

NEVD SERIES VAV SMART ACTUATOR HMI

LCD Room Unit for NSVA
Smart Actuators

NENUTEC[®]

INNOVATIVE MEMBER OF SWISSTECH

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DAMPER ACTUATOR MODEL CHART

MODEL										
	NACA	NACM	NECA	NECM	NASA	NASM	NAFA	SAFA	SASA	NSVA
VOLTAGE 230VAC ~ 24VAC/DC	●	●	●	●	●	●	●	●	●	24 VAC
TORQUE (NM)	2 ; 5 ; 10 ; 20 ; 40	2 ; 5 ; 10 ; 20 ; 40	5 ; 10 ; 20	5 ; 10 ; 20	10 ; 20	10 ; 20	3 ; 5 ; 8 ; 20	3 ; 5 ; 8 ; 20	10 ; 15	5
CONTROL	2/3 pts	Modulating	2 pts	Modulating	2/3 pts	Modulating	2 pts SR	2 pts SR	3 pts	Modulating

SPECIAL TYPE

ELECTRONIC RETURN			●	●						
FAST RUNNING					●	●			●	
SPRING RETURN							●			
FIRE & SMOKE SPRING RETURN								●		
SMOKE SAFETY								●	●	
NETWORKING										●

TYPE DESIGNATION

TYPE	ACTUATOR	DESIGNATION	CONTROL	VOLTAGE	DOT	INPUT SIGNAL	HYPHENATED	TOQUE	AUXILIARY SWITCH
N	A	C	M	1	.	1	-	1 0	S1

TYPE	N = Standard Actuator S = Fire & Smoke
ACTUATOR	A = Standard Actuator E = Electronic Return
DESIGNATION	C = Standard Actuator S = Fast Running Actuator F = Spring Back Actuator
CONTROL	A = 2/3 Points M = Modulating
VOLTAGE	1 = 24 VAC/VDC 2 = 230 VAC 3 = 110/120 VAC 4 = 48 VAC

INPUT SIGNAL (NOT APPLICABLE FOR 2/3 POINTS)	1 = 0(2)...10 VDC and 0(4)...20 mA 2 = 0(2)...10 VDC only 3 = 0...135 Ω only 4 = 4...20 mA only
TORQUE	02 = 2 Nm 03 = 3 Nm 05 = 5 Nm 08 = 8 Nm 10 = 10 Nm 15 = 15 Nm 20 = 20 Nm 40 = 40 Nm
AUXILIARY SWITCH / FEEDBACK POTENTIOMETER	None = No Auxiliary or Feedback Potentiometers S1 = 1 x Auxiliary Switch S = 2 x Auxiliary Switches P1 = 1000Ω P2 = 10000Ω P3 = 140Ω

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NEVD SERIES

NEVD series Human Machine Interface, Compact with sensing + Controller + Communication+ LCD Display. It has communication port (MODBUS RTU) provide with RJ11 connector. For direct communicate with smart VAV actuator.



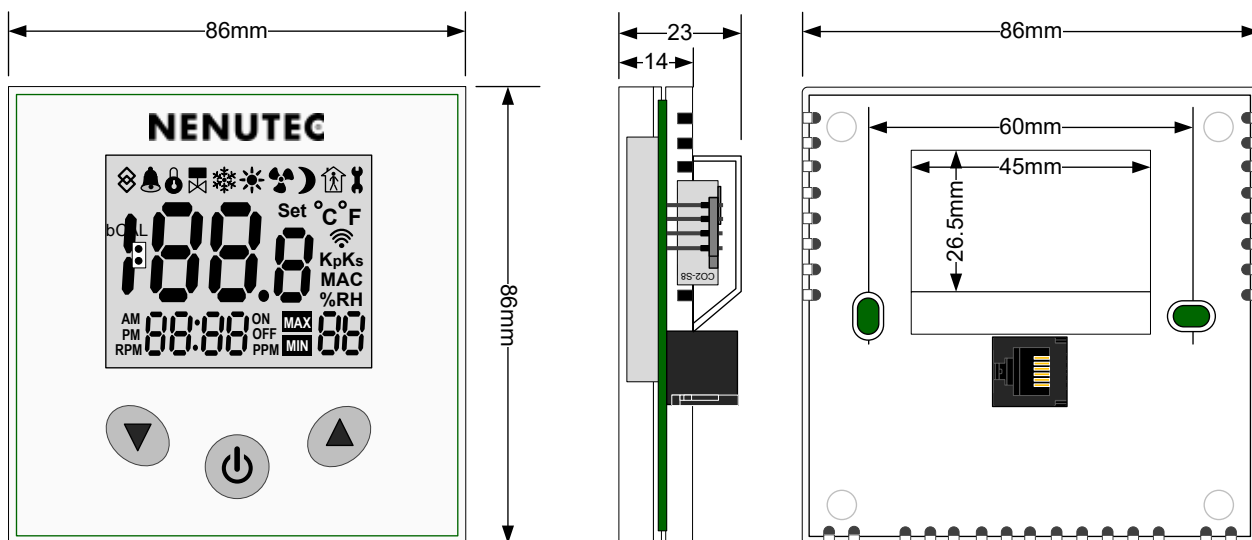
PRODUCT FEATURE

- 32 bit (MCU) with memory
- Compact with Sensing + Controller + Communication + Display
- MODBUS RTU for Communication
- LCD with back light, Clear and detailed display of the operating data
- Built in Temperature(T), Humidity(H), Carbon dioxide (CO2), IAQ sensor
- High-precision for IAQ sensor
- Dedicated design for smart VAV actuator
- Compact, quickly installation with Pluggable terminal & RJ11 connection

