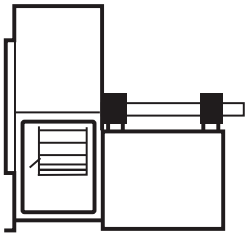
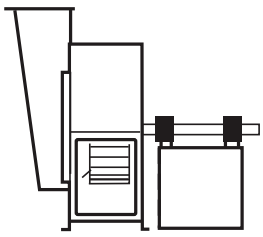
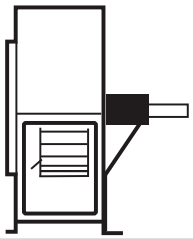
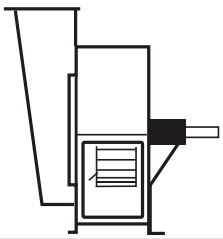
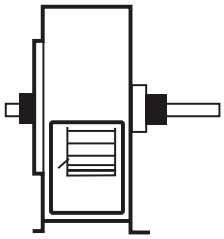
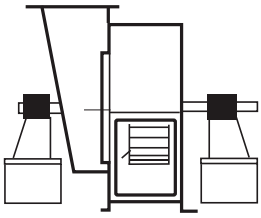
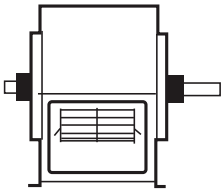
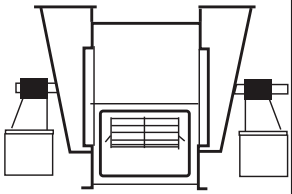
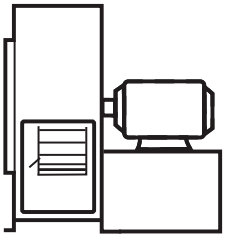
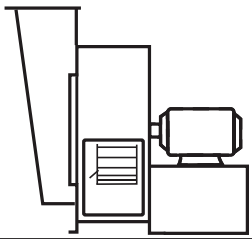
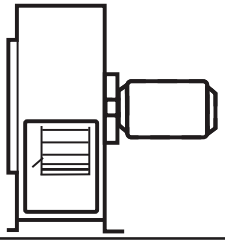
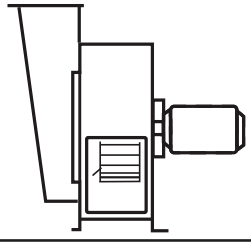
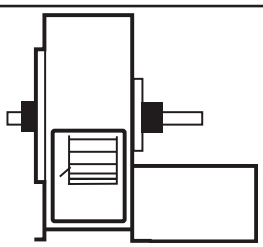
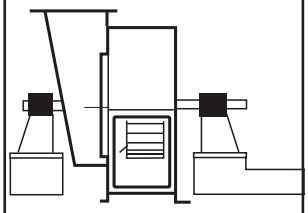
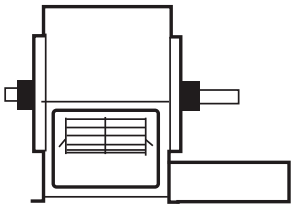
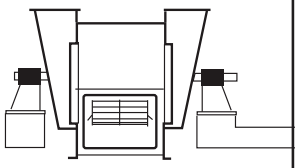
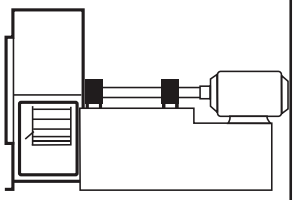
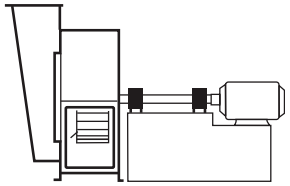
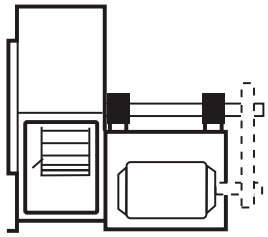
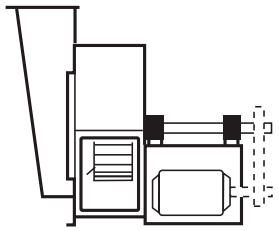
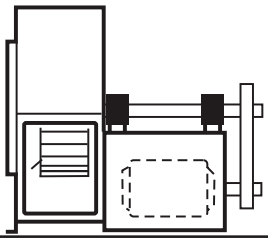
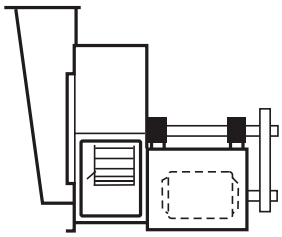
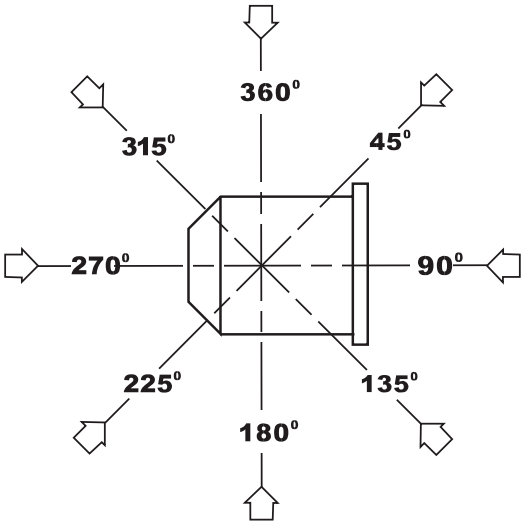
2404 _ Drive Arrangements for Centrifugal Fans

