

This lesson covers 7 of the basic functions of an Adjustable Frequency Drive (AFD). Use the questions below to see how well you understand this material. Answers follow on the next page, but attempt to answer the questions first.

Review

Matching:

1. Change Reference _____
 2. Maintain Speed _____
 3. Ramp Up _____
 4. Change Direction _____
 5. Ramp Down _____
 6. Limits _____
 7. Braking _____
 8. 3-Phase AC Motor _____
- A.** Slowly starts the motor and increases the speed over a certain amount of time, say 20 seconds, before it achieves the reference speed. This is also known as acceleration.
 - B.** Slowly stops the motor, decreasing the speed over a certain amount of time, say 10 seconds, before it stops completely. This is also known as deceleration.
 - C.** Stops the drive and motor when the current or torque is too high. It also prohibits an operator from operating the AFD and motor too fast.
 - D.** Allows the operator to select different speeds for the motor – slower or faster.
 - E.** A special challenge exists because of the inertia generating power that must be dissipated by the drive.
 - F.** This is the device that is operated by an Adjustable Frequency Drive (AFD).
 - G.** This function allows the operator to go both backward and forward.
 - H.** This function continues operating the motor at the same speed, regardless of the load, heavy or light.

Answers

1. D.
2. H.
3. A.
4. G.
5. B.
6. C.
7. E.
8. F.

Objectives of this lesson:

1. The student is able to identify 7 basic functions of an Adjustable Frequency Drive (AFD) and give a brief description of each function.
2. The student is able to identify the device operated by an Adjustable Frequency Drive (AFD).

For more information, please contact the MCU Training Team.