

# **NDB 500 SERIES OPERATION TERMINAL NPB CONTROLLER**

# **NENUTEC<sup>®</sup>**

INNOVATIVE MEMBER OF SWISSTECH

**NENUTEC ASIA PACIFIC PTE LTD**

7030 Ang Mo Kio Ave 5  
#03-56 Northstar @ AMK  
Singapore 569 880



(65) 6570 3233



(65) 6570 6783



info@nenutec.com.sg

# NDB 500 SERIES

## OPERATION TERMINAL NPB CONTROLLER



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NDB 500 series thermostat with LCD is a remote display and operation terminal for NPB series controllers with an internal temperature sensor and two passive inputs.

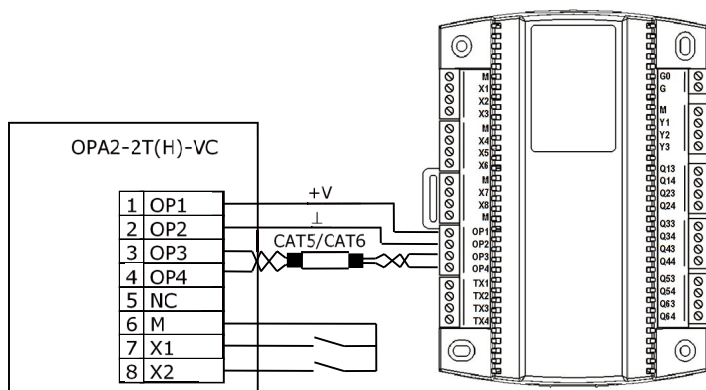
## PRODUCT FEATURE

- Remote access to controller state, setpoints, inputs and outputs
- Access to time schedule and clock settings
- Access to configuration parameters
- RS485 peer to peer communication according to proprietary protocol
- The terminal adapts itself to the NPB controller used. One terminal thus fits all the configuration variations of the NPB series
- Internal temperature sensor
- Internal humidity sensor (D version)

## TECHNICAL SPECIFICATION

MODEL NUMBER	NDB 501	Operation terminal for NPB controller with peer to peer RS485 communication and internal temperature sensor and 2 passive inputs
	NDB 501D	Operation terminal for NPB controller with peer to peer RS485 communication and internal temperature sensor and 2 passive inputs. Include internal humidity sensor
POWER SUPPLY	12 - 30VDC	
POWER CONSUMPTION	Max 1 VA	
SIGNAL INPUT	Internal temperature	
	Range	0...50° C (32...122 °F)
	Accuracy	0.5 K
SIGNAL INPUT FOR HUMIDITY SENSOR	Humidity sensor	Capacity sensor
	Range	0...100 % RH
	Hysteresis	1%
	Stability	< 0.5% / year
COMMUNICATION	RS485 in accordance with EIA/TIA 485	
ENVIRONMENT	Operation (with accordance to IEC 721-3-3) temperature: 0 to 50°C; <95% RH Non-condensing	
CERTIFICATION	CE and ISO 9000 (EN...requirements) with EMC directive 2004/108/EC & low voltage directive 2006/95/EC	
DEGREE OF PROTECTION	IP30 to EN 60 529	
BODY MATERIAL	Fire proof ABS plastic	
DIMENSION	88x88mm	
WEIGHT	250g	

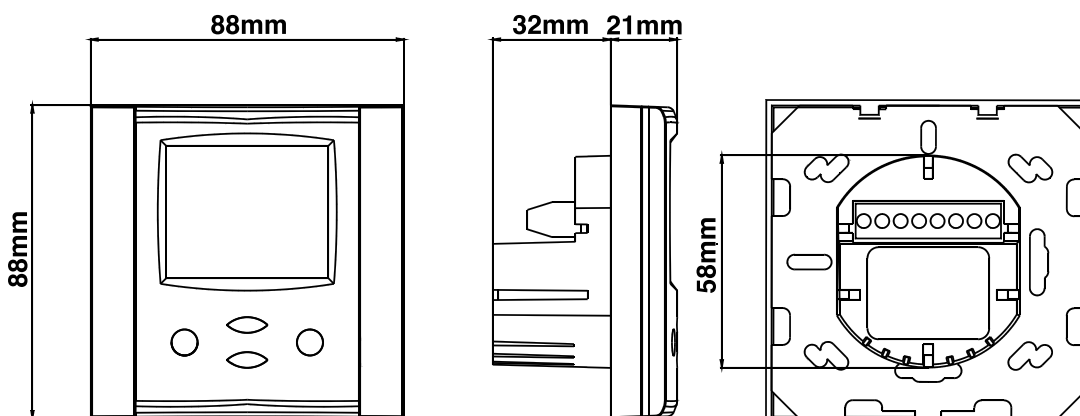
## WIRING DIAGRAM



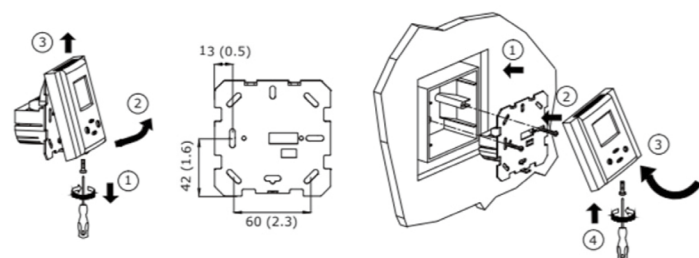
## DESCRIPTION

<b>OP1-OP4</b>	Connection to NPB controller via RS485
<b>NC</b>	Do not connect
<b>M</b>	Common for potential free contacts
<b>X1</b>	Passive input for dry contact. VI3
<b>X2</b>	Passive input for dry contact. VI4

## DIMENSION (mm)



## MOUNTING



- 1 Install the operation terminal on an easy accessible interior wall, approx. 1.5 m above the floor in an area of average temperature.
- 2 Avoid direct sunlight or other heat sources, e.g. the area above radiators and heat emitting equipment.
- 3 Avoid locations behind doors, outside walls and below or above air discharge grills and diffusers.
- 4 Location of mounting is less critical if external temperature sensors are used.

The performance specifications are nominal and conform to acceptable industry standards. NENUTEC shall not be liable for damages resulting from misapplication or misuse of its products.