



**KEL-TECH**  
ELECTRIC CANADA LTD 

# OPTIDRIVE IP66 / NEMA 4X

## High Pressure Wash Down Duty

AC Variable Speed Drive  
0.5HP -1.5HP

110/120V single phase input  
230V Three phase output

### The ultimate drive for harsh environments

Ready for high-pressure washdown, the cost-effective Ip66 / Nema 4X Optidrives can be mounted directly on your processing equipment



### 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.
- Modbus RTU onboard allows simple control and integration with a wide range of PLC's and MMI's.
- Keypad control with;
  - Manual or Digital speed control
  - FWD / REV Switch
  - On/Off power switch with locking feature

#### Industry Sectors

- Food Processing
- Bottling
- Pumping
- Chemical
- Waste Water
- HVAC
- Conveyors



### OPTISTICK

For fast accurate repeat drive programming

Simply insert Optistick into the Rj45 slot on the inside panel of the Optidrive Ip66:

- Upload/Download buttons allow for fast copying of parameters between drives
- Infa red communications capability provides remote control convenience
- Can be programmed with PDA or Smart phone



Specification		OPTIDRIVE I55
Output ratings	Overload Capacity	150% for 60 secs 175% for 2 secs
	Frequency	0...500Hz
Input Ratings	Frequency	48 - 62Hz
	Voltage	110 - 115 + / - 10% 1 Phase (0.5 - 1.5HP)
Ambient Conditions	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
Programming	Keypad	Yes
	PC	Yes
	PDA	Yes
	Smartphone	Yes
Control Specification	Control Method	Voltage Vector
	PWM Frequency	4...32kHz (effective)
	V/Hz ratio	Linear
	Boost	Yes
	Stop Mode	Coast / Ramp / DC Brake
	Capacity	100% Drive Rated Power continuously
	Skip Frequency	One Point, adjustable frequency band
	Frequency setpoint control	0...10 VDC 20...4mA / 4...20mA Digital - Keypad ModBus
	Pre-set speeds	4
	PI Control	Yes
	Spin Start	Yes
	Acceleration	0..600 sec
	Deceleration	(2ramps) 0..600 sec
	Programmable I/O	Input 1
Input 2		Programmable Digital Input
Input 3		User Selectable Analog / Digital Input
Input 4		User Selectable Analog / Digital Input
Output 1		Programmable Analog / Digital Output
Relay 1		Relay Output (30 Vdc 5A, 250 VAC, 6A)
Keypad Display	Operating Display	Output Frequency, Current, RPM, and User scalable values
	Remote mount	Optional Optoport E2 remote mounting keypad
Protective Functions	Inverter Trip	Over Volatage, 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

Size 1



Size	Length (in)	Width (in)	Depth (in)	Weight (lbs)
1	9.13	6.34	6.89	6.2
2	10.1	7.40	7.36	10.1

### Ratings Explained:

#### **IP66**

An IP number contains two numbers (i.e Ip66) in most instances, which relates to the level of protection provided by an enclosure or housing

The first number related to protection from solids as follows:

6 - Dust tight.

The second number relates to the protection from liquids as follows:

6 - Protection against powerful jets of water

#### **NEMA 4X**

Enclosures constructed for indoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, windblown dust, splashing water, and hose-directed water.

Enclosure is protected against corrosion.

110-120V	HP	Output Current (A)	Frame Size
ODE-2-11005-1H01Y	0.5	2.3	1
ODE-2-11010-1H01Y	1	4.3	1
ODE-2-21015-1H04Y	1.5	5.8	2

\* 575V available soon