

Domestic Heating Circulators

Selectric/Super Selectric

UPS15-50 Selectric and UPS15-60-Super selectric circulators are designed to cater for the majority of domestic wet central systems up to 120,000 btu's/hr. The UPS15-50 Selectric covers virtually all standard systems, whilst the higher head UPS15-60 can accommodate larger domestic systems and higher resistance circuits (leg microbore). The pumps incorporate an energy saving three speed motor for pump to system matching and consequent reduction of hydraulic noise. The very highest quality pump components provide long life and maximum resistance to corrosion. Standard port to port dimensions make these pumps interchangeable when replacing the vast majority of old pumps.

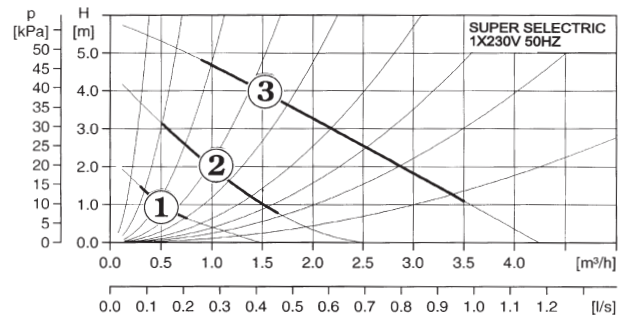
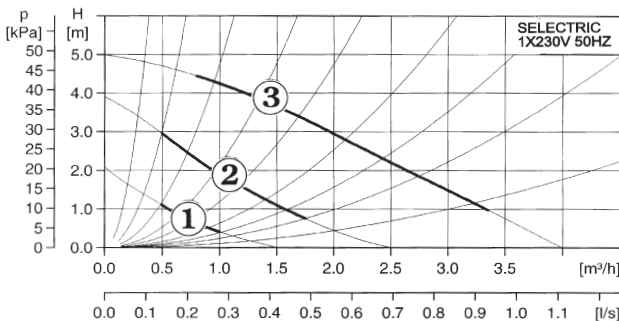
Features:

- Cater for all domestic systems up to 120,000 btu's/hr
- Compact size and standard port to port dimensions for easy fitting and for interchange with old pumps
- Three speed motor for energy efficiency and precise system matching
- Choice of standard 'Selectric' or higher head 'Super Selectric' for higher resistance and larger domestic systems



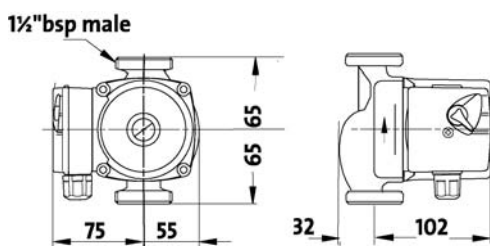
Performance 50Hz

Electrical Data



Dimensions mm

Electrical Data 1 x 230V single phase 50Hz



Speed Setting	Speed R.P.M.	Input Power	Full load Current (A)	Locked Rotor Current (A)
III	1900	95	0.42	0.47
II	1200	65	0.28	0.31
I	800	40	0.17	0.18

Capacitor rating 2µF

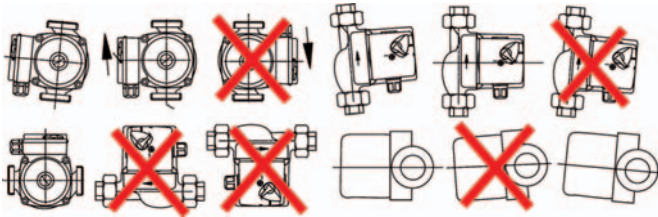
Speed Setting	Speed R.P.M.	Input Power	Full load Current (A)	Locked Rotor Current (A)
III	1750	95	0.44	0.47
II	1100	65	0.30	0.31
I	750	40	0.17	0.18

Capacitor rating 2µF

INSTALLATION

It is preferable to install Grundfos circulators in a vertical pipe pumping upwards. This position ensures that the pump shaft is horizontal, which reduces the thrust bearing load and ensures positive air purging from both the rotor chamber and impeller housing.

Pumping downwards in a vertical pipe is not recommended as this may lead to air locking of the pump, with resultant loss of performance. However, pumping downwards is acceptable provided an effective air vent is incorporated in the system, before the pump.



Where pumps can only be installed in horizontal pipework, it is imperative that the pump shaft is horizontal, or slightly higher at the vent plug end.

The shaft must not fall below the horizontal plane, even by a few degrees, as this causes premature wear of the top bearing and shaft.

Pumps should not be installed with the shaft in a vertical plane, as this may lead to dry running of the top bearing, noise and possible pump failure.

To avoid cavitation noise and risk of damage to the bearings the minimum inlet pressure should be 0.5m at 75°C and 1.5m at 82°C (water temperature).

MAXIMUM PERMISSABLE OPERATING TEMPERATURES

System Water Temp °C	110	105	100	90	80
Ambient Temperature °C	50	55	60	70	80

MAXIMUM OPERATING CONDITIONS

Water Temperature Range: +15°C to 110°C.

To avoid condensation in the motor windings the pumped liquid temperature must always be higher than the ambient temperature.

Pressures up to 10 Bar (145 psig).

Maximum ambient temperature 80°C.

MATERIAL SPECIFICATION

Shaft Bush	Stainless Steel BS 1449 304 S15.
Rotor Can	Stainless Steel BS 1449 304 S15.
Rotor Cladding	Stainless Steel BS 1449 304 S15
Bearing Plate	Stainless Steel BS 1449 304 S15.
Thrust Bearing	
Cover	Stainless Steel BS 1449 304 S15.
Pump Housing	Cast Iron
Upper Bearing	Ceramics
Lower Bearing	Ceramics
Shaft Ends	Ceramics
Thrust Bearing	Carbon
Stator Housing	Aluminium
Terminal Box	Plastics
seal	Plastics
O Rings	EPDM Rubber Gasket EPDM Rubber

APPLICATIONS

The pumps may be used in heating systems containing glycol based anti-freeze with corrosion inhibitors up to a maximum of 50% solution. However, if the liquid temperature remains lower than the ambient temperature during operation, condensation may form in the stator housing and, may short circuit the motor windings.

FLOW ADJUSTMENT

UPS15-50 -Selectric and UPS15-60 Super Selectric have a three speed selector switch on the terminal box. Please refer to performance curve to select duty required.