

SW – Single Width DW – Double Width  
 SI – Single Inlet DI – Double Inlet

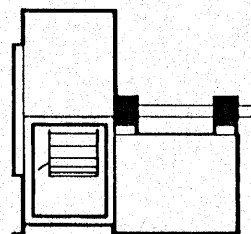
Arrangements 1, 3, 7 and 8 are also available with bearings mounted on pedestals or base set independent of the fan housing.

For designation of rotation and discharge, see Figure 3-16

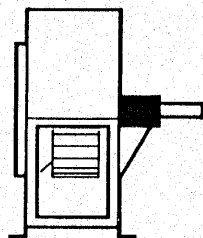
see Figure 3-16

For motor position, belt or chain drive, see Figure 3-15

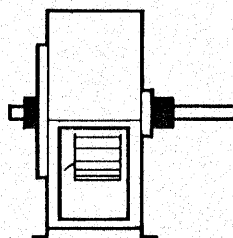
see Figure 3-15



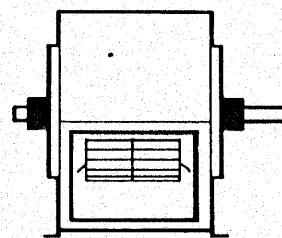
**ARR. 1 SWSI** For belt drive or direct connection. Impeller overhung. Two bearings on base.



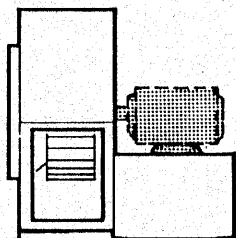
**ARR. 2 SWSI** For belt drive or direct connection. Impeller overhung. Bearings in bracket supported by fan housing.



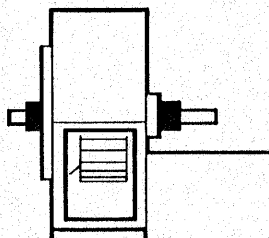
**ARR. 3 SWSI** For belt drive or direct connection. One bearing on each side and supported by fan housing.



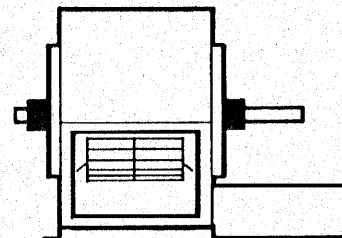
**ARR. 3 DWDI** For belt drive or direct connection. One bearing on each side and supported by fan housing.



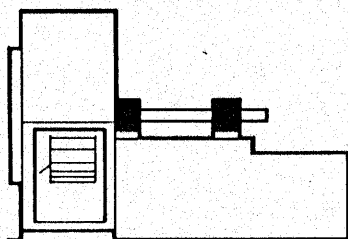
**ARR. 4 SWSI** For direct drive. Impeller overhung on prime mover shaft. No bearings on fan. Prime mover base mounted or integrally directly connected.



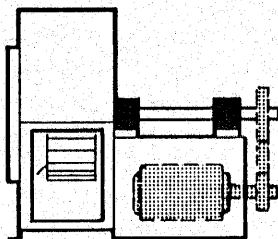
**ARR. 7 SWSI** For belt drive or direct connection. Arrangement 3 plus base for prime mover.



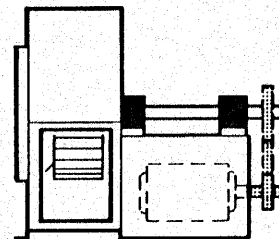
**ARR. 7 DWDI** For belt drive or direct connection. Arrangement 3 plus base for prime mover.



