

OPTIDRIVE IP66 / NEMA 4X

Washdown Duty

AC Variable Speed Drive
0.37kW – 7.5kW (0.5 – 10HP)
110 – 480V



Ideal for high-pressure washdown applications

Ready for high-pressure washdown, the cost-effective IP66 / NEMA 4X Optidrives can be mounted directly on your processing equipment.

Available for all Optidrive E2 variants up to 7.5kW/10HP in three physical frames sizes.



Key Benefits

- Dust-tight IP66 / NEMA 4X enclosure for protection in dusty and damp environments
- Innovative sealing system to resist frequent high pressure washdown
- Coated heatsink resists corrosion and chemicals
- Simple parameter set for fast commissioning and start up
- Optistick compatible, allowing parameters to be rapidly copied between multiple drives
- Cast heatsink with wide cooling channels to resist blockage negates the need for a cooling fan
- Optional internal EMC filter complies with EN61800-3 requirements
- Built in PI Controller for level, flow or pressure control applications
- Modbus RTU onboard allows simple control and integration with a wide range of PLCs and MMIs

Switched Units (optional)

- Local Power Isolater
- Local Potentiometer for speed control
- Drive REV/OFF/FWD switch

Ratings Explained

IP66: IP (Ingress Protection) ratings classify the level of protection provided by an enclosure or housing, against solids (1st digit) and liquids (2nd digit). IP66 is rated as 'dust-tight' and protected against 'powerful jets of water'.

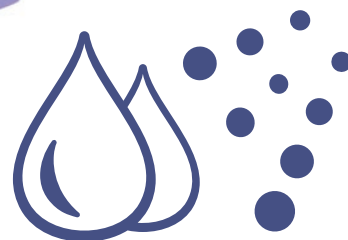
NEMA 4X: The NEMA (National Electrical Manufacturers Association) ratings can be approximately compared to those of the IP system. NEMA 4X specifies protection against falling dirt, windblown dust, splashing or hose-directed water and corrosion.

Industry Sectors

- Food Processing
- Paper & Forest Products
- Petroleum & Chemical
- Unit & Baggage Handling
- HVAC
- Pumping & Fluid Handling
- Aggregate & Cement
- Mining



Size 2
Non-switched



OPTIDRIVE IP66 / NEMA 4X Electrical Data

110–115V ± 10% 1 Phase Input / 3 Phase 230V Output (Voltage Doubler)

kW Models			HP Models			Output Current (A)	Size
With Filter	Without Filter	kW	With Filter	Without Filter	HP		
–	–	–	–	ODE-2-11005-1H01#	0.5	2.3	1
–	–	–	–	ODE-2-11010-1H01#	1	4.3	1
–	–	–	–	ODE-2-21015-1H04#	1.5	5.8	2

200–240V ± 10% 1 Phase Input

kW Models			HP Models			Output Current (A)	Size
With Filter	Without Filter	kW	With Filter	Without Filter	HP		
ODE-2-12037-1KB1#	ODE-2-12037-1K01#	0.37	ODE-2-12005-1HB1#	ODE-2-12005-1H01#	0.5	2.3	1
ODE-2-12075-1KB1#	ODE-2-12075-1K01#	0.75	ODE-2-12010-1HB1#	ODE-2-12010-1H01#	1	4.3	1
ODE-2-12150-1KB1#	ODE-2-12150-1K01#	1.5	ODE-2-12020-1HB1#	ODE-2-12020-1H01#	2	7	1
ODE-2-22150-1KB4#	ODE-2-22150-1K04#	1.5	ODE-2-22020-1HB4#	ODE-2-22020-1H04#	2	7	2
ODE-2-22220-1KB4#	ODE-2-22220-1K04#	2.2	ODE-2-22030-1HB4#	ODE-2-22030-1H04#	3	10.5	2
ODE-2-32040-1KB4#	ODE-2-32040-1K04#	4	ODE-2-32050-1HB4#	ODE-2-32050-1H04#	5	15	3

200–240V ± 10% 3 Phase Input

kW Models			HP Models			Output Current (A)	Size
With Filter	Without Filter	kW	With Filter	Without Filter	HP		
–	ODE-2-12037-3K01#	0.37	–	ODE-2-12005-3H01#	0.5	2.3	1
–	ODE-2-12075-3K01#	0.75	–	ODE-2-12010-3H01#	1	4.3	1
–	ODE-2-12150-3K01#	1.5	–	ODE-2-12020-3H01#	2	7	1
ODE-2-22150-3KB4#	ODE-2-22150-3K04#	1.5	ODE-2-22020-3HB4#	ODE-2-22020-3H04#	2	7	2
ODE-2-22220-3KB4#	ODE-2-22220-3K04#	2.2	ODE-2-22030-3HB4#	ODE-2-22030-3H04#	3	10.5	2
ODE-2-32040-3KB4#	ODE-2-32040-3K04#	4.0	ODE-2-32050-3HB4#	ODE-2-32050-3H04#	5	18	3

