

NAFM...20 SERIES

SPRING RETURN DAMPER ACTUATOR MODULATING SPRING RETURN CONTROL



NAFM...20 SERIES

NAFM series Modulating Spring Return actuators are engineered for general air damper application, rotary valve which require a fail-safe function with precision control.

During normal operation, the actuator modulates the device according to control signal. In the event of power outage, the actuator springs back to its fail-safe position.

NAFM series combines reliability, precision, and safety to support critical HVAC applications.

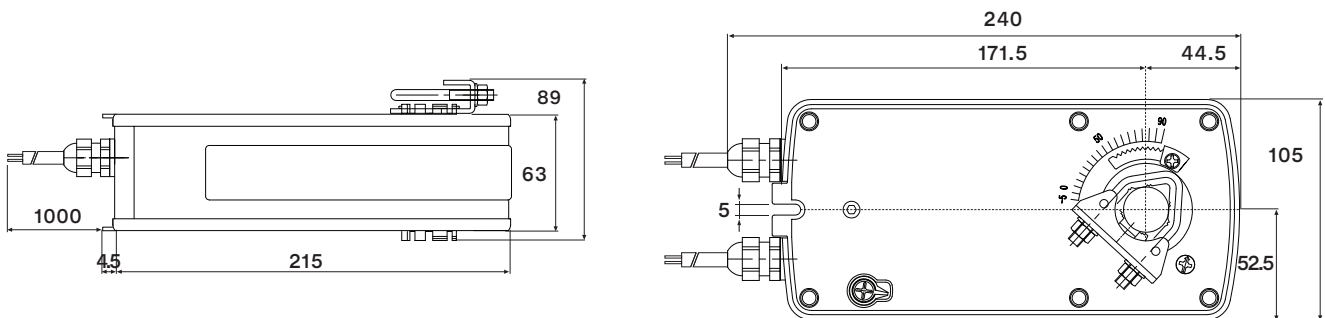
PRODUCT FEATURE

- Torque 20 Nm
- Damper size 4.0 m²
- Power supply AC/DC 24V
- Control modulating DC 0(2)...10 V / 0(4)...20 mA
- Shaft dimensions - Ø 12...20 mm / □ 9...14 mm
- Minimum shaft length 90 mm
- Direction of rotation (motor): selectable with 0.1 switch
- Direction of rotation (fail-safe): selectable by mounting L/R
- Manual override by hand crank
- The anti-rotation bracket is included in the scope of delivery

MODEL SELECTION TABLE

MODEL / TYPE	TORQUE	POWER SUPPLY	RUNNING TIME	AUXILIARY SWITCH
NAFM 1.1-20	20 Nm	AC/DC 24 V ± 10%	<75 sec (Spring Return <30 sec)	-

DIMENSION (mm)



TECHNICAL SPECIFICATION

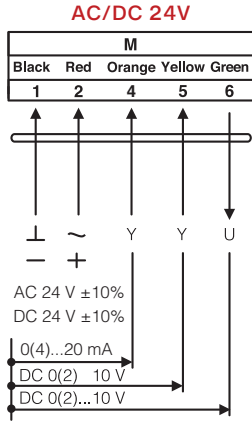
MODEL NUMBER	NAFM 1.1-20
TORQUE	20 Nm
DAMPER SIZE	4.0 m ²
SHAFT DIMENSION	Ø 12...20 mm / □ 9...14 mm*
POWER SUPPLY	AC/DC 24 V ± 10%
FREQUENCY	50...60 Hz
CONTROL SIGNAL (INPUT)	DC 0(2)...10 V / 0(4)...20 mA
CONTROL SIGNAL (OUTPUT)	DC 0(2)...10 V
POWER CONSUMPTION	
• OPERATING	12.0 W
• END POSITION	8.0 W
FOR WIRE SIZING	14.0 VA
ELECTRICAL CONNECTION	1 m Cable
AUXILIARY SWITCH RATING	3 (1.5) A, AC 250 V
PROTECTION CLASS	Class III ◇
ANGLE OF ROTATION	90° (95° mechanical)
WEIGHT	2.8 Kg
LIFE CYCLE	60,000 Rotation
SOUND LEVEL	75 dB
IP PROTECTION	IP54
OPERATING TEMPERATURE	-30°...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
EMC	CE & ISO 9000 EN / EEC

*Note that shaft dimension has a tolerance offset of ± 0.2mm.

