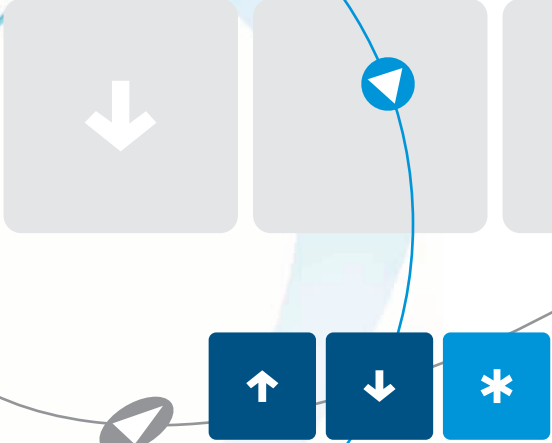


Product Group
ECONOMY
Variable Speed Drives



„Easy to operate“



ECONOMY series „VersiDrive i...“ AC Variable Speed Drives

Frequency inverters of the type series "VersiDrive i" have been developed for standard applications.

The principle reads: Layout Connect Get Started.

The devices combine extremely user-friendly operability with a high degree of functionality. In addition, PETER electronic decided to tread new paths in terms of enclosure protection classes and extended its product family by adding devices in IP66, from 0.37 to 7.5kW. A further highlight is the single-phase variant of the "VersiDrive i" for a.c. motors.

Our AC Variable Speed Drives offer convincing advantages:

Easy-to-operate due to a reduced, structured set of parameters

Extended protection of the motor by motor PTC input

Diverse expansion capabilities

Serial communication with Modbus RTU

Quick start with 14 basic parameters

Integrated mains filter



CE EUROPE



CTICK Australien



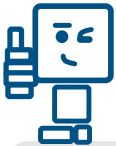
ISO 9001:2008



UL / cUL America



RoHS



Easy-to-operate Variable Speed Drive for three-phase a.c. motors

VersiDrive i.../E3/3E3

VD i...E3 from 0,37kW to 2,2kW, 230V

VD i...3E3 from 0,75kW to 22kW, 400V

„VersiDrive i.../E3/3E3“ is the basis of our new frequency inverter series. „VersiDrive i“ offers a range of advanced features that provide a high level of functionality and make this inverter series unique for you.

VD i... can be used for three-phase a.c. motors from 0.37kW to 22kW and is thus an energy-saving drive solution for various industrial applications. The features of VD i... are convincing: motors equipped with internal temperature detectors (PTCs) can be directly connected to "VersiDrive i". This is rounded off by an integrated mains filter of the highest class C1,1-phase, or C2, 3-phase. If several frequency inverters are to be used for the same application, it is recommended to program them by using the optional memory stick (VersiStick) with copying function.

Dimensions

VersiDrive i.../E3/3E3

...E3 from 0,37kW to 2,2kW, 230V

...3E3 from 0,75kW to 22kW, 400V

	B (mm)	H (mm)	T (mm)
VD i 037/E3	82	173	123
VD i 075/E3	82	173	123
VD i 150/E3	82	173	123
VD i 220/E3	109	221	150
VD i 075/3E3	82	173	123
VD i 150/3E3	82	173	123
VD i 220/3E3	109	221	150
VD i 400/3E3	109	221	150
VD i 550/3E3	131	261	175
VD i 750/3E3	131	261	175
VD i 1100/3E3	131	261	175
VD i 1500/3E3	171	420	212
VD i 1850/3E3	171	420	212
VD i 2200/3E3	171	420	212

AC Variable Speed Drive as a motor controller for hazardous areas

VersiDrive i.../E3/3E3/IP66/IP66S

VD i....E3/IP66 from 0,37kW to 2,2kW, 230V

VD i...3E3/IP66/IP66S from 0,75kW to 7,5kW, 400V



With their protection class IP66/IP66S, frequency inverters of the „VersiDrive i.../E3/3E3/IP66/IP66S“ type series can be placed decentralized in positions near the motor well protected against environmental influences such as dust and high pressure water.