380–480V ± 10% 3 Phase Input

kW Models			HP Models			Output Current (A)	Size
With Filter	Without Filter	kW	With Filter	Without Filter	HP		
ODE-2-14075-3KA1#	ODE-2-14075-3K01#	0.75	ODE-2-14010-3HA1#	ODE-2-14010-3H01#	1	2.2	1
ODE-2-14150-3KA1#	ODE-2-14150-3K01#	1.5	ODE-2-14020-3HA1#	ODE-2-14020-3H01#	2	4.1	1
ODE-2-24150-3KA4#	ODE-2-24150-3K04#	1.5	ODE-2-24020-3HA4#	ODE-2-24020-3H04#	2	4.1	2
ODE-2-24220-3KA4#	ODE-2-24220-3K04#	2.2	ODE-2-24030-3HA4#	ODE-2-24030-3H04#	3	5.8	2
ODE-2-24400-3KA4#	ODE-2-24400-3K04#	4	ODE-2-24050-3HA4#	ODE-2-24050-3H04#	5	9.5	2
ODE-2-34055-3KA4#	ODE-2-34055-3K04#	5.5	ODE-2-34075-3HA4#	ODE-2-34075-3H04#	7.5	14	3
ODE-2-34075-3KA4#	ODE-2-34075-3K04#	7.5	ODE-2-34100-3HA4#	ODE-2-34100-3H04#	10	18	3

All models are available with or without switches.

Note: Replace '#' in the product code with: 'Y' for switched drives or 'X' for non-switched drives.



OPTIDRIVE IP66 / NEMA 4X Dimensions

Size	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Fixings
1	232	161	175	2.8	4 × M4
2	257	188	187	4.6	4 × M4
3	310	210.5	243	7.4	4 × M4

Specification

Output Ratings	Overload capacity	150% for 60 secs; 175% for 2 secs
	Frequency	0...500Hz
Input Ratings	Frequency	48–62Hz
	Voltage	110–115V ± 10% 1 Phase (0.5–1.5HP) 200–240V ± 10% 1 Phase (0.37–2.2kW / 0.5–3HP) 200–240V ± 10% 3 Phase (0.37–3.7kW / 0.5–5HP) 380–480V ± 10% 3 Phase (0.75–7.5kW / 1–10HP)
	Temperature	Operating: -10 to 40°C max Storage: -40 to 60°C
	Altitude	0–2000m (derate 1% per 100m above 1000m)
	Ingress protection	IP66 / NEMA 4X (indoor use)
Programming	Keypad	Yes
	PC	Yes
	PDA	Yes
	Smartphone	Yes
	Control Specification	Control method
PWM Frequency	4...32kHz (effective)	
V/Hz ratio	Linear	
Boost	Yes	
Stop mode	Coast/Ramp/DC Brake	
Internal brake transistor	Yes (sizes 2 and 3); External resistor required	
Capacity	100% Drive Rated Power continuously	
Skip frequency	One point, adjustable frequency band	
Frequency setpoint control	0...10V DC 20...4mA 4...20mA Digital–Keypad Modbus	
Preset speeds	4	
PI control	Yes	
Spin start	Yes	
Acceleration	0...600 secs	
Deceleration	(2 ramps) 0...600 secs	
Programmable I/O	Input 1, Input 2	Programmable Digital Input
	Input 3, Input 4	User-selectable Analogue / Digital Input
	Output 1	Programmable Analogue / Digital Output
	Relay 1	Relay Output (30V DC 5A, 250V AC, 6A)
	Keypad Display	Operating display
	Remote mount	Optional Optoport E2 remote mounting keypad
Protective Functions	Inverter trip	Over voltage, over current, under voltage, external trip, motor overload, over temperature, short circuited, earth fault
	Memory	Last 4 trips stored
Bus Communication	Modbus RTU	Standard
	Profibus DP	via Gateway
	DeviceNet	via Gateway
	RS485 (Optibus)	Standard
Compliance	EN 61800-3:2004	Adjustable speed electrical power drive systems. EMC requirements.

