



## Synchronous PM Motor and Drive Packages - IES2

### PM MOTOR WITH INTEGRATED DRIVE - IES2

- Maximum integration for increasingly performance
- IE5 motor + IE2 VFD
- Combination of AC motor's reliability and Brushless Servomotor's performance

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

**IES2** 

## TECHNICAL DATA

### Motor Type

HPI 90 4500 159\_Flow 7.5 kW - 4500 rpm | Drive three-phase - 500-600V

## PERFORMANCE DATA

| Package Type                    | HPI 90 4500 159_Flow |
|---------------------------------|----------------------|
| Rated Speed rpm                 | 4500                 |
| Rated Power kW                  | 7.5                  |
| Rated Power HP                  | 10                   |
| Rated Torque Nm                 | 15.9                 |
| Peak Torque Nm                  | 17.5                 |
| Rated Current Arms              | 15.9                 |
| Peak Current Arms               | 23.9                 |
| Rated input current 380Vac Arms | 15.9                 |
| Rated input current 480Vac Arms | 12.6                 |
| Torque Constant Nm/A            | 1.0                  |
| HPI Weight kg                   | 20.5                 |
| Motor Efficiency IE code        | IE5                  |

|                                 |      |
|---------------------------------|------|
| <b>Drive Type</b>               | Flow |
| <b>Drive Efficiency IE code</b> | IE2  |
| <b>HPI Efficiency IE code</b>   | IES2 |
| <b>HPI Efficiency ? %</b>       | 90.9 |

## Mechanical Data

|                             |                               |
|-----------------------------|-------------------------------|
| <b>Design</b>               | ALUMINIUM                     |
| <b>Degree of protection</b> | IP 55                         |
| <b>Bearings DE</b>          | 6206 2Z                       |
| <b>Bearings NDE</b>         | 6304 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>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>              | 1001 m.a.s.l.  |

## Drive Data

|                        |                                                        |
|------------------------|--------------------------------------------------------|
| <b>Drive Type</b>      | Flow                                                   |
| <b>Supply Voltage</b>  | three-phase                                            |
| <b>Drive Voltage</b>   | 500-600V                                               |
| <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)             |

