

NEW

OPTIDRIVE™ E³

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	Brake 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



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
Output Ratings	Output Power	110V 1 Ph Input: 0.5–1.5HP (230V 3 Ph Output) 230V 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	Digital		Motorised Potentiometer (Keypad) Modbus RTU CANopen	EMC Directive	2014/30/EU Cat C1 according to EN61800-3:2004		
	Overload Capacity	150% for 60 Seconds 175% for 2.5 seconds	I/O Specification		Power Supply	24 Volt DC, 100mA, Short Circuit Protected 10 Volt DC, 10mA for Potentiometer	Machinery Directive	2006/42/EC	
	Output Frequency	0 – 500Hz, 0.1Hz resolution			Programmable Inputs	4 Total 2 Digital 2 Analog / Digital selectable	Conformance	CE, UL, C-Tick	
	Typical Efficiency	> 98%			Digital Inputs	8 – 30 Volt DC, internal or external supply Response time < 4ms	Environmental Class	3C3/3S3 conformal coated PCBs	
	Ambient Conditions	Temperature			Storage: –40 to 60°C Operating: –20 to 50°C	Analog Inputs	Resolution: 12 bits Response time: < 4ms Accuracy: ± 2% full scale Parameter adjustable scaling and offset	New Features	Built-in
		Altitude		Up to 1000m ASL without derating Up to 2000m maximum UL approved Up to 4000m maximum (non UL)	Programmable Outputs	2 Total 1 Analog / Digital 1 Relay			
Humidity		95% Max, non condensing		Relay Outputs	Maximum Voltage: 250 VAC, 30 VDC Switching Current Capacity: 6A AC, 5A DC				
Vibration		Conforms to EN61800-5-1	Analog Outputs	0 to 10 Volt					
Enclosure		Ingress Protection	IP66	Programming	Keypad	Built-in keypad as standard Optional remote mountable keypad			
		Programming	Display		7 Segment LED				
	PC		OptTools Studio						