

**NEW**

**OPTIDRIVE™ E<sup>3</sup>**

# IP66 / NEMA 4X Outdoor Rated Enclosed Drives



**4 Frame Sizes**

**↑ 22kW**

## Machine Mountable

No additional cabinet protection required

## Clean Operation

None of the wear or debris associated with gearboxes and belts

## Conformal Coating

Enhanced protection and reliability for arduous environments to 3C3 class

- ✓ Dual internal RJ45 ports
- ✓ Built in EtherNet as a factory fit option
- ✓ Withstands UV exposure
- ✓ Washdown ready
- ✓ Dust-tight


- ✓ Easy set up and operation
- ✓ EtherNet/IP, CANopen, Modbus RTU




	kW	HP	Amps	Frame	Model Code	Product Family	Generation	Frame Size	Voltage Code	Output Current x 10	Supply Phases	EMC Filter	Optical Transistor	Enclosure Option
110–115V ± 10% 1 Phase Input	0.37	0.5	2.3	1	ODE - 3 - 1 1 0023 - 1	0	1	#						
	0.75	1	4.3	1	ODE - 3 - 1 1 0043 - 1	0	1	#						
	1.1	1.5	5.8	2	ODE - 3 - 2 1 0058 - 1	0	4	#						
200–240V ± 10% 1 Phase Input	0.37	0.5	2.3	1	ODE - 3 - 1 2 0023 - 1	#	1	#						
	0.75	1	4.3	1	ODE - 3 - 1 2 0043 - 1	#	1	#						
	1.5	2	7	1	ODE - 3 - 1 2 0070 - 1	#	1	#						
	1.5	2	7	2	ODE - 3 - 2 2 0070 - 1	#	4	#						
	2.2	3	10.5	2	ODE - 3 - 2 2 0105 - 1	#	4	#						
	4	5	15.3	3	ODE - 3 - 3 2 0153 - 1	0	4	#						
200–240V ± 10% 3 Phase Input	0.37	0.5	2.3	1	ODE - 3 - 1 2 0023 - 3	0	1	#						
	0.75	1	4.3	1	ODE - 3 - 1 2 0043 - 3	0	1	#						
	1.5	2	7	1	ODE - 3 - 1 2 0070 - 3	0	1	#						
	1.5	2	7	2	ODE - 3 - 2 2 0070 - 3	#	4	#						
	2.2	3	10.5	2	ODE - 3 - 2 2 0105 - 3	#	4	#						
	4	5	15.3	3	ODE - 3 - 3 2 0153 - 3	#	4	#						
	5.5	7.5	24	3	ODE - 3 - 3 2 0240 - 3	#	4	#						
	7.5	10	30	4	ODE - 3 - 4 2 0300 - 3	#	4	#						
	11	15	46	4	ODE - 3 - 4 2 0460 - 3	#	4	#						
380–480V ± 10% 3 Phase Input	0.75	1	2.2	1	ODE - 3 - 1 4 0022 - 3	#	1	#						
	1.5	2	4.1	1	ODE - 3 - 1 4 0041 - 3	#	1	#						
	1.5	2	4.1	2	ODE - 3 - 2 4 0041 - 3	#	4	#						
	2.2	3	5.8	2	ODE - 3 - 2 4 0058 - 3	#	4	#						
	4	5	9.5	2	ODE - 3 - 2 4 0095 - 3	#	4	#						
	5.5	7.5	14	3	ODE - 3 - 3 4 0140 - 3	#	4	#						
	7.5	10	18	3	ODE - 3 - 3 4 0180 - 3	#	4	#						
	11	15	24	3	ODE - 3 - 3 4 0240 - 3	#	4	#						
	15	20	30	4	ODE - 3 - 4 4 0300 - 3	#	4	#						
	18.5	25	39	4	ODE - 3 - 4 4 0390 - 3	#	4	#						
22	30	46	4	ODE - 3 - 4 4 0460 - 3	#	4	#							

Replace # in model code with colour-coded option

### Enclosure Types

**A**  **IP66 Outdoor Use Non-switched**

**B**  **IP66 Outdoor Use Switched**

**IP66**

Size	1	2	3	4
mm Height	232	257	310	380
mm Width	161	188	210.5	210.5
mm Depth	155	180	215	235
kg Weight	2.1	3	5	7
Fixings	4xM4	4xM4	4xM4	6xM4

### EMC Filter

**F** Internal EMC Filter

**O** No Internal EMC Filter

## Drive Specification

Input Ratings	Supply Voltage	110 – 115V ± 10% 200 – 240V ± 10% 380 – 480V ± 10%	Control Specification	Control Method	Sensorless Vector Speed Control PM Vector Control BLDC Control Synchronous Reluctance	Application Features	PI Control	Internal PI Controller Standby / Sleep Function						
	Supply Frequency	48 – 62Hz		PWM Frequency	4–32kHz Effective		Fire Mode	Bidirectional Selectable Speed Setpoint (Fixed / PI / Analog / Fieldbus)						
	Displacement Power Factor	> 0.98		Stopping Mode	Ramp to stop: User Adjustable 0.1–600 secs Coast to stop		Maintenance & Diagnostics	Fault Memory	Last 4 Trips stored with time stamp					
	Phase Imbalance	3% Maximum allowed		Braking	Motor Flux Braking Built-in braking transistor (not frame size 1)		Data Logging	Logging of data prior to trip for diagnostic purposes: Output Current Drive Temperature DC Bus Voltage						
	Inrush Current	< rated current		Skip Frequency	Single point, user adjustable		Monitoring	Hours Run Meter						
	Power Cycles	120 per hour maximum, evenly spaced		Fieldbus	Setpoint Control		Analog Signal	0 to 10 Volts 10 to 0 Volts 0 to 20mA 20 to 0mA 4 to 20mA 20 to 4mA	Standards	Low Voltage Directive	Adjustable speed electrical power drive systems. EMC requirements			
Output Ratings	Output Power	110V 1 Ph Input: 0.5–1.5HP (230V 3 Ph Output)	Digital			Motorised Potentiometer (Keypad) Modbus RTU CANopen	EMC Directive	2014/30/EU Cat C1 according to EN61800-3:2004						
		230V 1 Ph Input: 0.37–4kW (0.5–5HP)	I/O Specification			Power Supply	24 Volt DC, 100mA, Short Circuit Protected	Machinery Directive		2006/42/EC				
		230V 3 Ph Input: 0.37–11kW (0.5–15HP)					Built-in	Modbus RTU		9.6–115.2 kbps selectable	Conformance	CE, UL, C-Tick		
		400V 3 Ph Input: 0.75–22kW						Programmable Inputs		4 Total 2 Digital 2 Analog / Digital selectable	Environment Class	3C3/3S3 conformal coated PCBs		
		460V 3 Ph Input: 1–30HP								Digital Inputs		8 – 30 Volt DC, internal or external supply Response time < 4ms	New Features	Built-in
		Overload Capacity		150% for 60 Seconds 175% for 2.5 seconds	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
Output Frequency	0 – 500Hz, 0.1Hz resolution								Relay Outputs					Maximum Voltage: 250 VAC, 30 VDC Switching Current Capacity: 6A AC, 5A DC
			Typical Efficiency			> 98%								Analog Outputs
							Ambient Conditions							
								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			IP66										
			Programming	Keypad	Built-in keypad as standard Optional remote mountable keypad									
					Display	7 Segment LED								
						PC	OptiTools Studio							

Contact us to discuss availability & pricing