Slip–In Dampers

DAMPSLS–B

DAMPSLB–B

Installation Instructions

NOTE: Read the entire instruction manual before starting the installation.

SAFETY CONSIDERATIONS

Installation and servicing of this equipment can be hazardous due to mechanical and electrical components. Only trained and qualified personnel should install, repair, or service this equipment.

Untrained personnel can perform basic maintenance functions such as cleaning and replacing air filters. All other operations must be performed by trained service personnel. When working on this equipment, observe precautions in the literature, on tags, and on labels attached to or shipped with the unit and other safety precautions that may apply.

Follow all safety codes. Installation must be in compliance with local and national building codes. Wear safety glasses, protective clothing, and work gloves. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit.

Recognize safety information. This is the safety–alert symbol ⚠. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand these signal words; DANGER, WARNING, and CAUTION. These words are used with the safety–alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Follow all safety codes. Wear safety glasses and work gloves. Have a fire extinguisher available.

Before proceeding with installation, inspect thoroughly for shipping damage. Notify shipper immediately if any damage is found. Check for proper clearances of moving parts.

The qualified installer or agency must use factory–authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

INTRODUCTION

Slip–in style dampers are designed for easy installation in rectangular ductwork on residential new construction or retrofit applications. A 24vac, direct–drive actuator is used for smooth, quiet performance.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Before performing installation, service or maintenance operations on this system, turn off all main power switches and/or disconnects. There may be more than 1 disconnect switch. Turn off accessory heater power switch if applicable. Lock out and tag switch with a suitable warning label.

INSTALLATION CONSIDERATIONS

1. Place dampers away from areas that may be noise sensitive. It is recommended to install zone dampers near furnace plenum when possible. This may help ease installation, as well as dissipate air noise associated with zoning.
2. Install dampers in rectangular or square duct systems only. Any frame misalignment will jam damper blades.
3. Install dampers so actuator is visible for inspection and accessible in the event it would ever need service.
4. Use sheet metal screws to secure damper in ductwork (do not try to weld dampers in any way).
5. To ensure proper fit and operation dampers must be sized according to ductwork. Dampers are made slightly smaller than nominal duct dimensions (See Table 1).

⚠ CAUTION

UNIT OPERATION HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Never force dampers into an undersized duct system. The excess pressure can cause damper blades to jam.

NOTE: All dampers must be properly installed and supported according to local codes or SMACNA standards. Seal duct joints using duct tape, mastic, or other approved methods. Do not allow mastic to come in contact with actuator.

INSTALLATION

1. To apply Side Mount or Bottom Mount dampers, first select location for damper to be installed. Cut out a 3–in. opening in 1 side of duct at selected location. Ensure opening is fully cut from top to bottom of seam, this will allow damper to be inserted without obstruction (See Fig. 1 and 2).
2. Slide damper into opening and check for proper alignment. Secure damper using sheet metal screws through clearance holes located on mounting plate.

⚠ CAUTION

UNIT OPERATION HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

For most damper applications the mounting plate is sufficient in securing the damper into the duct system. However, with larger size dampers (e.g. 10 in. X 18 in.) or side mount dampers (or dampers mounted in a horizontal installation), it may be necessary to additionally secure damper to avoid drooping inside duct system (See Fig. 3). Use extreme caution when inserting screws in the sides of dampers; be careful not to bind or damage assembly. Do not insert screws on the opposite frame end from actuator assembly; use side rails to secure.

3. Route field wiring to terminal block. Provide strain relief to prevent wires from being pulled or snagged. Strip wire leads and install on appropriate terminals labeled: OPN (open), COM (common), CLS (close).
4. In areas where a duct system may experience excessive condensing, carefully insulate over actuator assembly and mounting plate (check local codes). Make sure insulation does not interfere with operation of actuator.
5. After installation is complete, check dampers and verify they are all operating properly. When 24vac is applied between common and open, the damper should go full open in approximately 15 sec. If the damper is used in a 50 Hz application, time will increase to approximately 18 sec. Power damper and cycle open / closed several times.

