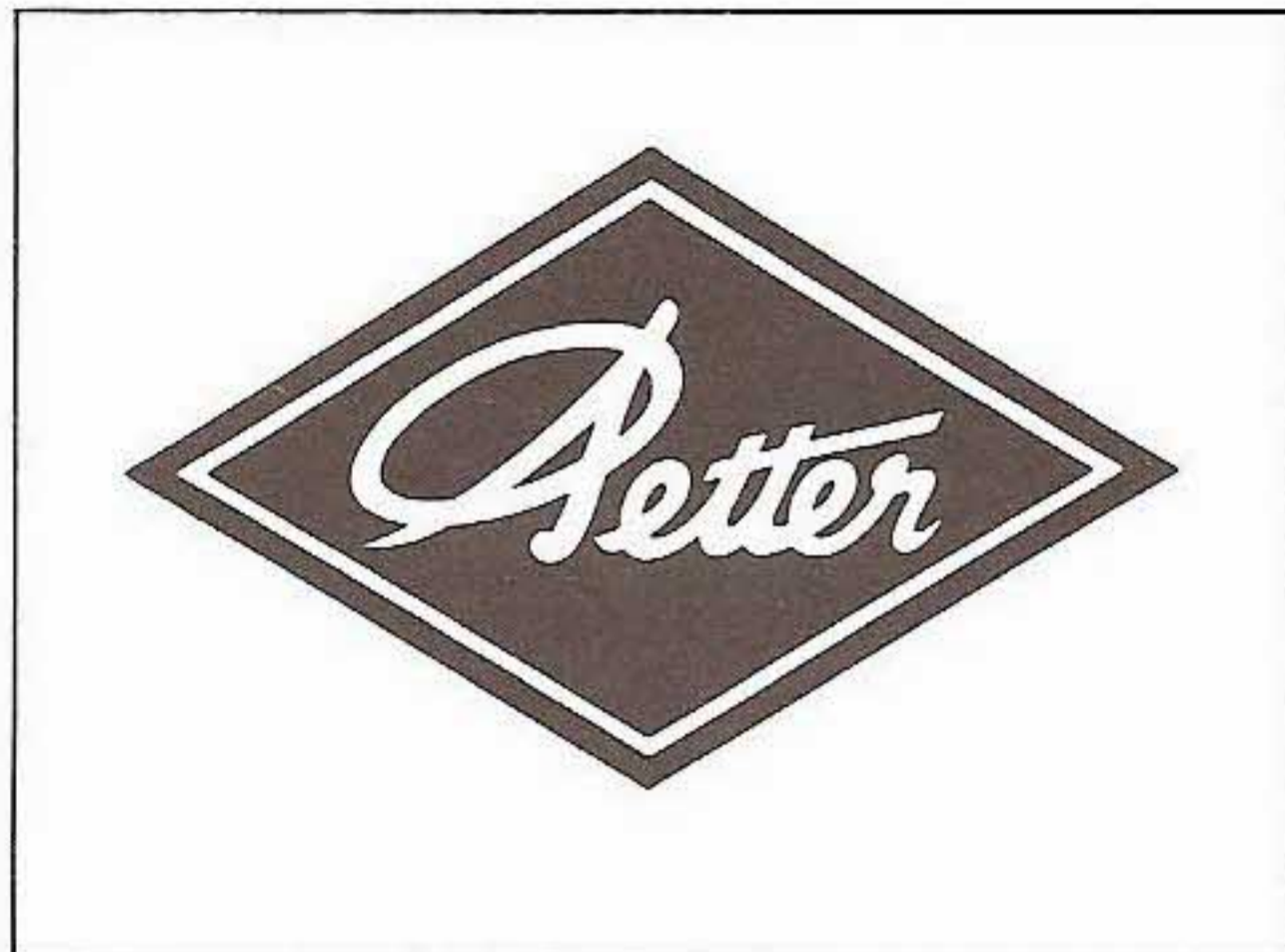
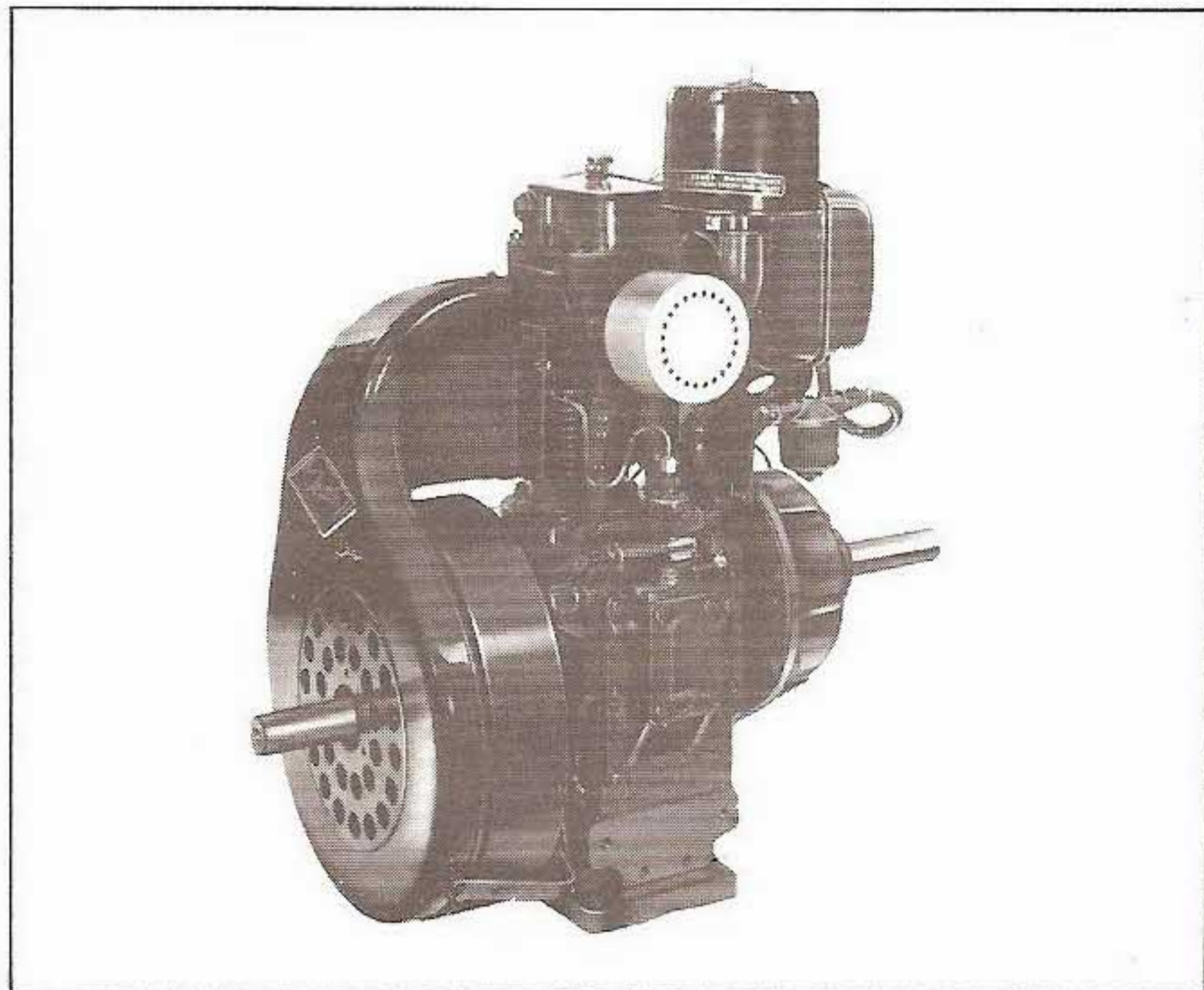
