

ML4125/ML4135/ ML8125/ML8135

Fast-Acting, Spring Return, On-Off
type Direct-Coupled Damper Actuators
2위치 고속 제어 댐퍼 조작기
(5Nm/12Nm)



개요

고속 스프링 리턴 타입 직결형 댐퍼 조작기는 다음과 같은 분야에 2위치 제어에 사용됩니다.

- 통합분전반의 고속 댐퍼 조작
- 에어 핸들러
- 환기 플랩
- 통풍 구멍
- 5Nm / 12Nm 까지의 댐퍼 지원
- 신뢰성 높은 제어동작

특징

- 2위치 제어 가능한 댐퍼 조작기
- 저소음, 고속운전 가능
- 다이캐스트 알루미늄 사용으로 강한 내구성
- 결선 용이(Wiring Box 분리 가능)
- UL 및 CE 인증

모델

Model	Spring Return Direction	Voltage in Vac	Torque in lb-in. (N · m)
ML4125A	CCW	120	100 (11,3)
ML4125B	CW		
ML4135A	CCW		40(4,5)
ML4135B	CW		
ML4125C	CCW	230	100 (11,3)
ML4125D	CW		
ML8125A	CCW	24	100 (11,3)
ML8125B	CW		
ML8135A	CCW		40(4,5)
ML8135B	CW		

특성 및 규격

Electrical Ratings I

Power Input:

- ML4125A,B: 120 Vac +10%, -15%, 60 Hz.
- ML4125C,D: 230 Vac ±10%, 50 Hz.
- ML4135: 120 Vac ±10%, 60 Hz.
- ML8125, ML8135: 24 Vac +20%, -10%, 50/60 Hz.

Power Consumption (at Nominal Voltage):

- ML4125A,B: Running: 0.16A, 15W. Holding: 0.10A, 5W.
- ML4125C,D: Running: 0.12A, 18.6W. Holding: 0.10A, 7W.
- ML4135: Running: 0.18A, 18W. Holding: 0.11A, 9W.
- ML8125: Running: 15.6 VA. Holding: 4 VA.
- ML8135: Running: 18 VA. Holding: 8.5 VA.

Temperature Ratings I

Ambient: -40°F to 130°F (-40°C to 55°C).

Shipping and Storage: -40°F to 140°F (-40°C to 60°C).

Humidity Ratings I 5% to 95% RH noncondensing.

Electrical Connections I

ML4125A,B, ML4135, ML8125, ML8135: Two color coded 16 in. leads; includes ground screw.

ML4125C,D: 1m appliance cable. Three 7/8 in. holes for conduit connections (fittings not included).

Controller Type I

ML4125A,B, ML4135: Line voltage (120 Vac), two-position, spst (Series 40).

ML4125C,D: Line voltage (230 Vac), two-position, spst (Series 40).

ML8125, ML8135: Low voltage (24 Vac), two-position, spst (Series 80).

Device Weight I 5 lb (2.3 kg).

Stroke I 95° ± 3°, mechanically limited.

Torque Ratings I

Driving:

- Minimum:
 - ML4125, ML8125: 100 lb-in. (11.3 N · m).
 - ML4135, ML8135: 40 lb-in. (4.5 N · m).

Typical:

- ML4125, ML8125: 170 lb-in. (19.2 N · m).
- ML4135, ML8135: 100 lb-in. (11.3 N · m).

Spring Return:

- Minimum:
 - ML4125, ML8125: 80 lb-in. (9 N · m).
 - ML4135, ML8135: 40 lb-in. (4.5 N · m).

Typical:

- ML4125, ML8125: 100 lb-in. (11.3 N · m).
- ML4135, ML8135: 50 lb-in. (5.7 N · m).

Derated (from -40°F to 0°F [-40°C to -18°C]):

- ML4135, ML8135: 30 lb-in. (3.4 N · m).
- Holding (minimum): 100 lb-in. (11.3 N · m).

