



Electronic Products

ELECTRONIC APPLICATION

SubDrives & MonoDrives

The Franklin Electric SubDrive/MonoDrive controller is a variable-speed drive that delivers water at a constant pressure. MonoDrive and MonoDriveXT are designed to convert a conventional 3-wire 1/2 hp to 2 hp pump system to a variable speed constant pressure system by simply replacing the 3-wire control box and pressure switch. The SubDrive 3-phase models are designed for three-phase motors to provide constant pressure with three-phase performance using single-phase input power. The SubDrive2W is designed to convert a conventional 2-wire 1/2 hp, 3/4 hp, and 1 hp pump system to a variable speed constant pressure system by simply replacing the pressure switch.

Applications

- Residential homes
- Schools
- Restaurants
- Car washes
- Farms
- Landscape irrigation systems

Protects Against

- Surge protection
- Overheated controller
- Locked pump
- Short circuits
- Undervoltage
- Open circuit
- Underload
- Broken pipe detection (NEMA 3R only excluding 2W)
- User-configurable underload off time (NEMA 3R only excluding 2W)



WARNING: Serious or fatal electrical shock may result from failure to connect the motor, SubDrive/MonoDrive Controller, metal plumbing, and all other metal near the motor or cable to the power supply ground terminal using wire no smaller than motor cable wires. To reduce the risk of electrical shock, disconnect power before working on or around the water system. Capacitors inside the SubDrive/MonoDrive Controller can still hold a lethal voltage even after power has been removed. Allow 10 minutes for dangerous internal voltage to discharge. Do not use motor in swimming areas.

Generator Sizing for SubDrive/MonoDrive

Basic generator sizing for the Franklin Electric SubDrive/MonoDrive system is 1.5 times maximum input watts consumed by the drive, rounded up to the next normal sized generator.

Recommended minimum generator sizes:

MonoDrive

- 1/2 hp (0.37 kW) = 2000 watts (2 kW)
- 3/4 hp (0.55 kW) = 3000 watts (3 kW)
- 1 hp (0.75 kW) = 3500 watts (3.5 kW)

MonoDriveXT

- 1.5 hp (1.1kW) = 4000 watts (4 kW)
- 2 hp (1.5 kW) = 5000 watts (5 kW)

SubDrive15 = 3500 watts (3.5 kW)

SubDrive20 = 5700 watts (6 kW)

SubDrive30 = 7000 watts (7 kW)

SubDrive2W = 6000 watts (6 kW)

SubDrive75 = 3500 watts (3.5 kW)

SubDrive100 = 5700 watts (6 kW)

SubDrive150 = 7000 watts (7 kW)

SubDrive300 = 11000 watts (11 kW)

SubDrive2W = 6000 watts (6 kW)

Note: Not to be used on a Ground Fault Circuit Interruptor (GFCI). If using an externally regulated generator, verify that the voltage and Hertz are appropriate to supply the drive.

