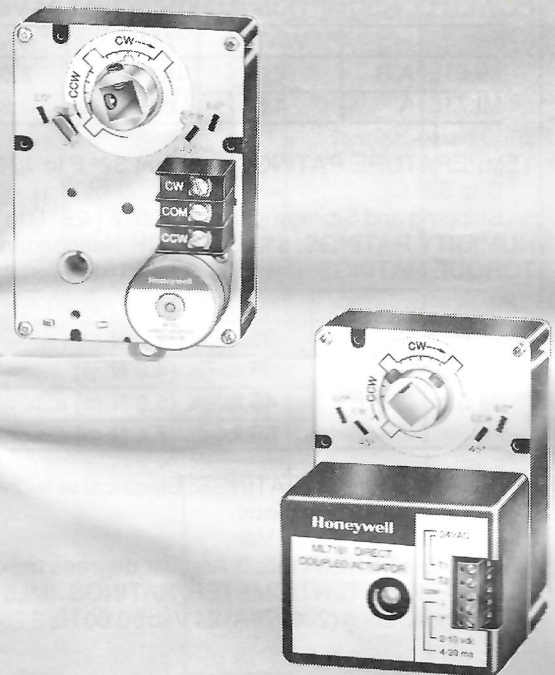


Honeywell

THE ML6161 AND ML7161 ARE DIRECT COUPLED ACTUATORS USED TO CONTROL DAMPERS IN APPLICATIONS SUCH AS VARIABLE AIR VOLUME (VAV) TERMINAL UNITS. SUITABLE FOR USE WITH PULSE WIDTH MODULATED SYSTEMS, SINGLE POLE DOUBLE THROW (SPDT) FLOATING THERMOSTATS, OR ELECTRONIC SYSTEMS.

- Mounts directly on damper shaft.
- 35 lb.-in. torque.
- Selectable 45°, 60°, and 90° stroke in either clockwise (CW) or counterclockwise (CCW) directions.
- 90 second timing models suitable for use with pressure independent VAV systems.
- 7 minute timing models suitable for use with pressure dependent VAV systems.
- Magnetic Coupling provides a 45 lb.-in. stall torque eliminating the need for mechanical stops or limit switch adjustments.
- 3 field-addable auxiliary switches.
- Field-addable auxiliary feedback potentiometer.
- Models available with 0° to 30° minimum position adjustment in CW or CCW directions.
- Compatible for use with Honeywell W7620 Terminal Unit Controller.
- 2 to 10 Vdc or 4 to 20 mA control input for ML7161.
- ML6161 and ML7161 can be used with Commercial Zone Damper in W7600 Commercial Zone System.

DIRECT COUPLED ACTUATOR



ML6161
ML7161

SPECIFICATIONS

Standard features include:

Models: 35 lb.-in. torque, Selectable 45°, 60°, and 90° stroke in both CW and CCW directions.

ML6161A—90 second, 3 minute and 7 minute timing models, spdt Floating Series 60, includes auxiliary potentiometer drive for use with field-addable feedback potentiometer. Includes minimum position adjustment set screws for CW or CCW operation. Includes 4074ENJ bag assembly.

ML6161B—90 second, 7 minute timing, spdt Floating Series 60, models. Models available with minimum position adjustment set screws. (Models include 4074ENJ or 4074ENY bag assembly as appropriate.)

ML7161A—90 second timing, 2 to 10 Vdc or 4 to 20 mA control input. Includes 4074ENY bag assembly.

ELECTRICAL RATINGS:

INPUT VOLTAGE: 24 Vac + 20%/30% 50/60 Hz.

POWER CONSUMPTION (MAXIMUM), AT 24 Vac:

	WATTS	AMPS	VA
ML6161A,B	2.0	0.085	2.04
ML7161A	4.5	0.2	4.8

TEMPERATURE RATINGS: Ambient 32° F to 130° F [0° C to 52° C].

Shipping and Storage -20° F to 130° F [-29° C to 49° C].

HUMIDITY RATINGS: 5% to 95% RH Noncondensing.

