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	DRA
Product Key	DRACAA
Catalog Page	Page 461 (C-8-2015)
GTIN	4046356646543
Weight per Piece (including packing)	364.6 g
Weight per Piece (excluding packing)	364.6 g
Customs tariff number	85371098
Country of origin	DE

2700486

<https://www.phoenixcontact.com/in/products/2700486>

Technical Data

Product properties

Product type	Base unit
Product family	Nanoline

System properties

System requirements

Engineering tool	nanoNavigator 3 or above
------------------	--------------------------

Electrical properties

Supply

Supply voltage	12 V DC (Power available to the I/O and Communications modules)
Supply voltage range	9 V DC ... 15 V DC
Power supply connection	Screw connection
Max. current consumption	400 mA
Typical current consumption	250 mA

Real-time clock

Realtime clock	Yes (battery-backed)
Description realtime clock	±2 s/day @ 25°C ±4 s/day @ -20 °C ... +60 °C Lithium BR2330

Input data

Analog

Description of the input	Analog input
Number of inputs	2
A/D converter resolution	12 bit (monotonic)
Connection technology	Screw connection
Voltage input signal	0 V DC ... 10 V DC
Input resistance of voltage input	20 kΩ
Input filter	Digital
Limit frequency (3 dB)	1 Hz (3 dB)
Measuring principle	Successive approximation
Protective circuit	Transient voltage suppression

Digital

Input name	Digital inputs
Description of the input	EN 61131-2 type 1 NPN/PNP
Number of inputs	8
Connection method	Screw connection
Input voltage range "0" signal	0 V DC ... 5 V DC
Input voltage range "1" signal	10.2 V DC ... 14.4 V DC

NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

Nominal input voltage U_{IN}	12 V DC
Nominal input current at U_{IN}	3 mA DC (On)
	< 100 mA (Off)
Typical response time	20 ms (on)
	40 μ s (OFF)

Counter

Number of inputs	2
Input frequency	6 kHz

Output data

Digital

Output name	Relay output
Output description	Relay output
Connection method	Screw connection
Number of outputs	4
Protective circuit	External protection required
Maximum output current per channel	5 A
Maximum output current per module / terminal block	20 A
Maximum output current per module	5 A
Nominal output voltage	24 V DC
Nominal load, ohmic	600 W (@ 24 ohms)
Maximum operating frequency with ohmic nominal load	0.5 Hz (at full load)

Connection data

Connection method	Screw connection
Conductor cross section, rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross section, flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

Interfaces

Operator Panel

Connection method	RJ45 / COMBICON
-------------------	-----------------

RS-232

Connection method	Slot 1
-------------------	--------

USB

Connection method	Slot 1
-------------------	--------

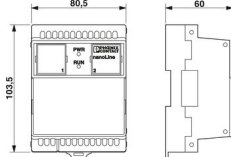
Dimensions

NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

Dimensional drawing	
Width	80.5 mm
Height	103.5 mm
Depth	60 mm

Material specifications

Color	white
-------	-------

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	90 %
Permissible humidity (storage/transport)	90 %