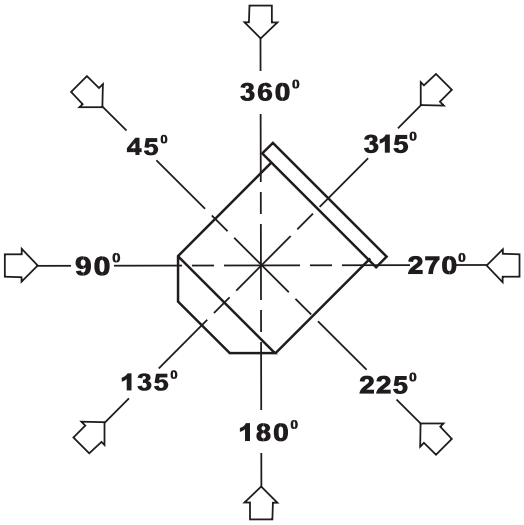
AMCA Drive Arrangement	ISO 13349 Drive Arrangement	Description	Fan Configuration	Alternative Fan Configuration
1 SWSI	1 or 12 (Arr. 1 with sub-base)	For belt or direct drive. Impeller overhung on shaft, two bearings mounted on pedestal base. Alternative: Bearings mounted on independant pedestals, with or without inlet box.		
2 SWSI	2	For belt or direct drive. Impeller overhung on shaft, bearings mounted in bracket supported by the fan casing. Alternative: With inlet box.		
3 SWSI	3 or 11 (Arr. 3 with sub-base)	For belt or direct drive. Impeller mounted on shaft between bearings supported by the fan casing. Alternative: Bearings mounted on independent pedestals, with or without inlet box.		
3 DWDI	6 or 18 (Arr. 6 with sub-base)	For belt or direct drive. Impeller mounted on shaft between bearings supported by the fan casing. Alternative: Bearings mounted on independent pedestals, with or without inlet boxes.		
4 SWSI	4	For direct drive. Impeller overhung on motor shaft. No bearings on fan. Motor mounted on base. Alternative: With inlet box.		
5 SWSI	5	For direct drive. Impeller overhung on motor shaft. No bearings on fan. Motor flange mounted to casing. Alternative: With inlet box.		