NOTE: Dampers are designed to be as quiet and efficient as possible. However, slip–in style dampers may exhibit some airflow noise associated with zoning. It is recommended to check damper operation with airflow moving through the duct system.

6. Residential dampers are designed in such a way that if the damper blades should jam or stall it will not damage the damper or motor. If for any reason the damper should jam, it will usually be related to twisting or bending of the damper body during installation, or tension on the damper shaft. After you correct any bending or twisting problems, damper should operate properly. If, in an emergency, it becomes necessary to force a damper open manually, press and hold the disengagement (quick blade release) button with 1 hand and turn mounting hub to reposition damper shaft. Release button to hold damper shaft in new position.

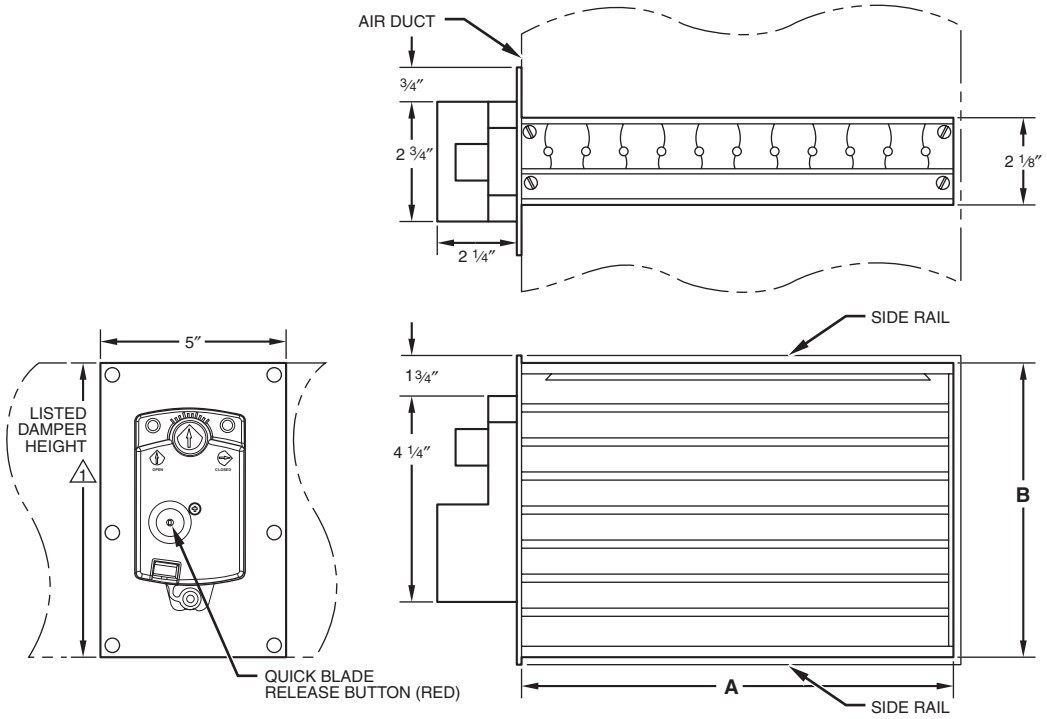

Fig. 1 – Side–Mount Damper Configuration

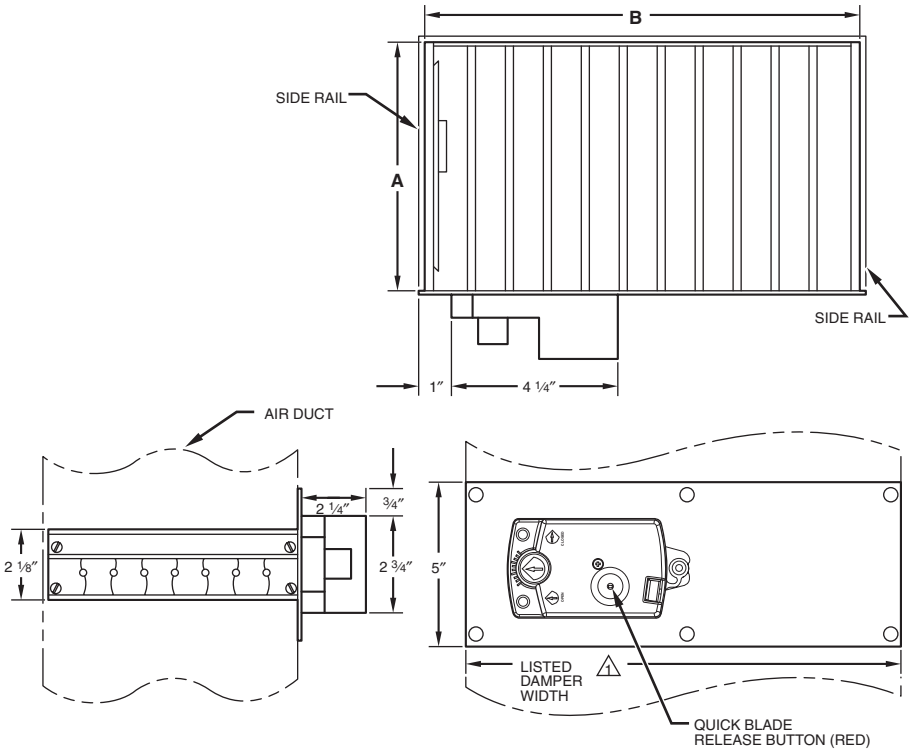

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Fig. 2 – Bottom–Mount Damper Configuration

Table 1—Slip−In Damper Dimensions (In.)