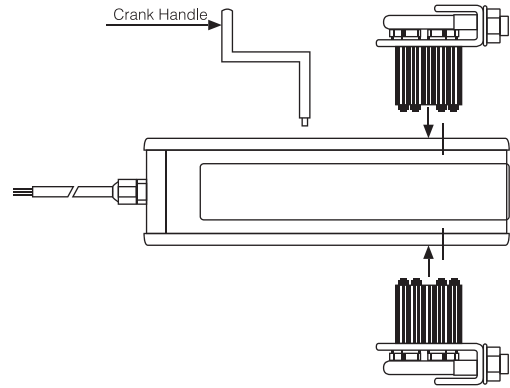
NAFM...20 (S) SERIES

SPRING RETURN DAMPER ACTUATOR MODULATING SPRING RETURN CONTROL

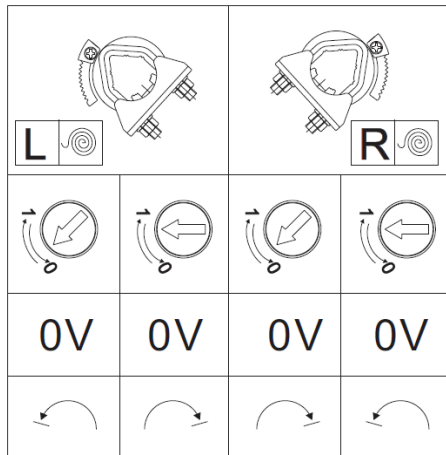
WIRING DIAGRAM NAFM...20 POWER SUPPLY AC/DC 24V



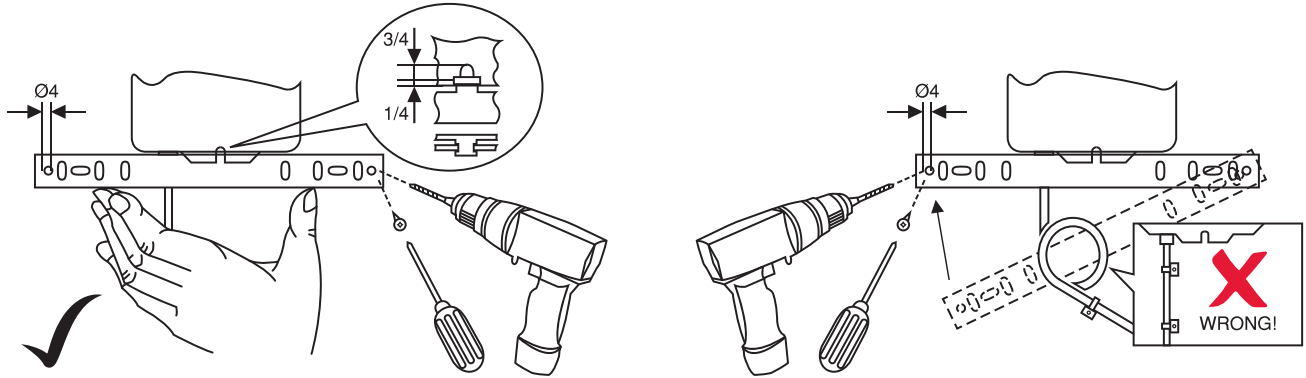
CHANGE OF ROTATION (FAIL-SAFE) NAFM...20



CHANGE OF ROTATION (MOTOR) NAFM...20



INSTALLATION / MOUNTING INSTRUCTION



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.



AC / DC 24 V:
AC 230 V:

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.

Disclaimer:

While we strive for accuracy, product specifications may change without notice. Images are for illustration only. Contact our sales team for the latest information.