AMCA Drive Arrangement	ISO 13349 Drive Arrangement	Description	Fan Configuration	Alternative Fan Configuration
7 SWSI	7	For coupling drive. Generally the same as Arr. 3, with base for the prime mover. Alternative: Bearings mounted on independent pedestals with or without inlet box.		
7DWDI	17 (Arr. 6 with base for motor)	For coupling drive. Generally the same as Arr. 3 with base for the prime mover. Alternative: Bearings mounted on independent pedestals with or without inlet box.		
8 SWSI	8	For direct drive. Generally the same as Arr. 1 with base for the prime mover. Alternative: Bearings mounted on independent pedestals with or without inlet box.		
9 SWSI	9	For belt drive. Impeller overhung on shaft, two bearings mounted on pedestal base. Motor mounted on the outside of the bearing base. Alternative: With inlet box.		
10 SWSI	10	For belt drive. Generally the same as Arr. 9 with motor mounted inside of the bearing pedestal. Alternative: With inlet box.		

2405 _ Inlet Box Positions for Centrifugal Fans



CLOCKWISE FAN ROTATION (90° Inlet Box Position Shown)



COUNTERCLOCKWISE FAN ROTATION (315° Inlet Box Position Shown)

Opening towards fan housing not shown and may be on either side of box

Notes:

1. Position of inlet box and air entry to inlet box is determined from the drive side as defined below:

    a. On single inlet fans: The drive side is that side which is opposite of the fan inlet.

    b. On double inlet fans:

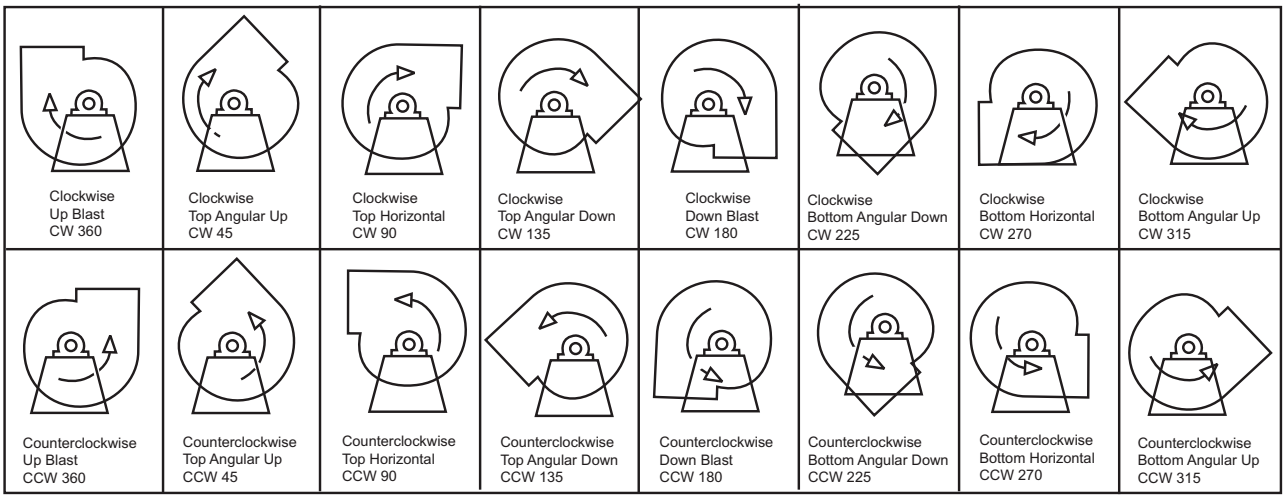
        1) With a single driver: That side with the driver is considered as the drive side.

        2) With multiple drivers: That side with the higher total power is considered as the drive side. If the total power on each side is equal, then that side which has the fixed (non-expansion) bearing is considered as the drive side.