Catalog number	Description	A	B
DAMPSLS08X08−B	SIDE MOUNT 8X8	7 13/16	7 13/16
DAMPSLB08X08−B	BOTTOM MOUNT 8X8	7 13/16	7 13/16
DAMPSLS08X10−B	SIDE MOUNT 8X10	9 7/8	7 13/16
DAMPSLB08X10−B	BOTTOM MOUNT 8X10	7 13/16	9 7/8
DAMPSLS08X12−B	SIDE MOUNT 8X12	11 7/8	7 13/16
DAMPSLB08X12−B	BOTTOM MOUNT 8X12	7 13/16	11 7/8
DAMPSLS08X14−B	SIDE MOUNT 8X14	13 7/8	7 13/16
DAMPSLB08X14−B	BOTTOM MOUNT 8X14	7 13/16	13 7/8
DAMPSLS08X16−B	SIDE MOUNT 8X16	15 7/8	7 13/16
DAMPSLB08X16−B	BOTTOM MOUNT 8X16	7 13/16	15 7/8
DAMPSLS08X18−B	SIDE MOUNT 8X18	17 7/8	7 13/16
DAMPSLB08X18−B	BOTTOM MOUNT 8X18	7 13/16	17 7/8
DAMPSLS08X20−B	SIDE MOUNT 8X20	7 13/16	19 7/8
DAMPSLB08X20−B	BOTTOM MOUNT 8X20	19 7/8	7 13/16
DAMPSLS08X22−B	SIDE MOUNT 8X22	7 13/16	21 7/8
DAMPSLB08X22−B	BOTTOM MOUNT 8X22	21 7/8	7 13/16
DAMPSLS08X24−B	SIDE MOUNT 8X24	7 13/16	23 7/8
DAMPSLB08X24−B	BOTTOM MOUNT 8X24	23 7/8	7 13/16
DAMPSLS10X10−B	SIDE MOUNT 10X10	9 7/8	9 13/16
DAMPSLB10X10−B	BOTTOM MOUNT 10X10	9 13/16	9 7/8
DAMPSLS10X12−B	SIDE MOUNT 10X12	11 7/8	9 13/16
DAMPSLB10X12−B	BOTTOM MOUNT 10X12	9 13/16	11 7/8
DAMPSLS10X14−B	SIDE MOUNT 10X14	13 7/8	9 13/16
DAMPSLB10X14−B	BOTTOM MOUNT 10X14	9 13/16	13 7/8
DAMPSLS10X16−B	SIDE MOUNT 10X16	15 7/8	9 13/16
DAMPSLB10X16−B	BOTTOM MOUNT 10X16	9 13/16	15 7/8
DAMPSLS10X18−B	SIDE MOUNT 10X18	17 7/8	9 13/16
DAMPSLB10X18−B	BOTTOM MOUNT 10X18	9 13/16	17 7/8
