

WEG Variable Speed Drives

Range overview: CFW500, CFW700, CFW11, CFW501 HVAC, CFW701 HVAC, MW500, AFW11, AFW11M / AFW11W and MVW01

WEG groups these drives by where and how they are installed. The low-voltage range covers compact machinery drives up to large system and cabinet-built drives. The MVW01 sits at the top of the range for medium-voltage motors. The table below is a quick comparison; detailed notes for each model follow.

Model	Type / role	Power range	Supply voltage
CFW500	Compact machinery drive	0.25-175 cv (0.18-132 kW)	1/3-ph 200-240 V; 3-ph 380-480 V (500-600 V variants listed)
CFW700	General-purpose drive	1.1-132 kW (1.5-150 HP)	200-240 V and 380-480 V classes
CFW11	System drive for industrial applications	From 1.5 kW up to 1000 HP (incl. modular CFW11M)	200-240 V, 380-480 V, 500-690 V
CFW501 HVAC	Compact HVAC-R drive	Small to mid ratings (frames A-D)	3-ph 200-240 V and 380-480 V
CFW701 HVAC	Full-range HVAC-R drive	1.1-132 kW (1.5-175 HP)	3-ph 380-480 V (typical)
MW500	Decentralised motor-mounted / wall-mounted drive, IP66	1.1-7.5 kW (1.5-10 HP)	1-ph 200-240 V or 3-ph 380-480 V
AFW11	Cabinet-built drive based on CFW11	2 cv / 1.1 kW up to 900 cv / 660 kW	3-ph 220-240, 380-480, 500-600, 660-690 V
AFW11M / AFW11W	Cabinet-built modular drive (air / water-cooled)	High-current, multi-module (up to 5 power units)	3-ph 380-690 V
MVW01	Medium-voltage drive	500 to 55,520 HP (400 kW to ~41 MW)	Motor voltage 2.3-6.9 kV

Ranges vary slightly between WEG catalogues, product pages and distributor sheets, and between product generations. Confirm the exact rating for a specific order code on the current WEG datasheet.

Model details

CFW500

Machinery drive - compact, plug-in modules

Power / current	0.25 to 175 cv (0.18 to 132 kW); output current 1.0 to 211 A. Second generation (G2) is listed as 1/3 to 175 HP.
Supply	Single- or three-phase 200-240 V; three-phase 380-480 V; 500-600 V models also appear in the datasheet.
Enclosure	IP20 / NEMA 1 and IP66 (NEMA 4X) versions.
Control	Scalar V/f, VVW vector, sensorless vector, vector with encoder, and permanent-magnet motor control (VVW PM).
Speed regulation	V/f: 1% of rated speed, range 1:20. VVW: 1%, range 1:30. Sensorless vector: 0.5%, range 1:100.

- Plug-and-play selectable plug-in modules; built-in HMI and RS485 port.
- Aimed at OEMs, panel builders and system integrators; Pump Genius feature available for pumping duty.

CFW700

General-purpose drive with torque and speed control

Power	1.1 to 132 kW (1.5 to 150 HP).
Supply	Single/three-phase 200-240 V and three-phase 380-480 V ratings appear in the catalogue.
Ratings	Normal duty (110% for 1 min) and heavy duty (150% for 1 min, 200% for 3 s) ratings.

- High-performance product for general industrial applications, positioned between the CFW500 and CFW11.
- Shares the safety stop guidance documentation with the CFW11 family.

CFW11

System drive for industrial systems

Power	Around 1.5 kW up to 1000 HP across the family, including the modular CFW11M (e.g. frame H: 450-710 kW at 380-690 V).
Supply	200-240 V (single-phase 6-10 A; three-phase 7-211 A), 380-480 V and 500-690 V (e.g. 2-450 HP at 575 V class).
Control	Adjustable V/f, VVW, sensorless vector and closed-loop vector with encoder; also controls WMagNet permanent-magnet motors.
Frequency	0-300 Hz in scalar mode; 120 Hz in vector mode.
Protocols	Modbus-RTU, Modbus-TCP, Profibus-DP, DeviceNet, CANopen, EtherNet/IP, EtherCAT, PROFINET-IO, BACnet.

- Vectrue technology, self-tuning, Optimal Braking (reduces need for braking resistors), built-in DC-link inductors, SoftPLC and USB port.
- Graphic HMI with real-time clock; IP55 version with built-in disconnect switch; optional safety stop board.
- Typical uses: pumps, fans, compressors, mining and cement, metals, paper, oil and gas, lifting, multi-pump control.

CFW501 HVAC

Compact drive dedicated to HVAC-R

Supply	Three-phase 200-240 V and 380-480 V.
Rated current	Catalogue examples from 1 A up to 24 A (200-240 V) and 31 A (380-480 V, frame D).
Enclosure / filter	IP20; built-in C3 category RFI filter; conformal coating 3C2; operating temperature 0-50 deg C.
Control	V/f scalar and VVW; rated efficiency 97% or better; SoftPLC built in.
Protocols	BACnet, Modbus-RTU and Metasys N2 in the standard product.

- Harmonic Mitigation Technology (HMT) allows installation directly on the line without an input reactor.
- HVAC functions: bypass via relay output, Fire Mode (runs the motor through adverse conditions), broken-belt / no-load detection.
- Aimed at pumps and fans in shopping centres, hospitals, hotels and airports.

