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Frequency inverter **Series S3** for single-phase AC Motors



Technical Data

Model	200V - 240V 1-phase Input IP20			200V - 240V 1-phase Input IP66		
	Power Rating [kW]	0,37	0,75	1,1	0,37	0,75
Output Current [A]	4,3	7,0	10,5	4,3	7,0	10,5
Supply Voltage, Supply Frequency	1-ph. 200V ... 240V (+10%), 50/60Hz (±5%),					
Output Voltage	0.0V to max. input voltage					
Overload Capacity	150% for 60s, 175% for 2,5s					
Output Frequency	0 ... 120Hz (resolution 0,1Hz)					
Programming	Keypad Integrated keypad as standard, optional remote control panels					
	Display 7 Segment LED					
	PC Software escodrives Tools					
Controller Specification	Control Method PSC (Permanent Split Capacitor), Shaded Pole					
	PWM Carrier Frequency 4-32kHz Effective					
	Stopping Mode Ramp to stop: User Adjustable 0,1 - 600 secs, Coast to stop					
	Skip Frequency individually adjustable incl. Hysteresis					
	Setpoint Control	Analog 0 - 10V, 10 - 0V; 0 - 20mA, 20 - 0mA; 4 - 20mA, 20 - 4mA				
Digital Motorised Potentiometer, Keypad, Modbus RTU, CANopen, EtherNet/IP						
I/O Specification	Power Supply 24VDC (100mA), Short Circuit Protected, 10VDC (10mA) for Potentiometer					
	Programmable Inputs 4 Total, 2 x Digital, 2 x Analog /Digital selectable					
	Digital Inputs 8 - 30 VDC 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 x Analog / Digital, 1 Relay					
	Relay Outputs Maximum Voltage: 250VAC / 6A; 30VDC / 5A; optionally expandable					
	Analog Outputs 0 ... 10V, max. 20mA					
	Safety functions Fire Mode (NO/NC) Selectable Speed Setpoint (Fixed / PI / Analog / Fieldbus), Emergency stop, Quick stop					
Protection Class	IP20			IP66		
Ambient Conditions	Storage Temperature: -40°C to +60°C; Operating: -10°C to +50°C; 'Humidity: 95% Max, non condensing					
Conformance	CE, cULus, RCM					

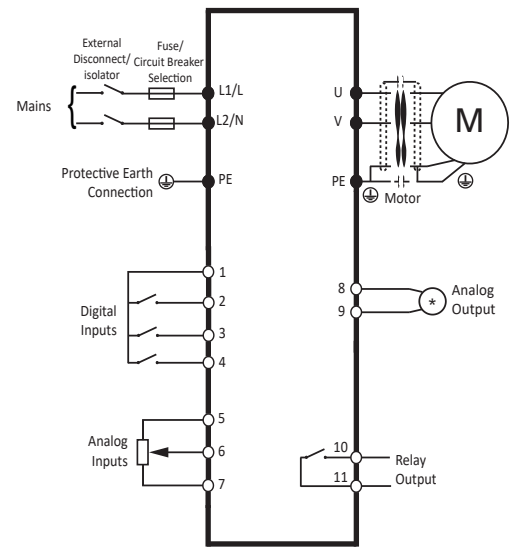
Frequency inverter with single-phase Output for PSC & Shaded-Pole Motors

The frequency inverter **escodrives** S3 series includes single-phase output devices in the protection class IP20 and IP66. The frequency inverter convince by its simple operation and the numerous accessories. Equipped with the same features as the 3-phase frequency inverters, they are the ideal energy-saving solution where high starting torque is not required - typically for pumps and fans.

Dimensions and Weight

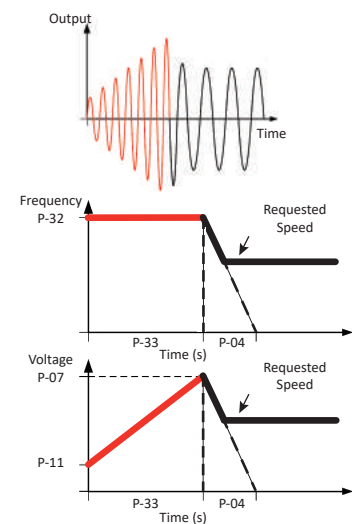
Model	Dimension (mm) W x H x D			Weight (kg)	
	200V - 240V 1-phase IP20	EDS3S-2004PL-1PO	83		173
200V - 240V 1-phase IP66	EDS3S-2007PL-1PO	83	173	123	1,0
	EDS3S-2011PL-1PO	110	221	150	1,7
	EDS3S-2004PL-1PO-66S	161	232	179	3,1
200V - 240V 1-phase IP66	EDS3S-2007PL-1PO-66S	161	232	179	3,1
	EDS3S-2011PL-1PO-66S	188	257	187	4,1

Switch example (here model IP20)



Special Boost Phase

To ensure reliable starting of single phase motors, the drive initially ramps the motor voltage up to rated voltage whilst maintaining a fixed starting frequency, before reducing the frequency and voltage to the desired operating point.



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