TORQUE RATINGS: (ML6161 & ML7161):

	Torque
Running	35 lb.-in. (4.0 N-m)
Breakaway	35 lb.-in. (4.0 N-m)
Stall	45 lb.-in. (5.0 N-m) minimum
	65 lb.-in. (7.4 N-m) maximum

AUXILIARY SWITCH RATINGS: Electrical selective N.O. or N.C. not simultaneous.

PILOT DUTY: 50 VA 24 Vac.

SWITCH DIFFERENTIAL: 3 Angular degrees maximum.

FEEDBACK POTENTIOMETER RATINGS (ML6161A):
Electrical rating (200976A) 24 Vac 50/60 Hz 2.25 watts.

RESISTANCE OUTPUT: [Resistance linear as measured between terminal R-B].

0 ohms (at 0 degree CW stroke)

250 ohms (at 45 degree CW stroke)

333 ohms (at 60 degree CW stroke)

500 ohms (at 90 degree CW stroke)

MOTOR TIMINGS AT 50 Hz (nominal):

90 Second Models

90°-108 sec.

60°-72 sec.

45°-54 sec.

3 Minute Models

90°-216 sec.

60°-144 sec.

45°-108 sec.

7 Minute Models

90°-504 sec.

60°-336 sec.

45°-252 sec.

MOTOR TIMINGS AT 60 Hz (nominal):

90 Second Models

90°-90 sec.

60°-60 sec.

45°-45 sec.

3 Minute Models

90°-3 min.

60°-2 min.

45°-90 sec.

7 Minute Models

90°-7 min.

60°-276 sec.

45°-210 sec.

DAMPER SHAFT MOUNTING:

- Suitable for mounting onto 3/8" to 1/2" square or round damper shafts secured by two 1/4"-28 NF allen screws.
- Minimum damper shaft length 1 3/4" [45mm].
- Motor may be mounted with motor shaft in any position.

APPROVALS: Underwriter's Laboratories Component Recognized: File No. E4436, Guide No. XAPX2, CSA Certified (includes auxiliary switch). Meets UL94-5V plenum requirements.

(continued on page 3)

ORDERING INFORMATION

WHEN PURCHASING REPLACEMENT AND MODERNIZATION PRODUCTS FROM YOUR AUTHORIZED DISTRIBUTOR, REFER TO THE TRADELINE CATALOG OR PRICE SHEETS FOR COMPLETE ORDERING NUMBER.

IF YOU HAVE ADDITIONAL QUESTIONS, NEED FURTHER INFORMATION, OR WOULD LIKE TO COMMENT ON OUR PRODUCTS OR SERVICES, PLEASE WRITE OR PHONE:

1. YOUR LOCAL HONEYWELL RESIDENTIAL AND BUILDING CONTROLS SALES OFFICE (CHECK WHITE PAGES OF YOUR PHONE DIRECTORY).
2. RESIDENTIAL AND BUILDING CONTROLS CUSTOMER SERVICE
HONEYWELL INC., 1985 DOUGLAS DRIVE NORTH
MINNEAPOLIS, MINNESOTA 55422-4386 (612)542-7500

(IN CANADA—HONEYWELL LIMITED/HONEYWELL LIMITEE, 740 ELLESMERE ROAD, SCARBOROUGH, ONTARIO M1P 2V9) INTERNATIONAL SALES AND SERVICE OFFICES IN ALL PRINCIPAL CITIES OF THE WORLD.

ACCESSORIES:

- 201052A One Auxiliary Switch.
- 201052B Two Auxiliary Switch.
- 201052C Three Auxiliary Switch.
- 200976A 0 to 500 ohm Auxiliary Potentiometer.
- 4074ENJ Bag Assembly—Includes stop pin, shaft adaptor and min. position screw.
- 4074ENY Bag Assembly—Includes stop pin and shaft adaptor.
- 7640QW Metal Enclosure—For running conduit to actuator.

- T8078A1011 Controller—For use with 3-minute models in 60 degree damper applications.
- T641 Floating Thermostat—For use with 7 minute models.

CAUTION

The ML6161 is not designed for two-position control. The actuator should only be used with electronic and electric floating relay outputs. Misapplying the ML6161 will result in reduced life of the actuator.

