

# **High Efficiency Motor**

New IE2 efficiency standard

**Frames 80 to 355** 



## **TP2 Series High Efficiency Motor**

### New IE2 efficiency standard



#### **Brook Crompton**

Brook Crompton is a leading manufacturer of electric motors for the global industrial market.

Brook Crompton motors are used in almost every industrial activity including water treatment, building services, chemical/petrochemicals, general processing and manufacturing. They drive fans, pumps, compressors and conveyors.

Brook Crompton incorporates many well known names including Brook Motors, Crompton Parkinson, Electrodrives, Newman, Bull Electric and Hawker Siddeley Electric Motors.

There are extensive stocks of motors around the world, backed-up by a network of distributors, ensuring excellent local support wherever needed.

#### Quality assurance

Stringent quality procedures are observed from first design to finished product in accordance with the ISO9001 documented quality systems.

All factories have been assessed to meet these requirements.

#### Series TP2

The Brook Crompton Series TP2 range is a high quality standard range of electric motors with a specification suitable for most industrial applications.

It covers outputs from 0.75-375 kW in frame sizes 80-355.

#### Benefits include:

- Full output range to meet your requirements
- Efficiencies are within the IE2 bands (where applicable).
- Robust construction for long life
- Mountings: foot, flange, face or combination
- Multi-mount aluminium range
- Dual frequency (50 / 60Hz)
- IP55
- Metal fan cover
- Metric entries
- Inverter duty

#### **MEPS**

#### The new standard

The EU MEPS scheme sets new mandatory minimum efficiency levels for most single speed 3ph induction motors up to 375kW rated up to 1000V, unlike the narrow definition of the CEMEP voluntary scheme which only covered a small number of standard motors.

The Voluntary Agreement, since 1998, of CEMEP for motor manufactures is running out (classes EFF3 /EFF2/EFF1).

The new standard for motors will be a mandatory regulation in Europe.

The scope of EU MEPS covers 2, 4 & 6 pole single speed 3ph induction motors from 0.75 to 375kW, rated up to 1000V based on continuous duty operation.

Aiming to reduce energy consumption throughout Europe and the rest of the world, it comes into effect in 3 stages. The effect of this is to maximise potential savings in electric motor driven systems.

Base of the regulation is a new international IEC 60034-30 standard. It defines the following efficiency class:

IE2 - High Efficiency (comparable to EFF1 and USA EPACT 60 Hz)

#### New Efficiency levels in Europe (Time Line)

Current situation:

Voluntary Agreement 2 and 4 pole,

1.1 to 90 kW Efficiencies: EFF3, EFF2, EFF1 (voluntary)
Mandatory from:

From 16 June 2011:

Minimum efficiency requirement at IE2 for all motors covered 0.75 - 375kW

From 1 January 2015:

Minimum efficiency requirement at IE3 level for  $\geqslant$  7.5 - 375kW for stand alone motors, with a requirement at IE2 level for  $\geqslant$  7.5 - 375kW motors to be equipped with an appropriate variable speed drive.

From 1 January 2017:

Minimum efficiency requirement at IE3 level for  $\geqslant 0.75$  - 375kW for stand alone motors, with a requirement at IE2 level for  $\geqslant 0.75$  - 375kW motors to be equipped with an appropriate variable speed drive.