Stall Maximum:

- ML4125, ML8125: 240 lb-in. (27.1 N · m).
- ML4135, ML8135: 150 lb-in. (17 N · m).

Noise Rating (Maximum) I

Driving/Spring Return: 65 dBA at 1m.

Holding: 20 dBA at 1m (no audible noise).

Mounting I 3/8 in. (10 mm) to 1/2 in. (13 mm) square or round damper shafts. Actuator can be mounted with shaft in any position. Secure hub to shaft with:

ML8125, ML4125A,B: Four 1/4-28 UNF set screws. Use 1/8 in. Allen wrench to tighten set screws.

ML8135, ML4135: Two 1/4–28 UNF set screws. Use 1/8 in. Allen wrench to tighten set screws.
 ML4125C,D: Four 3 mm set screws. Use 3 mm Allen wrench to tighten set screws.
 Minimum Damper Shaft Length | 1–3/4 in. (45 mm).

Timing |

Drive Open:

- ML4125, ML8125: 25 to 40 seconds (load dependant).
- ML4135, ML8135: 20 to 25 seconds (load dependant).

Spring Close:

- ML4125, ML8125: 20 to 25 seconds.
- ML4135, ML8135: 15 seconds.

Design Life (at Rated Voltage) |

- ML4125, ML8125: 80,000 full–stroke cycles.
- ML4135, ML8135: 60,000 full–stroke cycles.

Accessories | 201391 Shaft Adapter for 3/8 in. (10 mm) shafts. 205649 Mounting Bracket (included with the actuator). 32003532–001 Adjustable Switch Package, two 10A externally–mounted fully–adjustable switches.

보호등급 및 인증현황

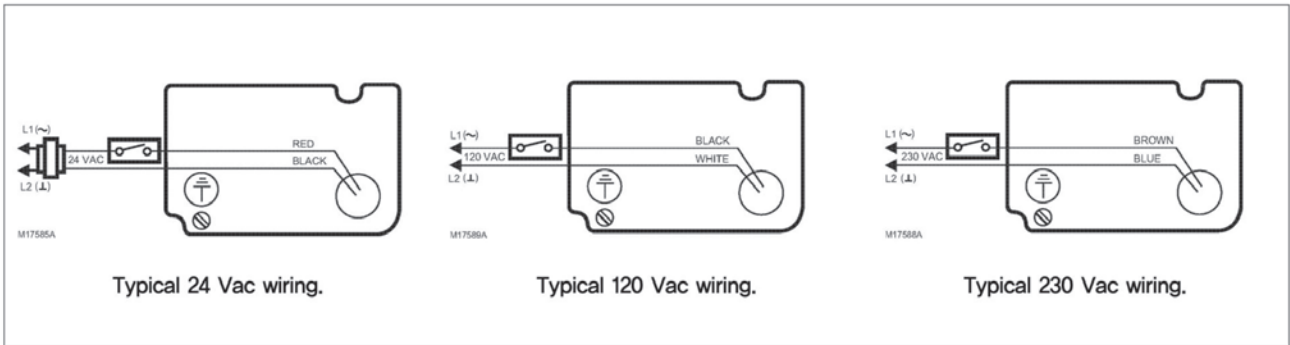
Environmental Protection Ratings

All Devices	ML4125C,D, ML8125, ML8135
NEMA1	IP54

Approvals

	ML4125				
	A,B	C,D	ML4135	ML8125	ML8135
UL/cUL	○	○	○	○	○
UL873 Plenum Rating, File No. E4436	○	○	○	○	○
CE		○		○	○
C–TICK		○		○	

결선도



Color Translations.

	G	F	I	E
BROWN	BRAUN	BRUN	BRUNO	CAFE
BLUE	BLAU	BLEU	AZZURRO	AZUL
BLACK	SCHWARZ	NOIR	NERO	NEGRO
WHITE	WEISS	BLANC	BIANCO	BLANCO
RED	ROT	ROUGE	ROSSO	ROJO

외형 및 치수 (단위 : mm)

