

BROCHURE

Variable Speed Drives & Accessories



NIETZ

AT20

General Purpose, Compact

- Various Control Version, V/F, Sensorless Vector and Closed Loop Vector Control
- Built-in braking unit up to 450kW (optional)
- Support MODBUS RS485, ProfiNet is Selectable
- Digital and analogue I/O optional cards
- Support different PG cards, including resolver
- Suitable AC Induction Motor, Permanent Magnet Synchronous Motor is selectable

Remove keypad



Item		Specifications
Basic Function	Control Mode	V/F Control Sensorless Flux Vector Control, SFVC Closed-Loop Vector Control, FVC, Above 3.7kW
	Max. Frequency	0.0-600.0 Hz
	Carrier Frequency	0.5 kHz-8.0 kHz The Carrier Frequency is Automatically Adjusted Based on the Load Features.
	Input Frequency Resolution	Digital Setting 0.01 Hz Analog Setting Max. Frequency x 0.025%
	Start Torque	G Type 0.5 Hz / 150%, SVC P Type 0.5 Hz / 100%
	Speed Range	1:100, SVC
	Speed Stability Accuracy	±0.5%, SVC
	Overload capacity	G Type 60s for 150% of the Rated Current, 3s for 180% of the Rated Current. P Type 60s for 120% of the Rated Current, 3s for 150% of the Rated Current.
	Torque boost	Auto-Boost; Customized Boost: 0.1%~30.0%
	Ramp Mode	Straight-Line Ramp. Four Groups of Acceleration/Deceleration Time with the Range of 0.00-6500.0s
	DC Braking	DC Braking Frequency 0.00Hz~Maximum frequency Braking Time 0.0s~36.0s Braking Action Current Value 0.0%~100.0%
	JOG control	JOG Frequency Range 0.00 Hz-50.00 Hz JOG Acceleration/Deceleration Time: 0.0s~6500.0s
	Simple PLC, Multiple Preset Speeds	It Implements up to 16 Speeds via the Simple PLC Function or Combination of Terminal States
	Onboard PID	It Realizes Process Controlled Closed Loop Control System Easily
	Auto voltage regulation (AVR)	It Can Keep Constant Output Voltage Automatically when the Mains Voltage Changes
	Overvoltage / Overcurrent Stall Control	The current and voltage are limited automatically during the running process so as to avoid Frequent Tripping Due to Over Voltage/Over Current.
	Rapid Current Limit	It Helps to Avoid Frequent Over Current Faults of the AC Drive.
	Torque Limit and Control	It can Limit the Torque Automatically and Prevent Frequent Over Current Tripping During the Running Process. Torque Control can be Implemented in the FVC Mode.
Individualized Functions	High Performance	Control of Asynchronous Motor are Implemented Through the High-Performance Current Vector Control Technology.
	Rapid Dip Ride Through	The Load Feedback Energy Compensates the Voltage Reduction so That the AC Drive can Continue to Run for a Short Time
	Support for Multiple PG Card	Support for Differential Input PG Card, Resolver PG Card, Rotating Transformer PG Card...
	Rapid Current Limit	It Helps to Avoid Frequent Over Current Faults of the AC Drive.
	Timing Control	0.0-6500.0 min.
	Communication Methods	RS 485 standard, ProfiNet is selectable
Running	Command Source	Operation Panel / Control Terminals / Serial Communication Port You can Perform Switchover Between these Sources in Various Ways.
	Frequency Source	There are Ten Frequency Sources. Digital Setting, Analog Voltage Setting, Analog Current Setting, Pulse Setting, Serial Port Setting. You can Perform Switchover Between these Sources in Various Ways.
	Input Terminal	Standard: 5 Digital Input Terminals (Below 5.5kW)/6 Digital Input Terminals (Above 7.5kW); 1 Analog Input Terminal (Below 5.5kW)/2 Analog Input Terminals (Above 6.5kW); 1 Voltage Input (Only Support for 0-10V, Above 7.5kW), 1 Voltage Input (0-10V) or Current Input (4-20mA)
	Output Terminal	1 High-Speed Pulse Output Terminal (Open-Collector), Above 3.7kW. 1 Relay Output Terminal (Below 5.5kW)/2 Relay Output Terminals (Above 7.5kW) 1 Analog Output Terminal (3.7-5.5kW)/2 Analog Output Terminal (Above 7.5kW), Support for 4-20mA Current Output or 0-10V Voltage Output