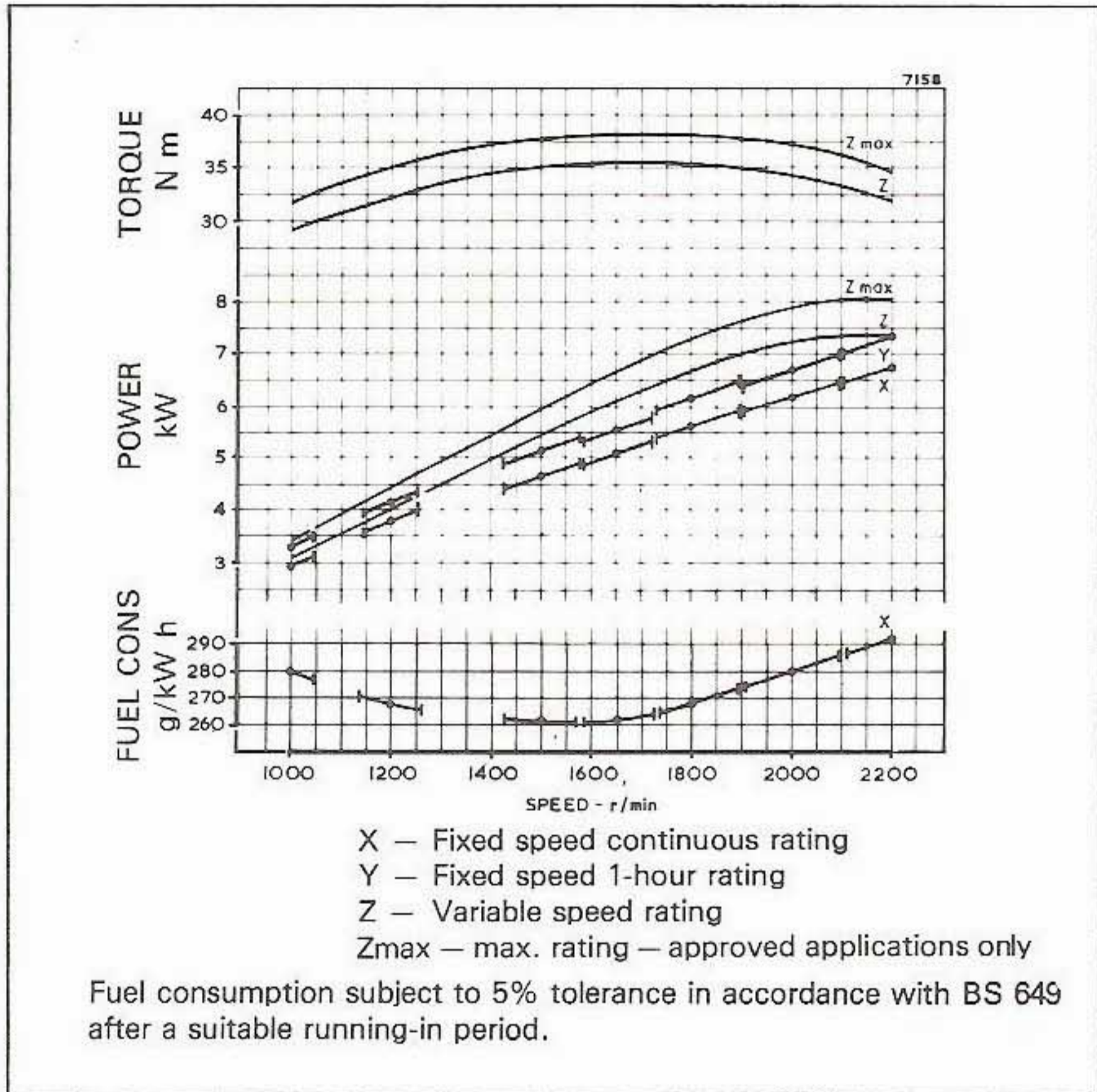