**ARR. 8 SWSI** For belt drive or direct connection. Arrangement 1 plus extended base for prime mover.



**ARR. 9 SWSI** For belt drive. Impeller overhung, two bearings, with prime mover outside base.



**ARR. 10 SWSI** For belt drive. Impeller overhung, two bearings, with prime mover inside base.

**FIGURE 3-11 Drive Arrangements for Centrifugal Fans**



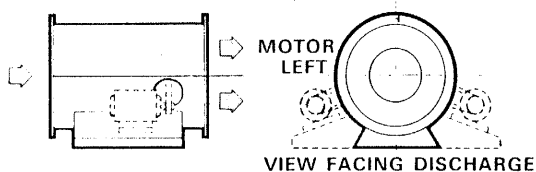


FIGURE 3-12 Arrangement 1—In-Line Fans

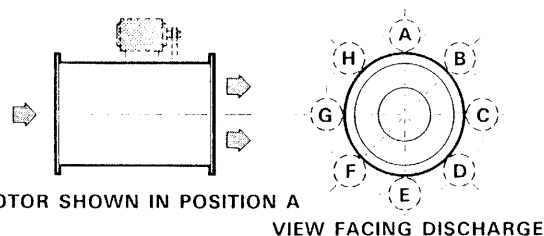


FIGURE 3-14 Arrangement 9—In-Line Fans

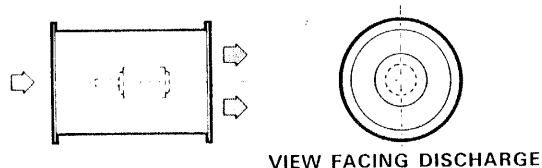


FIGURE 3-13 Arrangement 4—In-Line Fans

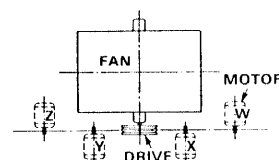


FIGURE 3-15 Centrifugal Fan Motor Locations

mined by facing the fan drive sheave. It is independent of the discharge or rotation.

**C. ROTATION**

Rotation is determined by the direction the fan wheel will be turning for proper operation as viewed from the drive side of the fan. Rotation is designated as clockwise (CW) or counter-clockwise (CCW).

**D. NONSPARKING CONSTRUCTION**

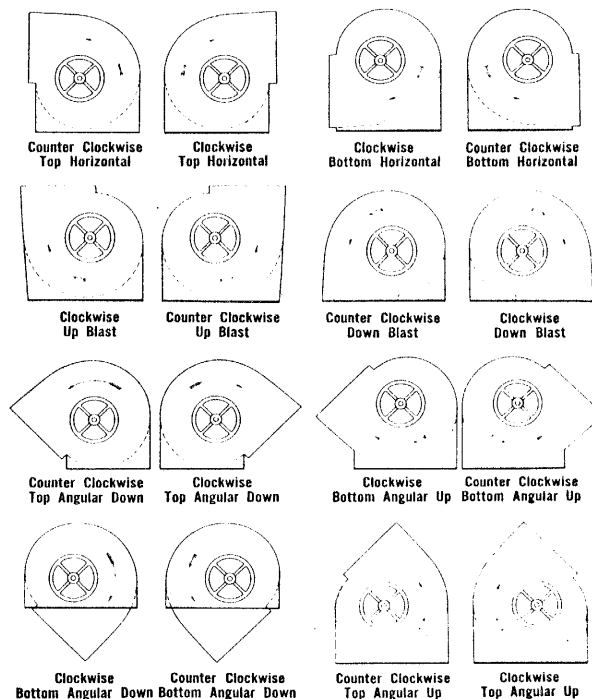
For applications where sparks generated in the air stream could be dangerous, AMCA provides three nonsparking construction classifications based on the degree of assurance desired. For all classes, bearings must be out of the air stream, the fan must be grounded, and nonsparking belts are required. The three classes are:

AMCA A. Requires all components in the airstream be made of nonferrous material. Steel shafts are allowed.

AMCA B. This requires all components in the airstream be made of nonferrous material. Housing can be steel.

AMCA C. Nonferrous wear ring is required on the inlet cone so that, if the impeller shifts, it will rub the nonferrous material.

Generally, AMCA A is the most expensive. AMCA C is the least expensive.



Direction of rotation is determined from the drive side. On single inlet fans, drive side is considered as opposite inlet, regardless of actual drive location.

FIGURE 3-16 Direction of Rotation and Discharge

