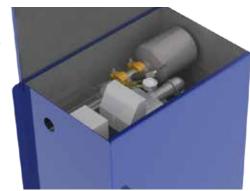


# SUBMERSIBLE POWER UNITS

## **DESCRIPTION OF A SUBMERSIBLE POWER UNIT**

EECO Submersible Power Units are designed with the directly connected pump and motor submerged in the oil reservoir. The control valve and muffler are mounted in the tank above the maximum oil level, providing access for valve adjustment.

The control valve and muffler can be located above the tank when greater oil capacity is required. Submersible pumps and motors are less costly than comparable air cooled components and are designed to allow for quick and easy installation. The insertion of the pump and motor in the oil helps to dampen noise generated during operation.



Because the pump and motor are directly connected, and the flow of the pump is a result of the speed of the motor, Gallons per minute output flow is a consequence of available pump sizes.

## **Performance Characteristics**

#### Construction

All units are designed and constructed in accordance with applicable requirements of ASME A17.1 / CSA B44. A grooved outlet is standard. A male threaded outlet is available.

#### Electrical

Available voltages are 208 Vac, 230/460 Vac or 575 Vac, 3-Phase, 60 Hz. Provision can be made for operation on 50Hz. Units can also be provided with voltages of 208 Vac or 230 Vac Single Phase, 60 Hz although motor horsepower is limited to 10 hp (7.5 kW).

#### Horsepower

2 ½ hp (1.9 kW) up to 50 hp (37.3 kW) for single submersible pump / motor combinations.

#### Flow Rate

Submersible - 3 gpm (15 lpm) up to 255 gpm (852 lpm).

### **Heat Output**

BTU/Hr = Hp x (1 - Motor Efficiency\*) / (Motor Efficiency\*) x 2545 \*Motor Efficiency: 1 Phase Submersible = 0.650, 3 Phase Submersible = 0.790

## **Working Pressure**

Varies depending on car speed and gross load.

#### Oil Recommendations

Recommended Operating Fluid: Use a good brand of ISO VG 32 turbine oil with a viscosity of 150 ssu @ 100° F (38° C). A minus pour point is recommended.

All EECO Products are "Green Compatible" as a standard when used with a biodegradable (vegetable) oil that **does not** contain a high acidic property is acceptable if it meets the same specifications.



## **Submersible Power Units**

## **GENERAL NOTES**

- Tank Size required is based on space required for pump & motor assembly and amount of oil required for operation.
- · All dimensions may vary slightly due to assembly tolerances.
- All units are designed to be mounted on 3/4" (2 cm) thick isolation pads. Overall height when set is, therefore, 3/4" higher.
- Actual "Usable Oil" has an allowance for 10 Gal. (38 Liters) of reserve oil.
- "Usable Oil" and "Oil Required to Fill Tank" are based on standard tank heights. If greater oil volume is required, the tank height can be increased accordingly.
- Power Units are furnished with EECO control valves as a standard. Other manufacturers' control valves can be substituted, if required.

Model	Dimensions in Inches (in)													
	Dimensions in Centimeters (cm)													
	Α	В	С	D	With UV-5AT					With UV-7B				
					E	F	G	Н	J	E	F	G	Н	J
SPU-36	36.25	24.00	44.00	40.25	38.00	34.88	10.50	8.50	56.00	35.25	35.25	9.63	9.63	58.00
	(92.1)	(61.0)	(111.8)	(102.2)	(96.5)	(88.6)	(26.7)	(21.6)	(142.2)	(89.5)	(89.5)	(24.4)	(24.4)	(147.3)
SPU-48	48.25	24.00	44.00	52.50	38.00	34.88	10.50	8.50	56.00	35.25	35.25	9.63	9.63	58.00
	(122.6)	(61.0)	(111.8)	(133.4)	(96.5)	(88.6)	(26.7)	(21.6)	(142.2)	(89.5)	(89.5)	(24.4)	(24.4)	(147.3)
SPU-60	60.25	24.00	44.00	64.50	38.00	34.88	10.50	8.50	56.00	35.25	35.25	9.63	9.63	58.00
	(153.0)	(61.0)	(111.8)	(163.8)	(96.5)	(88.6)	(26.7)	(21.6)	(142.2)	(89.5)	(89.5)	(24.4)	(24.4)	(147.3)
SPU-72	72.25	24.00	44.00	76.50	38.00	34.88	10.50	8.50	56.00	35.25	35.25	9.63	9.63	58.00
	(183.5)	(61.0)	(111.8)	(194.3)	(96.5)	(88.6)	(26.7)	(21.6)	(142.2)	(89.5)	(89.5)	(24.4)	(24.4)	(147.3)
SPU-84	84.25	24.00	44.00	88.50	38.00	34.88	10.50	8.50	56.00	35.25	35.25	9.63	9.63	58.00
	(214.0)	(61.0)	(111.8)	(224.8)	(96.5)	(88.6)	(26.7)	(21.6)	(142.2)	(89.5)	(89.5)	(24.4)	(24.4)	(147.3)
SPU-96	96.25	24.00	44.00	100.25	38.00	34.88	10.50	8.50	56.00	35.25	35.25	9.63	9.63	58.00
	(244.5)	(61.0)	(111.8)	(254.6)	(96.5)	(88.6)	(26.7)	(21.6)	(142.2)	(89.5)	(89.5)	(24.4)	(24.4)	(147.3)

NOTE: All dimensions may vary slightly due to assembly tolerances.

