## SUBMERSIBLE MOTOR ENGINEERING



9 Rye Lane Street Maddington WA 6109 Western Australia TEL: 61 8 9452 2922 FAX: 61 8 9452 2722

EMAIL: jayson@smeng.com.au ABN: 27 098 297 539

## <u>De-Rating SME Submersible Motors for High Ambient Water</u> <u>Temperature.</u>

26/7/15

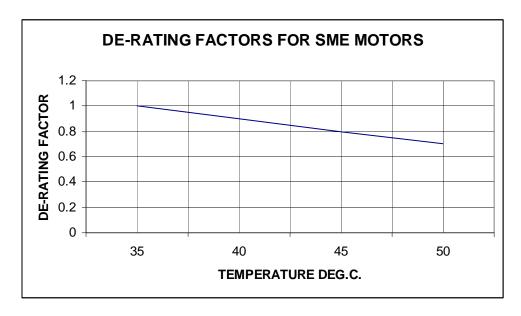
SME motors can be supplied with the following types of wire:

	PE2+PP+PA	XLPE+PE	PP
Temperature Rating	80 Deg.C.	90 Deg.C.	90 Deg.C.

Standard SME motors are wound with PE2+PP+PA wire and are suitable for operation in 35 Deg.C. Ambient water temperature provided the flow of cooling water exceeds 0.15m/sec.

(SME do not offer motors wound with PVC wire which has a temperature rating of 70 Deg.C.).

If SME motors are to be used with ambient water temperatures that are higher than 35 Deg.C. the following De-Rating chart should be applied to correctly size the motor.



This chart assumes that the flow of cooling water exceeds 0.15m/Sec.

This chart applies to SME motors with the following ratings: 6" 5.5 kW to 30 kW 8" 30 kW to 93 kW 10" 93kW to 150kW

SME can offer and recommend the use of oil filled motors, or heat exchanger motors, for ambient temperatures that exceed 45 Deg.C.

ALL SME motors are fitted with 1 or more PT100 temperature detector as standard. It is strongly recommended that these are connected to a suitable monitoring instrument so that the actual operating temperature of the stator winding can be measured and monitored and appropriate automatic protection set up.