The use of VD i.../E3/3E3/IP66/IP66S up to 7,5kW provides the great advantage that expensive and time-consuming mounting in enclosures required to meet protection class IP20 is a thing of the past. The integrated Modbus RTU allows easy control and networking with a variety of devices. A special coating protects the heat sinks against corrosion and chemicals, which, for instance, is important for applications in the food-processing industry. In this case too, what counts is a good price-performance ratio, easy installation and quick start-up.

Dimensions

VersiDrive i.../E3/3E3/IP66/IP66S

...E3/IP66/IP66S from 0,37kW to 2,2kW, 230V

...3E3/IP66/IP66S from 0,75kW to 7,5kW, 400V

	B (mm)	H (mm)	T (mm)
VD i 037/E3/IP66/IP66S	161	232	179
VD i 075/E3/IP66/IP66S	161	232	179
VD i 150/E3/IP66/IP66S	161	232	179
VD i 220/E3/IP66/IP66S	188	257	186,5
VD i 075/3E3/IP66/IP66S	161	232	179
VD i 150/3E3/IP66/IP66S	161	232	179
VD i 220/3E3/IP66/IP66S	188	257	186,5
VD i 400/3E3/IP66/IP66S	188	257	186,5
VD i 550/3E3/IP66/IP66S	210,5	310	229
VD i 750/3E3/IP66/IP66S	210,5	310	229

Variable Speed Drive for single-phase a.c. motors

VersiDrive i.../E3S/IP66/IP66S
VD i ... from 0,37 to 1,1kW, 230V
(110V on request)



„VersiDrive i.../E3S/IP66/IP66S“ is a fully digital frequency inverter that is easy to operate and favorable in use. It has been specially developed for adapting the speed of both capacitor and split-pole motors.

To the advantage of the user, during development, we attached great importance to easy installation and start-up. This advantage extends to the entire product range of VD i... .

The uniform user interface with 14 standard parameters makes setup and commissioning even faster and easier.

Dimensions

VersiDrive i...

.../E3S from 0,37 to 1,1kW, 230V

.../E3S/IP66/IP66S from 0,37 to 1,1kW, 230V

	B (mm)	H (mm)	T (mm)
VD i 037/E3S	82	173	123
VD i 075/E3S	82	173	123
VD i 110/E3S	109	221	150
VD i 037/E3S/IP66/IP66S	161	232	179
VD i 075/E3S/IP66/IP66S	161	232	179
VD i 110/E3S/IP66/IP66S	188	257	186,5