DAMPSLS10X20−B	SIDE MOUNT 10X20	19 7/8	9 13/16
DAMPSLB10X20−B	BOTTOM MOUNT 10X20	9 13/16	19 7/8
DAMPSLS10X22−B	SIDE MOUNT 10X22	21 7/8	9 13/16
DAMPSLB10X22−B	BOTTOM MOUNT 10X22	9 13/16	21 7/8
DAMPSLS10X24−B	SIDE MOUNT 10X24	23 7/8	9 13/16
DAMPSLB10X24−B	BOTTOM MOUNT 10X24	9 13/16	23 7/8
DAMPSLS12X12−B	SIDE MOUNT 12X12	11 7/8	11 13/16
DAMPSLB12X12−B	BOTTOM MOUNT 12X12	11 13/16	11 7/8
DAMPSLS12X14−B	SIDE MOUNT 12X14	13 7/8	11 13/16
DAMPSLB12X14−B	BOTTOM MOUNT 12X14	11 13/16	13 7/8
DAMPSLS12X16−B	SIDE MOUNT 12X16	15 7/8	11 13/16
DAMPSLB12X16−B	BOTTOM MOUNT 12X16	11 13/16	15 7/8
DAMPSLS12X18−B	SIDE MOUNT 12X18	17 7/8	11 13/16
DAMPSLB12X18−B	BOTTOM MOUNT 12X18	11 13/16	7 7/8
DAMPSLS12X20−B	SIDE MOUNT 12X20	19 7/8	11 13/16
DAMPSLB12X20−B	BOTTOM MOUNT 12X20	11 13/16	19 7/8
DAMPSLS14X14−B	SIDE MOUNT 14X14	13 7/8	13 13/16
DAMPSLB14X14−B	BOTTOM MOUNT 14X14	13 13/16	13 7/8
DAMPSLS14X16−B	SIDE MOUNT 14X16	15 7/8	13 13/16
DAMPSLB14X16−B	BOTTOM MOUNT 14X16	13 13/16	15 7/8
DAMPSLS14X20−B	SIDE MOUNT 14X20	19 7/8	13 13/16
DAMPSLB14X20−B	BOTTOM MOUNT 14X20	13 13/16	19 7/8
DAMPSLS16X16−B	SIDE MOUNT 16X16	15 7/8	15 13/16
DAMPSLB16X16−B	BOTTOM MOUNT 16X16	15 13/16	15 7/8
DAMPSLB16X20−B	BOTTOM MOUNT 16X20	19 7/8	15 13/16

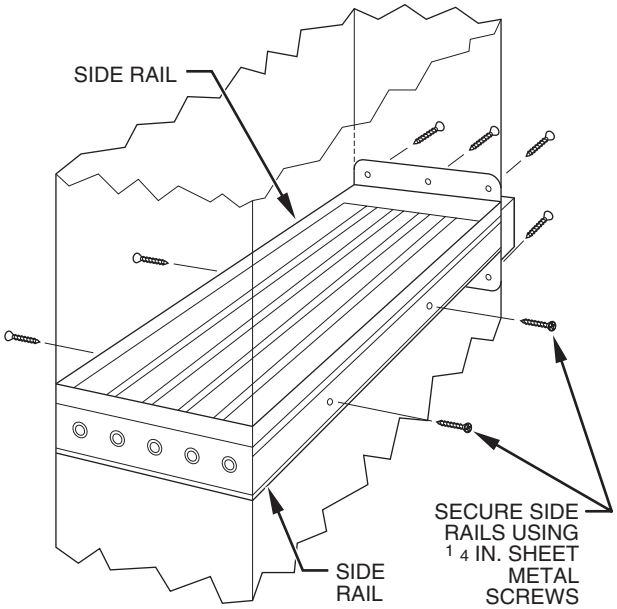

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Fig. 3 – Securing Damper to Air Duct