2. Position of inlet box is determined in accordance with diagrams. Angle of air entry to box is referred to the top vertical axis of fan in degrees as measured in the direction of fan rotation. Angle of air entry to box may be any intermediate angle as required.

3. Positions 135º to 225º in some cases may interfere with floor structure.

2406 _ Designation for Rotation and Discharge of Centrifugal Fans



Notes:

1. Direction of rotation and angular reference is determined from the drive side as defined below:

    a. On single inlet fans: The drive side is that side opposite the fan inlet.

    b. On double inlet fans:

        1. With a single driver: That side with the drive is considered the drive side.

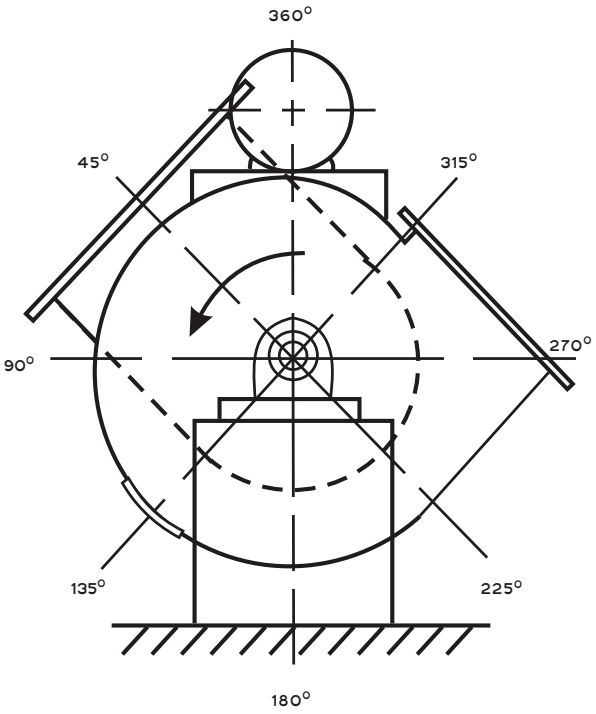
        2. With multiple drivers: That side with the higher total power is considered the drive side. If the total power on each side is equal, then the side that has the fixed (non-expansion) bearing is considered the drive side.

2. Direction of discharge is determined in accordance with diagrams. Angle of discharge is referred to the top vertical axis of fan and designated in degrees as measured in the direction of fan rotation. Angle of discharge may be any intermediate angle as required.

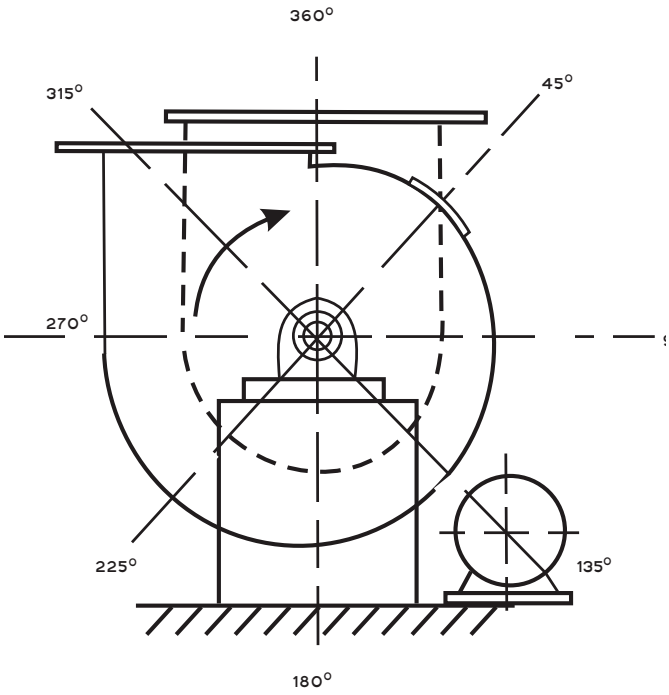
3. A fan inverted for ceiling suspension or rotated for side wall mounting will have its direction of rotation and angle of discharge determined when fan is located as if floor mounted.