MODEL SELECTION TABLE

MODEL / TYPE	TEMPERATURE	HUMIDITY	CARBON DIOXIDE	COMMUNICATION	BACKLIGHT
NEVD	Yes	-	-	MODBUS RTU	Yes
NEVD-H	Yes	Yes	-	MODBUS RTU	Yes
NEVD-IAQ	Yes	Yes	Yes	MODBUS RTU	Yes

DIMENSION (mm)



TECHNICAL SPECIFICATION

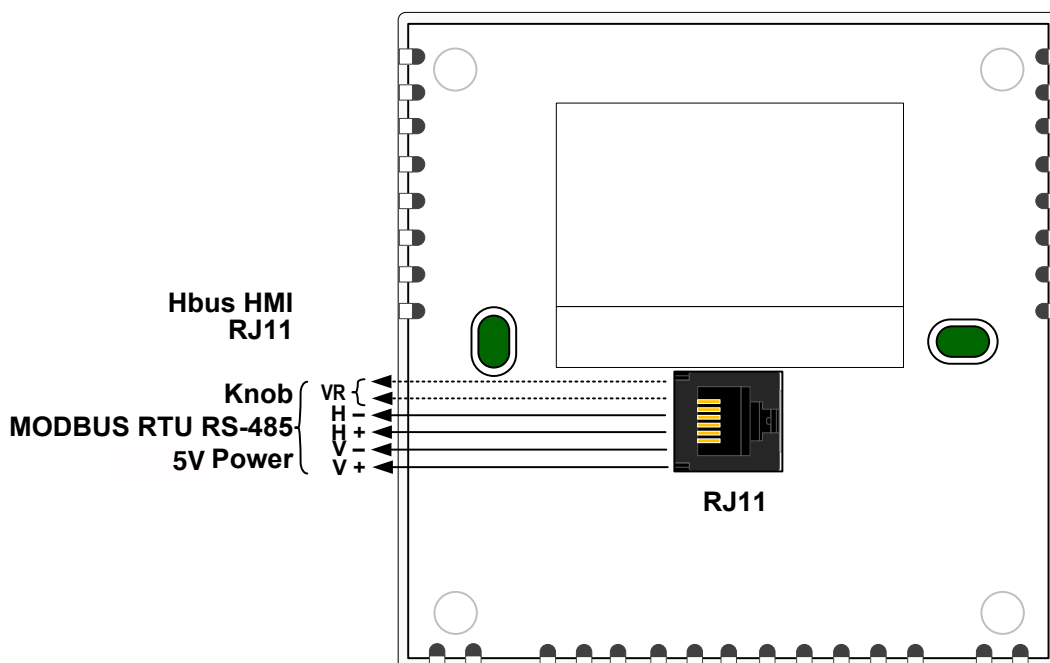
MODEL NUMBER	NEVD
MCU	32 bit CPU (MCU) with memory
DIMENSION	90mm(W)*90mm(H)*26mm(D)
WEIGHT	
● NEVD	138 g
● NEVD-H	138 g
● NEVD-IAQ	146 g
BUTTON	ON-OFF switch & UP Down setting
COMMUNICATION	MODBUS RTU RS-485 loop, speed, 9600 BPS, 100m
OPERATING	0°C...50°C, 20...90%RH, non condensing
POWER SUPPLY	5V, 1VA
DISPLAY	61.5*39.6mm LCD with backlight
TEMPERATURE SENSOR	
● NEVD-H	10KΩ @25°C (NTC) Thermistor, 0°C...50°C, ±0.3°C @25°C
● NEVD-IAQ	CMOS, 0°C...50°C, ±0.3°C
HUMIDITY SENSOR	CMOS, 0...100%RH, ±3%RH
CARBON DIOXIDE	Non-dispersive infrared (NDIR), 400...2000ppm, ±70ppm+3% of reading
CO2	ABC (Automatic Baseline Correction) & bCAL (background calibration)
HOUSING	ABS+PC, IP20
CERTIFICATION	CE(EMC Directive 2004/108/EC) FCC(Part 15, Subpart B, Class A)

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WIRING



INSTALLATION

- NEVD series designed for signal connection.
- Use RJ11 dedicated connector, you can use RJ11 dedicated 6-wire cable for wiring.
- Please wire in accordance with the instructions of the junction diagram.
 - First, separate the panel of this product from the base.
 - After fixing the base, insert the RJ11 dedicated 6-wire cable and fasten it, and then cover
 - the panel to complete the installation.