7.4 kW air cooled diesel engine

PH1



PETTER DIESELS



The PH1 single cylinder compression ignition engine with overhead valves and combustion by direct injection has been designed to combine easy starting and minimum maintenance with long life. Ruggedly constructed in cast iron with a forged steel crankshaft and connecting rod, aluminium pistons and replaceable shell bearings, this engine is supplied complete with starting handle, instruction book and spares pack.

Fixed Speed Engine Ratings		
Crankshaft speed r/min	Power kW	
	Continuous	1-h
1000	3.0	3.3
1200	3.75	4.1
1500	4.7	5.15
1650	5.05	5.55
1800	5.6	6.15
2000	6.15	6.75
2200	6.7	7.4

SPECIFICATION OF STANDARD ENGINE

CYCLE	Four stroke.
COOLING	Air cooled cylinder and cylinder head by a centrifugal fan integral with the flywheel.
ROTATION	Clockwise looking on the flywheel end.
DRIVE	Engine speed at flywheel end.
STARTING	Half speed hand start at gear end with removable handle.
MOUNTING	Baseplate mounting with four holes suitable for 13 mm diameter bolts.
INLET	Engine mounted air cleaner with replaceable filter element.
EXHAUST	Engine mounted exhaust silencer.
LUBRICATION	Oil pump pressure fed system with strainer.
FUEL SYSTEM	Engine mounted fuel tank and fuel filter with replaceable element.

GOVERNING

For general purposes, in accordance with BS 649 Class B, based on 2200 r/min design speed. For fixed speed 1500 and 1800 r/min engines, full load governing is to Class A2.

TECHNICAL DATA

Bore (nominal)	87.3 mm
Stroke	110 mm
Cubic capacity	659 cm ³
Compression ratio	16.5:1
Fuel tank capacity	6.8 litres
Fuel	Diesel to BS 2869 Class A1 or A2
Lubricating oil capacity	2.84 litres
Lubricating oil	To DEF 2101D or MIL-L-2104 B
below 5°C	SAE 10W/30 or 10W
5°C to 30°C	SAE 20/20W
above 30°C	SAE 30
Dry engine weight	185 kg

OUTPUT

The continuous powers tabulated conform to BS 649 and DIN 6270. The 1 hour rating is 10% higher than the continuous rating and is available for 1 hour in 12 to BS 649 and 1 hour in 6 to DIN 6270 B. Engines are all tested at their continuous rating. The setting of the fuel limiting stop is such that power in excess of this continuous rating, dependent upon application, can be obtained after a suitable running-in period.

DERATING

Depending on site conditions, derate in accordance with BS 649 as follows:

Altitude:	3 1/2 % per 300 m above 150 m
Temperature:	2% per 5 1/2 °C above 30°C