Mounting

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

NLC-055-012D-08I-04QRD-05A - Base unit

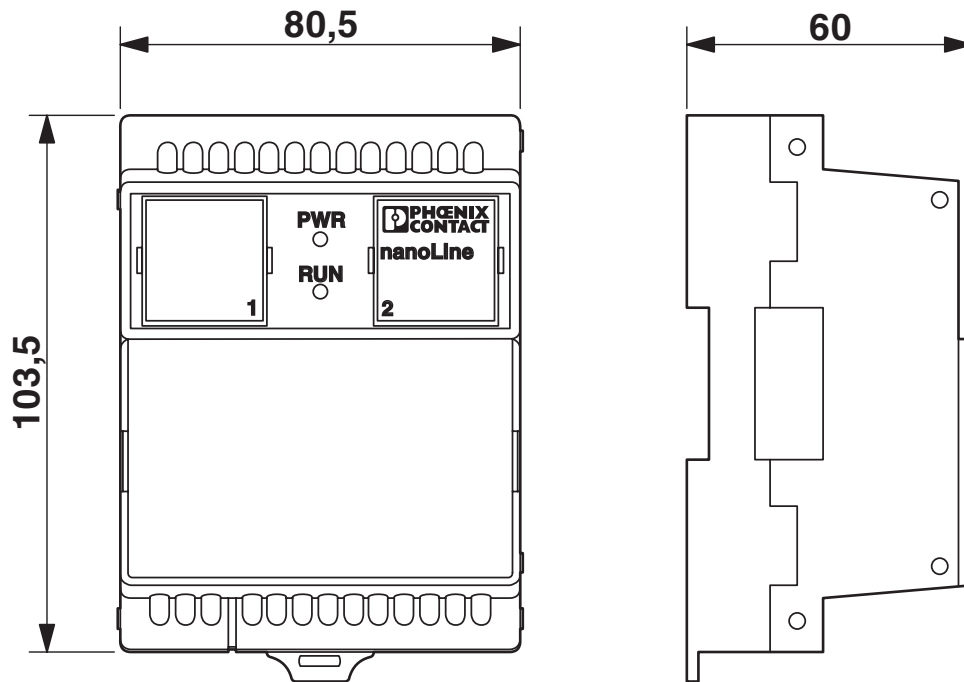


2700486

<https://www.phoenixcontact.com/in/products/2700486>

Drawings

Dimensional drawing



2700486

<https://www.phoenixcontact.com/in/products/2700486>

Approvals



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705



EAC

Approval ID: TR_TS_D_01831-19

2700486

<https://www.phoenixcontact.com/in/products/2700486>

Classifications

ECLASS

ECLASS-11.0	27242216
ECLASS-12.0	27242216
ECLASS-13.0	27242216

ETIM

ETIM 8.0	EC001417
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

2700486

<https://www.phoenixcontact.com/in/products/2700486>

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

Accessories

NLC-MOD-CAP-PXC - Covering hood

2701292

<https://www.phoenixcontact.com/in/products/2701292>

Replacement cover for slot 2 in base unit.



NLC-MOD-CAP - Covering hood

2701289

<https://www.phoenixcontact.com/in/products/2701289>

Replacement cover for slot 1 in base unit.



NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

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

2701072

<https://www.phoenixcontact.com/in/products/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.

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

2701085

<https://www.phoenixcontact.com/in/products/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.

NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

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

2701328

<https://www.phoenixcontact.com/in/products/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.

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

2701098

<https://www.phoenixcontact.com/in/products/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.

NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

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

2701040

<https://www.phoenixcontact.com/in/products/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.

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

2701137

<https://www.phoenixcontact.com/in/products/2701137>



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

NLC-055-012D-08I-04QRD-05A - Base unit

2700486

<https://www.phoenixcontact.com/in/products/2700486>



NLC-OP1-MKT - Mounting kit

2701140

<https://www.phoenixcontact.com/in/products/2701140>

Mounting kit



NLC-MOD-RS232 - nanoLC module

2701179

<https://www.phoenixcontact.com/in/products/2701179>

RS-232 connection for data transfer or software configuration



NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

NLC-MOD-RS485 - Option module

2701182

<https://www.phoenixcontact.com/in/products/2701182>

RS-485 connection for data transfer or software configuration



NLC-MOD-USB - nanoLC module

2701195

<https://www.phoenixcontact.com/in/products/2701195>

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



NLC-055-012D-08I-04QRD-05A - Base unit



2700486

<https://www.phoenixcontact.com/in/products/2700486>

NLC-COM-ENET-MB1 - Communication module

2701124

<https://www.phoenixcontact.com/in/products/2701124>



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

NLC-COM-GSM - Communication module

2701344

<https://www.phoenixcontact.com/in/products/2701344>



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

NLC-055-012D-08I-04QRD-05A - Base unit

2700486

<https://www.phoenixcontact.com/in/products/2700486>



NLC-PC/SERIAL-CBL 2M - Cable

2701234

<https://www.phoenixcontact.com/in/products/2701234>

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



NLC-PC/USB-CBL 2M - Cable

2701247

<https://www.phoenixcontact.com/in/products/2701247>

Cable, serial



Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.
A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420
info@phoenixcontact.co.in