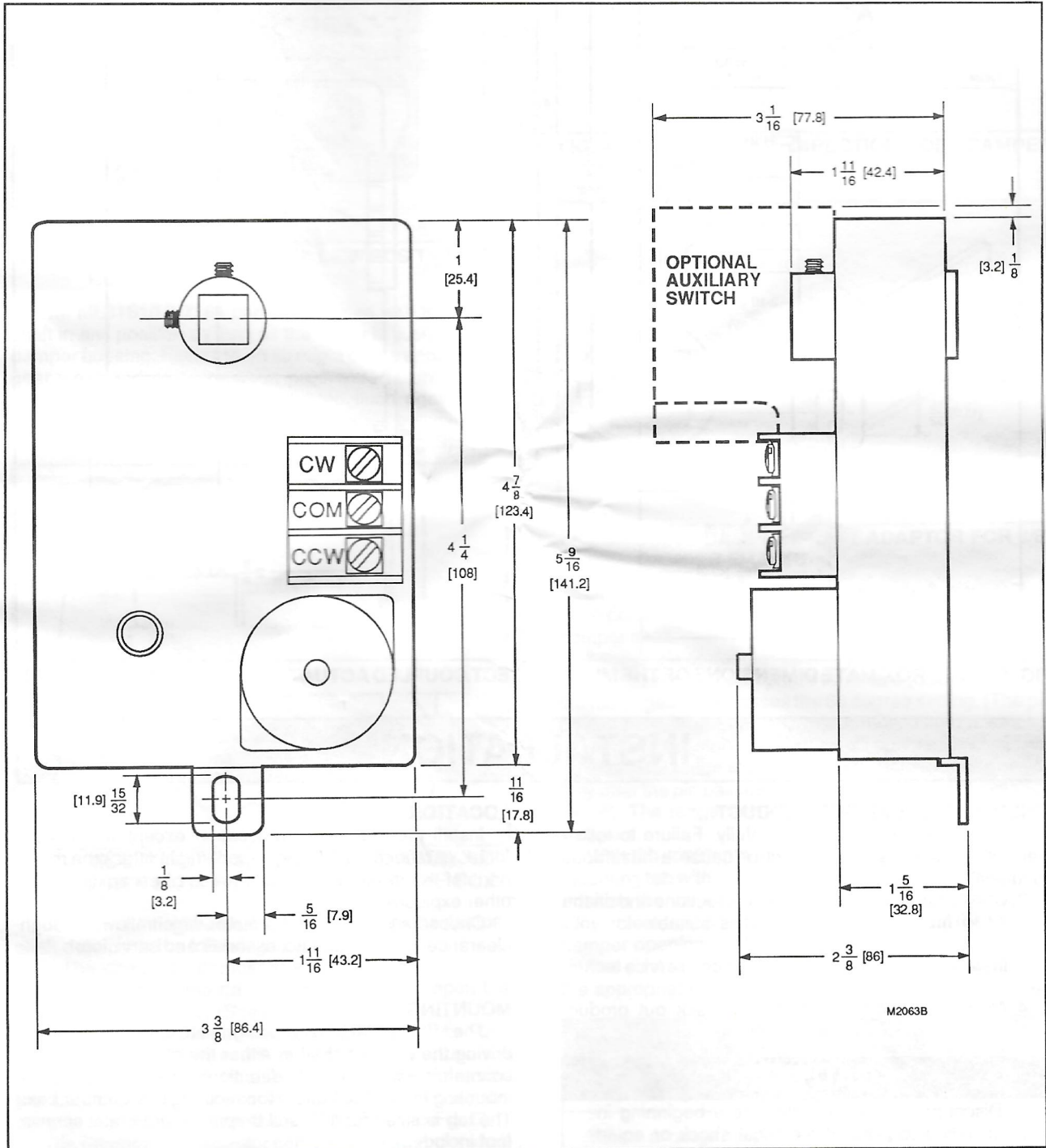


FIG.1—APPROXIMATE DIMENSIONS OF THE ML6161 DIRECT COUPLED ACTUATOR IN in. [mm IN BRACKETS].