CFW701 HVAC

Complete HVAC-R drive for higher powers

Power	1.1 to 132 kW (1.5 to 175 HP).
Supply	Three-phase 380-480 V (typical catalogue models).
Features	Built-in C3 RFI filter, dynamic braking as standard, internal electronics supply.

- Same HVAC-R function set as the CFW501 (bypass, Fire Mode and others), but covering a much wider power range.

MW500

Decentralised drive - mounts on the motor or wall

Power	1.1 to 7.5 kW (1.5 to 10 HP) per the WEG catalogue; some distributor sheets list 0.75-3.7 kW for earlier versions.
Supply	Single-phase 200-240 V or three-phase 380-480 V.
Enclosure	IP66 / NEMA 4X; ambient -10 to 50 deg C; conformally coated boards.
Control	V/f scalar and VVW vector; VVW PM for permanent-magnet motors; SoftPLC.

- Optional built-in switch-disconnector and RFI filter; potentiometer and status LED on the unit.
- Plug-in I/O, USB and fieldbus modules shared with the CFW500 (CANopen, DeviceNet, Profibus-DP, EtherNet/IP, Modbus-TCP, PROFINET IO, RS485).
- Removes long motor cables and separate panels by installing next to the motor.

AFW11

Cabinet-built low-voltage drive based on the CFW11

Supply	Three-phase 220-240 V, 380-480 V, 500-600 V and 660-690 V.
Rating	Rated current 3.6 A up to 1,141 A (2 cv / 1.1 kW to 900 cv / 660 kW).
Enclosure	IP42 or IP54; regenerative versions available; AFW11C variant also exists.
Short-circuit	Rated short-circuit current 50 kA (G2 brochure).

- Normal duty overload: 1.1x rated current for 1 minute or 1.5x for 3 seconds.
- Delivered as a finished panel, so no separate cabinet design or integration is needed.

AFW11M / AFW11W

Cabinet-built modular drives for high currents

Variants	AFW11M is air-cooled; AFW11W is water-cooled. Both use the CFW11M / CFW11W modular inverters.
Supply	380-690 V with a 6-pulse, 12-pulse or regenerative input rectifier.
Configuration	Up to 5 power units (UP11) and 3 rectifier units (UR11), plus 1 control unit (UC11) and connecting cables.
Control supply	The control unit runs from a 24 Vdc supply (built in on the AFW11M G2).

- Module-based design is narrow and deep, giving a compact cabinet and easier maintenance.
- Used for high-power motors where a single-body drive would not reach the required current.

MVW01

Medium-voltage variable speed drive

Motor voltage	2.3 kV to 6.9 kV.
Power	500 to 55,520 HP (400 kW to about 41 MW) in the current G4 generation; the earlier G2 brochure lists 500-22,500 HP.
Topology	Multilevel NPC / HNPC with high-voltage IGBTs; 12-, 18-, 24- or 36-pulse diode input, with active front end optional.
Cooling / enclosure	Air- or water-cooled; IP21, IP41, IP42, or IP54 (water-cooled version).
Communication	EtherNet/IP, Profinet, Modbus-TCP and MQTT; 10-inch touchscreen HMI; WEG Motion Fleet Management integration.

- Arc flash protection with an optional arc-resistant cabinet; protection of the phase-shift transformer, drive and MV motor.
- Ride-through, flying start, auto-restart, multi-speed, critical-speed avoidance and built-in SoftPLC.
- Start-and-transfer versions are available for very large motors (up to 100 MW).

Quick selection guide

Application	Suggested model
Small machines, OEM panels, pumps and fans	CFW500 (or MW500 when it must sit on the motor)
General industrial duty with torque control	CFW700
Demanding systems, closed-loop vector, PM motors, high power	CFW11
HVAC-R fans and pumps, smaller sizes / larger sizes	CFW501 HVAC / CFW701 HVAC
Washdown or dusty areas, no control panel available	MW500 (IP66)
Ready-built panel, regenerative or multi-pulse needs	AFW11 / AFW11M / AFW11W
Motors rated 2.3-6.9 kV	MVW01

Sources

- WEG CFW500 datasheet - static.weg.net (WEG-CFW500-50036259-en.pdf)
- WEG LV Variable Frequency Drives and Soft Starters catalogue - static.weg.net (50099431)
- WEG Automation Product Portfolio / Drives - static.weg.net (WEG-product-profile-50049853-en.pdf)
- WEG Variable Speed Drives Catalog (CFW700, CFW11, CFW501) - phoenixpumps.com
- WEG CFW11 product page - weg.net catalogue

- WEG CFW501 and CFW701 product pages - weg.net catalogue
- WEG MW500 decentralised VSD brochure - static.weg.net (50051392); MW500 product page - weg.net
- WEG AFW11 general brochure - static.weg.net (50122946); AFW11M / AFW11W product pages - weg.net
- WEG MVW01 product pages and brochure - weg.net / static.weg.net
- Distributor summaries: asb-drives.eu (CFW11, CFW501, MW500), Select Electrical, indiamart WEG listings

Compiled on 5 October 2026 from publicly available WEG documentation and distributor pages. Figures are for reference only.