4. This standard is in harmony with ISO 13349. In ISO 13349, CCW fans are referred to as LG, i.e., Left or Gauche, while CW fans are referred to as RD, i.e, Right or Droit-handed rotation.

Methods of Designation of The Angular Position of Component Parts of a Centrifugal Fan



CCW Example 1

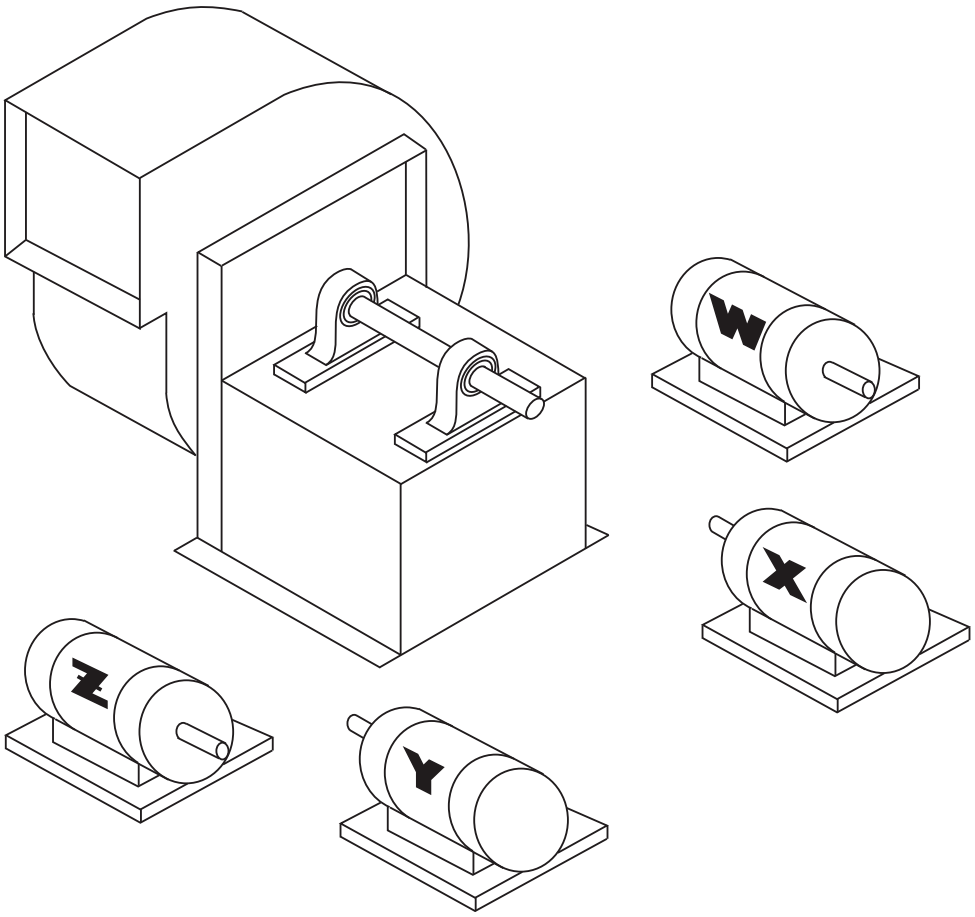


CW Example 2

Outlet	CCW	315°
Inspection door	CCW	135°
Inlet box	CCW	45°
Motor	CCW	360°

Outlet	CW	360°
Inspection door	CW	45°
Inlet box	CW	360°
Motor	CW	135°

2407 _ Motor Positions for Belt or Chain Drive Centrifugal Fans



Note:

Location of motor is determined by facing the drive side of the fan and designating the motor position by letters W, X, Y or Z as the case may be.