

# NACM SERIES STANDARD DAMPER ACTUATOR

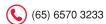
Modulating Control 2 Nm



#### **NENUTEC ASIA PACIFIC PTE LTD**

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## **DAMPER ACTUATOR MODEL CHART**

MODEL	NACA	NACM	NECA	NECM 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**

ТҮРЕ	ACTUATOR	DESIGNATION	CONTROL	VOLTAGE	DOT	INPUT SIGNAL	HYPHENATED	тос	UE	AUXILIARY SWITCH
Ν	А	С	M	1		1	-	1	0	S1

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

INPUT SIGNAL	1 = 0(2)10 VDC and 0(4)20 mA			
(NOT APPLICABLE FOR	2 = 0(2)10 VDC only			
2/3 POINTS)	$3 = 0135 \Omega$ only			
	4 = 420 mA	only		
	02 = 2 Nm	03 = 3 Nm		
TOPOUE	05 = 5 Nm	08 = 8 Nm		
TORQUE	10 = 10 Nm	15 = 15 Nm		
	20 = 20 Nm	40 = 40 Nm		
	None = No Auxiliary or Feedback Potentiometers			
AUXILIARY SWITCH	S1 = 1 x Auxiliary Switch			
/ FEEDBACK	S = 2 x Auxiliary Switches			
POTENTIOMETER	P1 = 1000Ω			
	P2 = 10000Ω			
	P3 - 1400			

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### NACM...02 SERIES

NACM standard damper actuators are specially designed and produced for applications in the HVAC Systems. Our wide range of Nenutec standard damper actuators has been developed to operate and position air dampers of different sizes.



### PRODUCT FEATURE

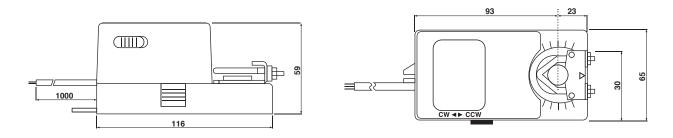
- Torque 2 Nm
- Damper size 0.4 m<sup>2</sup>
- Power supply AC/DC 24V
- Modulating Control Signal DC 0(2)...10 V
- Shaft dimensions Ø 6...15 mm / □ 5...10.5 mm
- Minimum Shaft Length 40 mm
- Adjustable angle of rotation
- Selectable direction of rotation of reversing actuator
- Actuator with 1 m cable connection
- Manual Over-ride push button when required

## **MODEL SELECTION TABLE**

MODEL / TYPE	TORQUE	POWER SUPPLY	RUNNING TIME	AUXILIARY SWITCH
NACM 1.2-02	2 Nm	AC/DC 24 V ± 10%	6090 sec	-



## **DIMENSION (mm)**



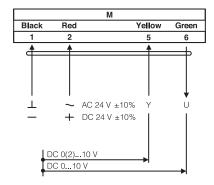
## **TECHNICAL SPECIFICATION**

MODEL NUMBER	NACM 1.2-02				
TORQUE	2 Nm				
DAMPER SIZE	0.4 m <sup>2</sup>				
SHAFT DIMENSION	Ø 615 mm / 🗆 510.5 mm				
POWER SUPPLY	AC/DC 24 V ± 10%				
FREQUENCY	5060 Hz				
CONTROL SIGNAL (INPUT)	DC 0(2)10 V				
POSITION SIGNAL (OUTPUT)	DC 010 V				
POWER CONSUMPTION					
OPERATING	4.0 W				
END POSITION	2.0 W				
FOR WIRE SIZING	14.0 VA				
ELECTRICAL CONNECTION	1 m Cable				
PROTECTION CLASS	Class III ⊕				
ANGLE OF ROTATION	90° (95° mechanical)				
WEIGHT	< 0.7 Kg				
LIFE CYCLE	60,000 Rotation				
SOUND LEVEL	40 dB				
IP PROTECTION	IP54				
OPERATING TEMPERATURE	-20°50° as per IEC 721-3-3				
NON-OPERATING TEMPERATURE	-30°+60° C / IEC 721-3-2				
AMBIENT HUMIDITY	5%95% rH non condensing / EN				
MAINTENANCE	Maintenance Free				
MODE OF OPERATION	Type I / EN 60730-1				
ЕМС	CE & ISO 9000 EN / EEC				

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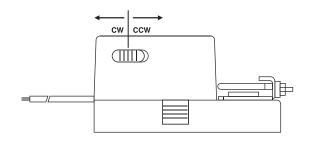
#### WIRING DIAGRAM NACM...02 POWER SUPPLY AC/DC 24V



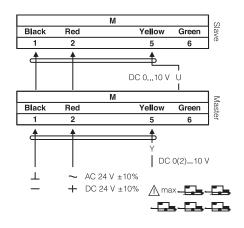
#### **DIRECTION OF ROTATION NACM...02**

Default factory setting: CW.

Direction of rotation can be change by toggling between CW/ CCW switch on the actuator's housing.



## WIRING DIAGRAM NACM...02 PARALLEL CONNECTION



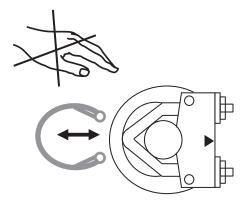
#### REMARK

During parallel operation, the output signal (terminal 6, DC 0...10 V) of the master actuator must be connected to terminal 5 of the next slave actuator.



## **RELEASING THE ADAPTER NACM...02**

Releasing the adapter is not required.

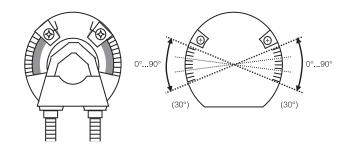


## **LIMITING ANGLE OF ROTATION NACM...02**

Adjustment of Mechanical Limiter

- 1. Loosen screw of mechanical limiter
- 2. Move limiter to appropriate position\*
- 3. Tighten screw

\*Working range of 90° can be reduced up to 30° from end position.



#### **IMPORTANT REMARK**

For special requirement, consult your local Nenutec's representative.



This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.



Connect via safety isolating transformer.

To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3mm contact gap.)

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.