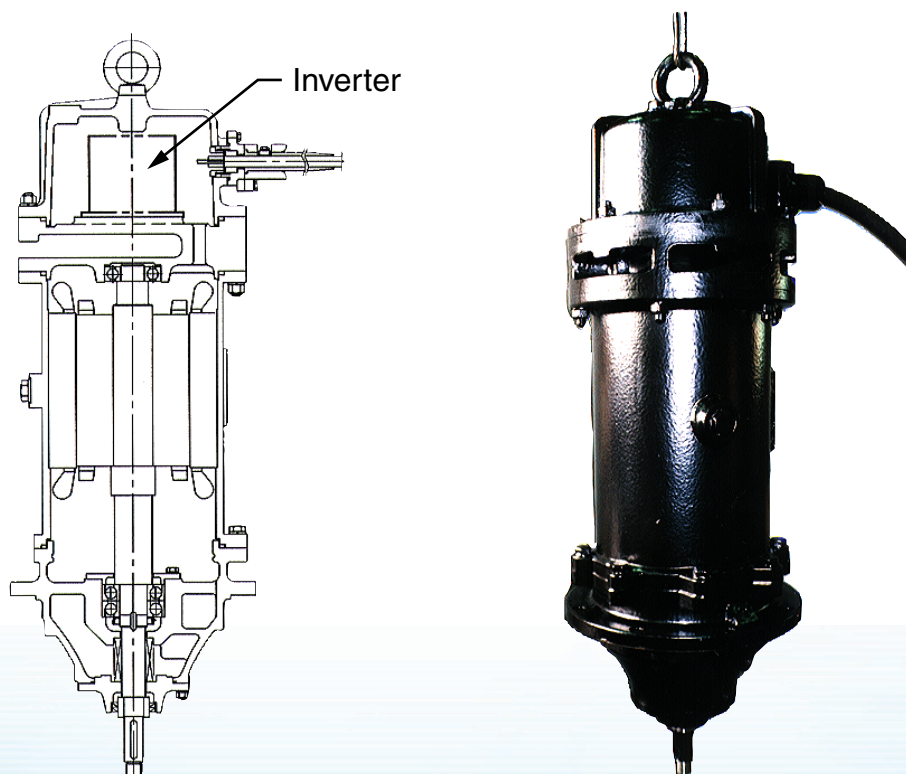


## The E.I.M. developed "Inverter-incorporated Submersible Motors" made it possible to obtain the ultimate speed drivers for submersible equipment.

Submersible motors are used as drivers for submersible pumps, mixers and other submersible equipment. Required running speeds differ largely depending on their applications and, therefore, to cope with such requirements, changing the number of poles of the motors and using reduction or step up gears have been employed.

E.I.M. has developed submersible motors incorporating inverters, which provide the required speeds even higher than the rated speeds without gear arrangements or changing of the number of poles of the motor.

By simply connecting the commercial power supply to the inverter-incorporated submersible motors, the user can get an optimum variable speed drive for his submersible equipment.



### Features

- 1) The incorporated inverter provides the optimum variable speed drive.
- 2) The variable speed drive provides optimum speed for the application regardless of the frequency (50 / 60 Hz) of the power supply, without changing the machine specifications (e.g. impeller design).
- 3) Operation with the higher-speed above 3,600 min<sup>-1</sup> can be attained.
- 4) The soft start/stop function of the incorporated inverter ensures smooth and safe operation.
- 5) Three-phase motors can be operated even with single-phase power supply.

# "E.I.M. Three-phase Submersible Pumps with Inverter-incorporated Motors" make their operation successful even using house hold single-phase power supply

Thanks to this new in-house development of the "Inverter-incorporated Motor", E.I.M. makes it possible for his three-phase submersible motors to be operated using the common house hold single-phase power supply.

These unique submersible pumps have been developed and produced according to the specification of "single-phase, 0.75 kW x 4-pole submersible pump" required by engineering consultants.

They have been supplied for a drainage application in the work shops of the Hung Hom Railway Station in Hong Kong.

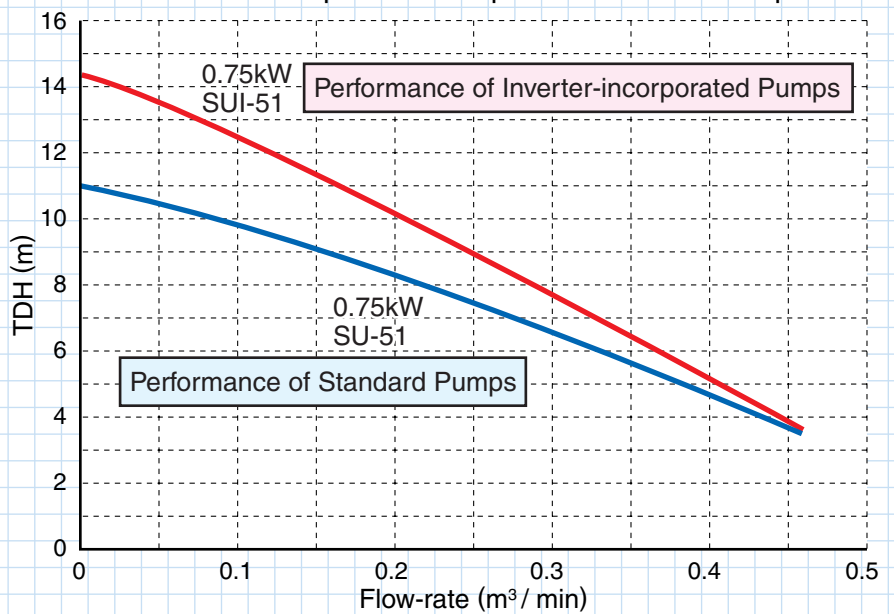
## Features

The function of the incorporated inverter improves the delivery head by 10 to 20 % compared to standard pumps.



- Model : SUI-51TB1
- Discharge : 50 mm
- TDH : 8 m
- Flow-rate : 0.21 m<sup>3</sup> / min
- Output : 0.75 kW 4P

Performance Curves for both of Inverter-incorporated Pumps and Standard Pumps



Hung Hom Station under Reconstruction