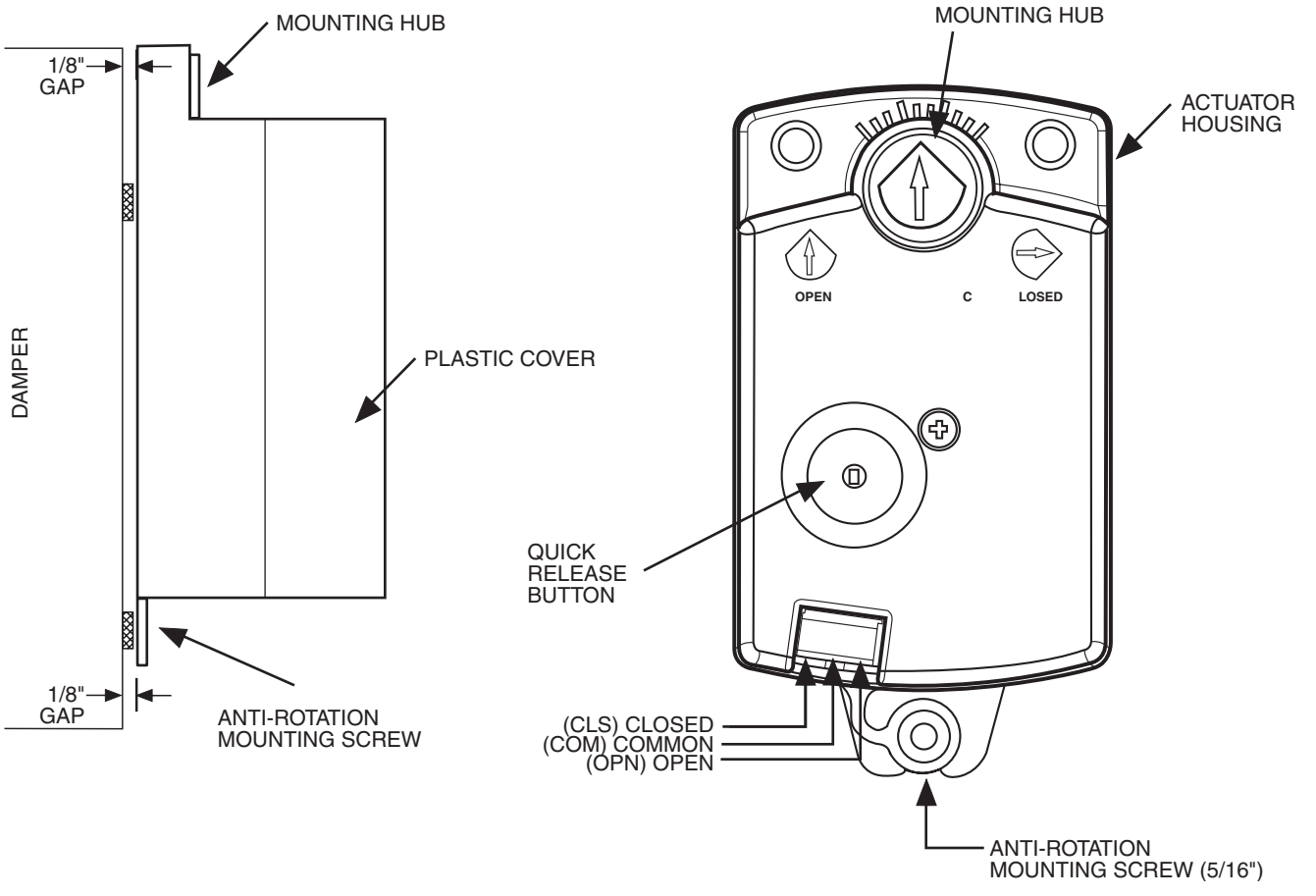

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Fig. 4 – Actuator Detail

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Replaces: IM–DAMP–15