



W22 Industrial Motor

Reduce energy loss and save money



Based on **state-of-the-art technologies** which **reduce carbon foot print** from manufacturing, to installation and on-going use, the W22 range of E3 High Efficiency motors will **reduce your operating, inventory and maintenance costs**, whilst helping you achieve **carbon emission** targets. With the **quietest noise levels** on the market, you will not find a **simpler** and more **economical** way to meet noise level regulations. High torques will keep your **equipment running**, even under severe load conditions. When used with a VSD, our innovative WISE® insulation will deliver years of **reliable operation**. Combined with WEG's CFW11 VSD, the patented Optimal Flux® will provide **savings** never before experienced.

Standard Features

1. Maximum heat dissipation through extended frame area.
2. Solid integrated feet for increased mechanical rigidity and easier installation.
3. Flat surfaces for vibration monitoring (D.E. - 2 in the end shield and one in the frame and N.D.E. - 2 in the frame).
4. Flexibility of terminal box mounting positions enabling reduced inventory and quicker modification (frames 225 to 355).
5. Reduced noise pressure levels.
6. Reduced operating temperatures through optimised cooling system.
7. Reliability of fan cover for extra mechanical protection.
8. Oversized terminal box for easier and safer connection of mains and accessories.
9. New connector for fast accessory assembly.
10. Connection reliability - terminal block design prevents cable rotation for extra protection.
11. Insulation class "H", temperature rise class "B".
12. Drive end shield design promotes excellent heat dissipation via optimised fin positioning and greater bearing hub exposure.
13. Extended lubrication intervals reducing maintenance costs.
14. Efficient lubrication system to improve the grease passages to and from the motor bearings.
15. New WSeal® shaft sealing offering higher protection against contaminants through a W-ring (double lipped V-ring) plus a metallic cap (frames 225 to 355).
16. Earth terminals on both sides of the frame providing flexibility during installation.
17. New drain plug in IP66 with change of drain position.
18. New frame range with extended outputs.
19. WISE® insulation system providing better materials for VSD capabilities (**WEG Insulation System Evolution**).
20. Flat efficiency curve; from 75% up to 100% of load the efficiency is kept constant for maximum energy saving.
21. Two efficiency levels - **High Efficiency E3** as per AS 1359.5-2004 and **Super High Efficiency E3+** (exceeds HEFF levels, not yet classed by AS 1359.5)
22. Both efficiency ranges in the same frame sizes for complete interchangeability.

W22 Industrial - Standard Features

Frame	63-100	112-132	160-200	225-280	315S/M	315L	355M/L	355A/B	
MECHANICAL FEATURES									
Mounting	B3R								
Frame & end shield material	Cast iron FC-200								
Degree of protection	IP66								
Grounding	Single grounding (one inside the terminal box)				Triple (one inside the terminal box and two on the frame)				
Cooling method	Totally enclosed fan cooled - IC 411								
Fan material	2p	Polypropylene						Aluminium	
	4p	Polypropylene				Aluminium			
	6 to 8p	Polypropylene				Aluminium			
Fan cover material	Steel			Cast iron FC-200					
Shaft material	AISI 1040 / 1045						AISI 4140		
Shaft seal	Oil seal				WSeal®				
D.E. bearing	Ball bearing								
Drain hole	Fitted with rubber drain plug								
Lubrication	Type of grease		Polyrex® EM 103 (Exxon Mobil)						
	Without grease fitting			With grease fitting					
Terminal block	With terminal block								
Terminal box	Type		Diagonal cut design						
	Material		Cast iron FC-200						
Vibration	Grade A								
Balance	With half key								
Painting	Type		Primer: one coat of 20 to 55 µm of alkyd primer. Finishing: one coat of 50 to 75 µm of alkyd synthetic enamel						
	Colour		RAL 6002 (Green)						
ELECTRICAL FEATURES									
Efficiency	High efficiency E3								
Design	N								
Voltage	220-240 / 380-415 / 440-460V		380-415 / 660 / 440-460V						
Frequency	50 / 60Hz								
Winding	Material		Copper						
	Insulation class		WISE® (WEG Insulation System Evolution), thermal class H (DT 80K)						
Service factor	1.15								
Rotor	Aluminium die cast								
Thermal protector	Without thermal protector			Thermistor PTC, 1 per phase tripping at 155°C		Thermistor PTC, 2 per phase, for alarm at 155°C and tripping at 180°C			

Optional Features

- Angular contact bearings
- Shaft earthing brush
- Double shaft end
- Cable glands
- NEMA frames and flanges
- Special paint
- Other colours
- Super high efficiency E3+
- Special electrical and mechanical characteristics upon request
- Insulated bearing housing (frames 225 to 355)
- Forced cooling kit
- Anti-condensation heaters
- Oversized and undersized flanges
- Bearing thermistors or RTD's
- 1000V motors

