

neptronic®

Specification & Installation instruction



Feature:

- Retrofit assembly available for the majority of the manufacturers of valves (with option –XX-Y) (see Retrofit option).
- Variable running time.
- Manuel override.
- Maintenance free.
- Fail safe by Enerdrive System¹ (on model 060, 065 & 080).
- Auxiliary switches. (on model 020 & 080).

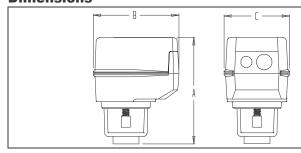
> AT005-30 AT020-30 AT060-30 AT065-30

AT080-30

1

| Technical Data | AT000 AQT 1000A | AT005 AQT 1005A | AT020 AQT 1021A | AT060 AQT 1060A | AT065 AQT 1065A | AT080 AQT 1080A | AT000 -30 | AT005 -30 | AT020 -30 | AT060 -30 | AT065 -30 | AT080 -30 |
|------------------------|---|---|-----------------------|-----------------------|-----------------------|---|------------------------|--------------|---|----------------|--------------|--------------|
| Auxiliary switches | No | No | Yes(2) | No | No | Yes(2) | No | No | Yes(2) | No | No | Yes(2) |
| Feedback | No | Yes | No | No | Yes | No | No | Yes | No | No | Yes | No |
| Fail safe - Enerdrive | No | | | Yes | | | No | | | Yes | | |
| Power consumption | 6 VA | | | 20VA Peak, 6VA | | | 6 VA | | | 20VA Peak, 6VA | | |
| Control signal | | 3 wire / 2 position, 3 wire / 3 point floating 2 wire / 2 position, 4 wire / 3 point floating | | | | 3 wire / 2 position, 3 wire / 3 point floating | | | 2 wire / 2 position, 4 wire / 3 point floating | | | |
| Running time to ½ inch | | 60 sec force dependant | | | | | 30 sec force dependant | | | | | |
| Force | 100 lb. [450 N] at rated voltage | | | | | | | | | | | |
| Power supply | 22 to 26 VAC or 28 to 32 VDC | | | | | | | | | | | |
| Electrical connection | 18 AWG [0.8 mm²] minimum | | | | | | | | | | | |
| Inlet bushing | 2 inlet bushing of 5/8 in [15.9 mm] & 7/8 in [22.2 mm] | | | | | | | | | | | |
| Maximum stroke | 1 in [25.4 mm] | | | | | | | | | | | |
| Direction | Reversible, normally open or normally close (factory set with normally close direction) | | | | | | | | | | | |
| Ambient temperature | 0°F to +122°F [-18°C to +50°C] | | | | | | | | | | | |
| Storage temperature | -22ºF to +122ºF [-30ºC to +50ºC] | | | | | | | | | | | |
| Relative Humidity | 5 to 95 % non condensing. | | | | | | | | | | | |
| Weight | 2 lbs. [0.9 kg] | | | | | | | | | | | |

Dimensions



| Dimension | Inches | Metric (mm) |
|-----------|--------|-------------|
| Α | 5.93 | 150.6 |
| В | 4.80 | 121.9 |
| С | 3.60 | 91.4 |

Caution

We strongly recommend that all neptronic® products be wired to a separate transformer and that transformer shall service only neptronic® products. This precaution will prevent interference with, and/or possible damage to incompatible equipment.





AT.doc/051207 C US CLASS 2 GROUT 11.59

When multiple actuators are wired on a single transformer, polarity must be observed. Long wiring runs create voltage drop which may affect the actuator performance.

¹ Enerdrive System U.S.A. Patent #5,278,454

Mechanical installation

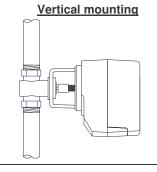
Mounting of the actuator on valve **Correct mounting** Non Correct mounting

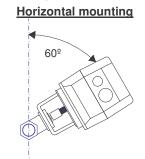
- Screw completely the valve shaft (C) unto the coupling of the actuator (A).
- Unscrew the coupling (A) for ½ of turn in order to leave a functional play.
- Screw the counter nut (B).

Warning:

Do not over tight coupling of the actuator on the shaft of the

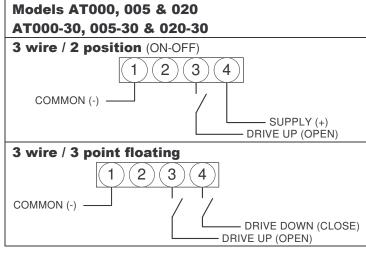
Mounting of the actuated valve on system



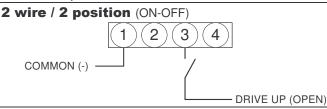


- Pay attention to system particularity; be sure that the expansions, contractions of the system and its medium as well as operating pressures are within the tolerances.
- When plumbing, the motorized valve should be situated in an easily accessible place and sufficient space should be allowed for the removal of the actuator.
- To prevent moisture from collecting in the motor casing, install the motorized valve such that the actuator is superior to the valve, at 60° maximum / at vertical. Avoid mounting the valve so that the valve stem is below horizontal.

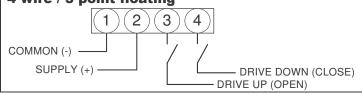
Wiring Diagrams



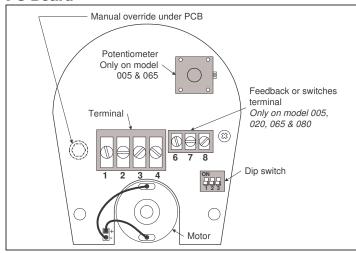
Models AT060, 065 & 080 AT060-30, 065-30 & 080-30



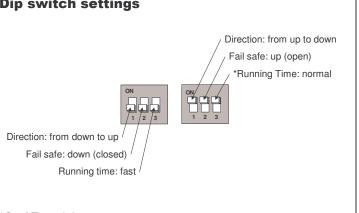
4 wire / 3 point floating



PC Board



Dip switch settings



*On AT model:

When switch #3 is "ON", the running time will be 60 sec.

Retrofit option

