

**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\_Flow\_IP20 22 kW - 1800 rpm | Drive three-phase - 380-480V

**PERFORMANCE DATA**

<b>Package Type</b>	HPC 160 1800_Flow_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>	Flow
<b>Drive Size</b>	4
<b>Drive Efficiency IE code</b>	IE2
<b>HPC Efficiency IE code</b>	IES2
<b>HPC Efficiency ? %</b>	93.0

## 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>	Flow
<b>Drive Size</b>	4
<b>Supply Voltage</b>	three-phase
<b>Drive Voltage</b>	380-480V
<b>Safety Function</b>	STO/PLC
<b>Drive Torque</b>	variable
<b>Fieldbus</b>	BACnet MS/TP; Modbus RTU

<b>Inputs</b>	3 Digital (+3 optional); 2 Analog / Digital selectable
<b>Outputs</b>	2 Analog / Digital; 2 Relays (+3 optional)
<b>Degree of Protection</b>	IP 20