

MFT/programmable, Spring return, 24 V





5-year warranty







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	l data	

Nominal voltage	AC/DC 24 V
Nominal voltage frequency	50/60 Hz
Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
Power consumption in operation	6.5 W
Power consumption in rest position	3 W
Transformer sizing	9 VA
Electrical Connection	18 GA appliance cable, 1 m, 3 m, or 5 m with 1/2" NPT conduit connector, degree of protection NEMA 2 / IP54
Overload Protection	electronic throughout 095° rotation

Functional data

Overload Protection	electronic throughout 095° rotation
Operating range Y	210 V
Operating range Y note	420 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
Operating range Y variable	Start point 0.530 V End point 2.532 V
Operating modes optional	variable (VDC, PWM, on/off, floating point)
Position feedback U	210 V
Position feedback U note	Max. 0.5 mA
Position feedback U variable	VDC variable
Direction of motion motor	selectable with switch 0/1
Direction of motion fail-safe	reversible with cw/ccw mounting
Manual override	5 mm hex crank (3/16" Allen), supplied
Angle of rotation	95°
Angle of rotation note	adjustable with mechanical end stop, 3595°
Running Time (Motor)	150 s / 90°
Running time motor note	constant, independent of load
Running time motor variable	40150 s
Running time fail-safe	<20 s @ -4122°F [-2050°C], <60 s @ -22°F [-30°C]
Override control	MIN (minimum position) = 0% MID (intermediate position) = 50% MAX (maximum position) = 100%



Techni

Technical data sheet NFX24-MFT-X²

Noise level, motor Noise level, fail-safe Position indication	50 dB(A) 62 dB(A) Mechanical
Position indication	
	Mechanical
- D	
a Power source UL	Class 2 Supply
Degree of protection IEC/EN	IP54
Degree of protection NEMA/UL	NEMA 2
Enclosure	UL Enclosure Type 2
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU
Quality Standard	ISO 9001
UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
Ambient humidity	Max. 95% RH, non-condensing
Ambient temperature	-22122°F [-3050°C]
Storage temperature	-40176°F [-4080°C]
Servicing	maintenance-free
t Weight	4.3 lb [1.9 kg]
s Housing material	Galvanized steel and plastic housing
1	Degree of protection NEMA/UL Enclosure Agency Listing Quality Standard UL 2043 Compliant Ambient humidity Ambient temperature Storage temperature Servicing Meight

Footnotes *Variable when configured with MFT options.

Accessories

Electrical accessories	Description	Туре
	Service tool, with ZIP-USB function, for programmable and	ZTH US
	communicative Belimo actuators, VAV controller and HVAC performance	
	devices	

Electrical installation



INSTALLATION NOTES

A Actuators with appliance cables are numbered.

A Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

6 Only connect common to negative (-) leg of control circuits.

 Λ A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.

(Source) or Common (Sink) 24 V line.

A For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.

Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.

IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).

Meets cULus requirements without the need of an electrical ground connection.

Marning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks.



Electrical installation

Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

