



## 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 11 kW - 1800 rpm | Drive three-phase - 380-480V

## PERFORMANCE DATA

| Package Type               | HPC 160 1800_Smart_IP20 |
|----------------------------|-------------------------|
| Rated Speed rpm            | 1800                    |
| Rated Power kW             | 11                      |
| Rated Power HP             | 15                      |
| Rated Torque Nm            | 58.0                    |
| Peak Torque Nm             | 146                     |
| Voltage Constant Vs        | 1.45                    |
| Torque Constant Nm/A       | 2.5                     |
| B.E.M.F. @ rated speed Vrs | 272                     |
| Rated Current Arms         | 23.2                    |
| Motor Efficiency IE code   | IE5                     |
| Motor Efficiency $\eta$ %  | 93.8                    |
| Motor Weight Kg            | 70                      |

|                          |       |
|--------------------------|-------|
| Drive Type               | Smart |
| Drive Size               | 3     |
| Drive Efficiency IE code | IE2   |
| HPC Efficiency IE code   | IES2  |
| HPC Efficiency ? %       | 92.0  |

## Mechanical Data

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

## Electrical Data

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

## Drive Data

|                 |                     |
|-----------------|---------------------|
| Drive Type      | Smart               |
| Drive Size      | 3                   |
| Supply Voltage  | three-phase         |
| Drive Voltage   | 380-480V            |
| Safety Function | -                   |
| Drive Torque    | constant/variable   |
| Fieldbus        | 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                                    |