

WAT PM SERIES

Designed with cutting-edge technology, our PM motors maximize energy efficiency and performance, providing superior torque density and minimized power losses. Meeting IE4 and IE5 efficiency standards, this series is designed to cover the challenging demands of modern applications, delivering reliable, high-performance solutions that drive productivity and sustainability.

80 Fr.



100 Fr.



132 Fr.



0,55 Kw

30 Kw

Target Applications:

- Pumps
- Fans
- Blowers
- Air compressors
- Vacuum pumps
- Conveyors
- Material handling

Benefits:

- High torque and power density
- High efficiency in the partial load range
- Reduced weight and volume
- Wide operating range
- Compact design
- Lower operating costs
- Highest operational efficiency
- Reduced total cost of ownership [TCO] and fast return on investment [ROI]
- Low noise and vibration

Rated Output Power	IEC Frame Size 2p 3000rpm	WAT PM Series Frame Size 3600 rpm	IE5 Efficiency Acc To IEC 60034-30-2 [%]
0.55	71	80	84.60
0.75	80		86.30
1.1	80		87.80
1.5	90		88.90
2.2	90		90.20
3	100	80-100	91.10
4	112		91.80
5.5	132	100-132	92.60
7.5	132		93.30
11	160		94.00
15	160	132	94.50
18.5	160		94.90
22	180		95.10
30	200		95.50

Rated Output Power	IEC Frame Size 4p 1500rpm	WAT PM Series Frame Size 1800 rpm	IE5 Efficiency Acc To IEC 60034-30-2 [%]
0.55	71	80	86.70
0.75	80		88.20
1.1	80		89.50
1.5	90		90.40
2.2	90		91.40
3	100	80-100	92.10
4	112		92.80
5.5	132	100-132	93.40
7.5	132		94.00
11	160		94.60
15	160	132	95.10
18.5	160		95.30
22	180		95.50

Power Rating:	0.55kW to 30kW
System Voltage	380-480V
Torque:	18 Nm to 117 Nm
Speed:	Up to 4800 rpm
Efficiency	IE4-IE5
Frame Size	80-100-132
Topology	SMSM [Surface Mounted Permanent Magnet Motors] IPMSM [Interior Permanent Magnet Motors]*
Types of construction	IM B3, IM B35, IM B5, IM B14, IM B34 and derived Types to IEC/EN 60034-7
Available Certificates	CEUKCA
Direction of Rotation	CW/CCW
Thermal Class	F
Cooling Type	IC 411
IP Class	IP55
Operating Temperature	Standard -20 °C to +40 °C
Housing material	Aluminium
Efficiency classification]/ efficiency determination	IEC 60034-30-2 TS:2016 / IEC 60034-2-3 : 2020
Duty Types	S1, continuous duty. Short-time duty S2, 10/30/60 min . Duty Type S3/S6, 25/40/60 % c.d.f., S9
Option List	Thermal Protection PTC/PTO/PT100/PT1000 [PTC is a standard] Pad Mounting External Fan Cooling IC416 Brake Cannopy Special Shaft and Endshields Special Bearings[NU, Z.RS, RZ, Hybrit or other types. Re-Greaseable Bearings Special Painting IP56,IP65,IP66 Encoder, Resolver etc. Condensation Drain Hole

