

**Synchronous PM Motor and Drive Packages - IES2**

**PM MOTOR AND COMBINED DRIVE - IES2**

- Plug & Play solution
- Total speed control
- IP20 or IP66 / NEMA 4X outdoor
- Three package configurations



**HP Combi**  
 Smart Flow Plus  
 solutions to meet your needs

**IES2** 

**TECHNICAL DATA**

**Motor Type**

HPC 160 1800\_Smart\_IP20 22 kW - 1800 rpm | Drive three-phase - 200-240V

**PERFORMANCE DATA**

|                                             |                         |
|---------------------------------------------|-------------------------|
| <b>Package Type</b>                         | HPC 160 1800_Smart_IP20 |
| <b>Rated Speed rpm</b>                      | 1800                    |
| <b>Rated Power kW</b>                       | 22                      |
| <b>Rated Power HP</b>                       | 30                      |
| <b>Rated Torque Nm</b>                      | 117.0                   |
| <b>Peak Torque Nm</b>                       | 292                     |
| <b>Voltage Constant Vs</b>                  | 1.45                    |
| <b>Torque Constant Nm/A</b>                 | 2.5                     |
| <b>B.E.M.F. @ rated speed Vrs</b>           | 272                     |
| <b>Rated Current Arms</b>                   | 46.5                    |
| <b>Motor Efficiency IE code</b>             | IE5                     |
| <b>Motor Efficiency <math>\eta</math> %</b> | 94.9                    |
| <b>Motor Weight Kg</b>                      | 85                      |

|                                 |       |
|---------------------------------|-------|
| <b>Drive Type</b>               | Smart |
| <b>Drive Size</b>               | 4     |
| <b>Drive Efficiency IE code</b> | IE2   |
| <b>HPC Efficiency IE code</b>   | IES2  |
| <b>HPC Efficiency ? %</b>       | 93.1  |

## Mechanical Data

|                             |                               |
|-----------------------------|-------------------------------|
| <b>Design</b>               | ALUMINIUM                     |
| <b>Degree of protection</b> | IP 55                         |
| <b>Bearings DE</b>          | 6310 2Z                       |
| <b>Bearings NDE</b>         | 6310 2Z                       |
| <b>Lubrication grease</b>   | low & high temperature grease |
| <b>Regreasing device</b>    | permanent lubrication         |
| <b>Cooling</b>              | IC 411                        |
| <b>Vibration Level</b>      | A (normal)                    |

## Electrical Data

|                              |                |
|------------------------------|----------------|
| <b>Motor Supply Voltage</b>  | 400V - 50Hz    |
| <b>Duty type</b>             | S1             |
| <b>Insulation class</b>      | F              |
| <b>Direction of rotation</b> | bidirectional  |
| <b>Ambient temperature</b>   | -15°C / +40 °C |
| <b>Altitude</b>              | 1000 m.a.s.l.  |

## Drive Data

|                        |                     |
|------------------------|---------------------|
| <b>Drive Type</b>      | Smart               |
| <b>Drive Size</b>      | 4                   |
| <b>Supply Voltage</b>  | three-phase         |
| <b>Drive Voltage</b>   | 200-240V            |
| <b>Safety Function</b> | -                   |
| <b>Drive Torque</b>    | constant/variable   |
| <b>Fieldbus</b>        | CANopen; Modbus RTU |

|                             |                                          |
|-----------------------------|------------------------------------------|
| <b>Inputs</b>               | 2 Digital; 2 Analog / Digital selectable |
| <b>Outputs</b>              | 1 Analog/Digital; 1 Relay                |
| <b>Degree of Protection</b> | IP 20                                    |