

HUAKIA VDN Series VFD Selection Guide

Choose the optimal variable frequency drive for your motor control needs.



VDN Series	Power Range (380V)	Control Modes	Overload Capability (G-type)	Starting Torque	Key Features & Best For
VDN100	0.75kW – 560kW	V/F Control	150% for 60s, 180% for 2s	Low (V/F dependent)	Basic General Purpose
					Simple fan, pump, and conveyor applications. Cost-effective, easy to use, and reliable for basic speed control.
VDN200	0.75kW – 560kW	SVC, V/F	150% for 60s, 180% for 2s	0.5Hz / 150% (SVC)	Standard General Purpose
					Ideal for packaging, woodworking, and light industry. Features SVC for better low-speed torque, multi-step speed, and PLC functions.
VDN300	0.75kW – 700kW	SVC, FVC, V/F	150% for 60s, 180% for 10s, 200% for 1s	0.5Hz / 150% (SVC)	High-Performance General
				0Hz / 180% (FVC)	Suitable for textile, printing, and demanding factory automation. Excellent
VDN500	0.75kW – 630kW	SVC, FVC, V/F	150% for 60s, 180% for 3s	0.5Hz / 150% (SVC)	Advanced Vector Control
				0Hz / 180% (FVC)	Perfect for machine tools, injection molding, and winding. Features user-programmable, virtual I/O, and multi-PG card support.

VDN700	45kW – 450kW	SVC, FVC, V/F	150% for 60s, 110% for 60s (P-type)	0.5Hz / 150% (SVC)	Heavy Duty & High Torque
				0Hz / 180% (FVC)	Designed for hoisting, centrifuges, and mining. High overload capacity and supports altitude derating up to 3000m.
VDN900	0.75kW – 500kW	SVC, FVC, V/F	150% for 60s, 180% for 10s, 200% for 1s	0.5Hz / 150% (SVC)	Premium High-End
				0Hz / 200% (FVC)	For complex automation and synchronized multi-axis lines. Supports resolver, UVW, and ABZ encoders. Best dynamic performance and zero-speed full torque.

Selection Notes:

G-type (Constant Torque): For heavy loads like conveyors, extruders, and hoists.

P-type (Variable Torque): For centrifugal loads like fans, pumps, and blowers (lower overload rating).

SVC (Sensorless Vector Control): High performance without an encoder.

FVC (Closed-Loop Vector Control): Requires an encoder (PG card) for highest precision and zero-speed torque.

For detailed parameters, wiring diagrams, and troubleshooting, please refer to the specific user manual for each VDN series.

Contact HUAKIA support for expert assistance in selecting the right VFD for your project.



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