Technical data overview

Input Ratings	Supply Voltage	110-115V ± 10%; 200-240V ± 10%; 380-480V ± 10%	
	Supply Frequency	48-62Hz	
	Displacement Power Factor	> 0,98	
	Phase Imbalance	3% Maximum allowed	
	Inrush Current	< rated current	
	Power Cycles	120 per hour maximum, evenly spaced	
	Output Ratings	Output Power	110V 1 Ph Input: 0,5-1,5 HP (230V 3 Ph Output) 230 V 1 Ph Input: 0,37-4kW (0,5-5HP); 230V 3 Ph Input: 0,37-11kW (0,5-15HP) 400V 3 Ph Input: 0,75-22kW 460V 3 Ph Input: 1-30HP
Overload Capacity		150% for 60 Seconds, 175% for 2.5 seconds	
Output Frequency		0-500Hz, 0.1Hz resolution	
Acceleration Time		0.01-600 seconds	
Deceleration Time		0.01-600 seconds	
Typical Efficiency		> 98%	
Ambient Conditions		Temperature	Storage: -40 to 60°C; Operating: -10 to 50°C
		Altitude	Up to 1000m ASL without derating; Up to 2000m maximum UL approved Up to 4000m maximum (non UL)
		Humidity	95% Max, non condensing
		Vibration	Conforms to EN61800-5-1
Enclosure	Ingress Protection	IP20, IP66	
Programming	Keypad	Built-in keypad as standard, optional remote mountable keypad	
	Display	7 Segment LED	
	PC	OptiTools Studio	
Control Specification	Control Method	Sensorless Vector Speed Control, PM Vector Control, BLDC Control Synchronous Reluctance	
	PWM Frequency	4-32kHz Effectiv	
	Stopping Mode	Ramp to stop: User Adjustable 0.1 - 600 seconds Coast to stop	
	Braking	Motor Flux Braking, Built-in braking transistor (not frame size 1)	
	Skip Frequency	Single point, user adjustable	
	Setpoint Control	Analog Signal 0-10 Volt, 10-0 Volt; 0-20mA, 20-0mA; 4-20mA; 20-4mA	
	Fieldbus	Built-in	CANopen 125-1000 kbps Modbus RTU 9,6-115,2 kbps selectable
I/O Specification	Power Supply	24 Volt DC, 100mA, Short Circuit Protected; 10 Volt DC, 5mA for Potentiometer	
	Programmable Inputs	4 Total: 2 Digital, 2 Analog / Digital selectable	
	Digital Inputs	8 - 30 Volt DC, internal or external supply; Response time < 4ms	
	Analog Inputs	Resolution: 12 bits; Response time: < 4ms; Accuracy: ± 2% full scale Parameter adjustable scaling and offset	
	Programmable Outputs	2 Total: 1 Analog / Digital, 1 Relay	
	Relay Outputs	Maximum Voltage: 250 VAC, 30 VDC; Switching Current Capacity: 6A AC, 5A DC	
	Analog Outputs	0 bis 10 Volt	
Application Features	PI Control	Internal PI Controller; Standby / Sleep Function	
	Fire Mode	Bidirectional; Selectable Speed Setpoint (Fixed / PI / Analog / Fieldbus)	
Maintenance & Diagnostics	Fault Memory	Last 4 Trips stored with time stamp	
	Data Logging	Logging of data prior to trip for diagnostic purposes: Output Current, Drive Temperature, DC Bus Voltage	
	Monitoring	Hours Run Meter	
Standards Compliance	Low Voltage Directive	Adjustable speed electrical power drive systems; EMC requirements	
	EMC Directive	2004/108/EC; Cat C1 according to EN61800-3:2004	
	Machinery Directive	2006/42/EC	
	Conformance	CE, UL, RCM	

VersiDrive i Accessories

The „VersiDrive i“ series offers you a variety of expansion capabilities ...

VersiStick (memory stick for parameters with copying function)

VersiPad (remote control unit)

VersiSplit (RS 485 data splitter)

RJ45-cable 0.5m

RJ45-cable 1m

RJ45-cable 3m

PC Kit (RS485 USB converter)

VersiRel 1 (1 additional relay output)

VersiCont (control of digital inputs with 230VAC)

VersiGateE (external gateway for Ethernet)

VersiGateD (external gateway for DeviceNet)

VersiGateP (external gateway for Profibus-DP)

VersiPC (Windows program for VersiDrive)



Overview of „VersiDrive i“ applications:



Type designation Input / Output	VD i.../E3S/IP66/IP66S 1-phase / 1-phase	VD i.../E3/3E3 1-phase / 3-phase	VD i...E3/3E3/IP66/IP66S 1-phase / 3-phase
Food-processing industry	Very suitable	Very suitable	Very suitable
Bottle-filling plants	Suitable to a limited extent	Very suitable	Very suitable
Chemical plants	Suitable to a limited extent	Very suitable	Very suitable
Ventilators / fans	Very suitable	Very suitable	Very suitable
Pumps	Very suitable	Very suitable	Very suitable
Conveyors	Suitable to a limited extent	Very suitable	Very suitable
Sewage technology	Very suitable	Very suitable	Very suitable
HVAC	Suitable to a limited extent	Very suitable	Very suitable

Suitable to a limited extent



Very suitable



Our range of products:

Soft Starters

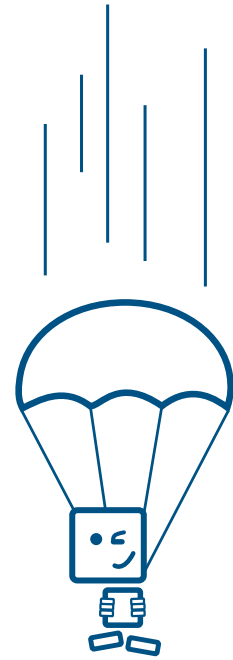
Braking Devices

Combined Motor Start and Braking Devices

Variable Speed Drives

DC-Controllers

Monitoring Modules



Stand 01/2018



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