

ODE-3-120043-1F12-01

Optidrive E3 Single Phase VFD Datasheet

0.37 kW (0.5 HP), 4.3 A, 200-240 V, 1PH
IP20 Variable Frequency Drive with EMC Filter



Input Ratings

| | |
|-----------------------------|-----------|
| Supply Voltage | 200-240 V |
| Input Phases | 1 |
| Supply Current Continuous | 6 A |
| Supply Fuse or MCB (Type B) | 10 A |

Output Ratings

| | |
|---------------------|--------------------|
| Motor Output Rating | 0.37 kW (0.5 HP) |
| Output Voltage | 0 – Supply Voltage |
| Output Current | 4.3 A |

Cable Information

| | |
|------------------------|--------------------------------|
| Max Supply Cable Size | 8 mm ² (0.01 sq in) |
| Max Motor Cable Size | 8 mm ² (0.01 sq in) |
| Max Motor Cable Length | 100 m (328 ft) |

Factory Build Options

| | |
|------------------|------------------------------|
| EMC Filter | Internal EMC Filter |
| Brake Transistor | No Internal Brake Transistor |
| Enclosure | IP20 |
| Display | LED |
| PCB Coating | - |

Dimensions

| | |
|---------|------------------|
| Size | 1 |
| Height | 173 mm (6.81 in) |
| Width | 83 mm (3.27 in) |
| Depth | 123 mm (4.84 in) |
| Weight | 1 kg (2.2 lbs) |
| Fixings | 4 x M5 |

Packaged Dimensions

| | |
|--------|-------------------|
| Height | 165 mm (6.5 in) |
| Width | 125 mm (4.92 in) |
| Depth | 235 mm (9.25 in) |
| Weight | 1.2 kg (2.65 lbs) |



 **Buy this drive or get more information**
Find your local sales partner on
inverterkdrives.com



OPTIDRIVE™

AC Variable Speed Drive

General Purpose Drive
Easy control for all motor types

Easy to Use



0.37kW–37kW / 0.5HP–50HP
110–480V Single & 3 Phase Input

IP20

IP66

Easy to Use

General Purpose Drive

Focused on ease of use, **Optidrive E3** provides unrivalled simplicity of installation, connection and commissioning, allowing the user to benefit from precise motor control and energy savings within minutes.



Simple Commissioning

With just 14 basic parameters and application macro functions providing rapid set up, Optidrive E3 minimises start-up time.



Intuitive Keypad Control

Precise digital control at the touch of a button.



Application Macros

Switch between **Industrial, Pump & Fan** modes to optimise Optidrive E3 for your application.

Industrial | Pump | Fan

See **Page 6**

IP20

Up to 37kW

- ✓ Easy to use
- ✓ Compact & robust

See **Page 4**

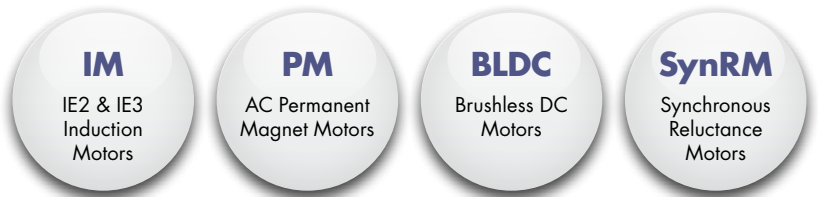


Take a closer look at the stunning Optidrive E3



www.invertekdrives.com/optidrive-e3

Sensorless Vector Control for all Motor Types



Precise and reliable control for **IE2, IE3 & IE4 motors**

IP66

Up to 22kW

- ✓ Outdoor rated
- ✓ Dust-tight
- ✓ Washdown ready

See **Page 5**



Key Features

- ✓ Internal Category C1 EMC filter
- ✓ Internal PI control
- ✓ Internal brake chopper
- ✓ Dual analogue inputs
- ✓ Operates up to 50°C
- ✓ Bluetooth connectivity
- ✓ Option for control of single phase motors (see **Page 8**)

Modbus RTU
CAN

on-board as standard

Internal Category C1 EMC Filter

An internal filter in every Optidrive E3 saves cost and time for installation.

Cat C1 according to EN61800-3:2004



OPTIDRIVE™

IP20 Up to 37kW

Compact, robust and reliable general purpose drive for panel mounting

Simple Installation
DIN rail and keyhole mounting options

Fast Connection
5mm rising clamp terminals with captive screws


Quick Reference
Integrated help card

Operates up to 50°C

Modbus RTU
CAN

on-board as standard

Incredibly Easy to Use

- ✓ Built in PI control, EMC filter (C1) & brake chopper
- ✓ Application macros for industrial, fan and pump operation
- ✓  Bluetooth® connectivity

Optistick Smart
Rapid commissioning tool

See Page 10



Dual analogue inputs

Motor supply connects at base

Controls Multiple Motor Types

- ✓ IE2, 3 & 4
- ✓ IM, PM, BLDC and SynRM

Simply Power Up

Optidrive E3 provides precise motor control and energy savings using the factory settings. Simply power up and the drive can immediately deliver energy savings.

14 basic parameters allow simple adjustment for your application if required, with up to 50 parameters available in total for a highly flexible performance.

5 sizes cover global supply ratings



OPTIDRIVE™ E³

IP66 Outdoor

Up to 22kW

Coated Heatsink as Standard

Ideal for hygiene based operations requiring washdown — such as food and beverage

Outdoor rated enclosed drives for direct machine mounting, dust tight and ready for washdown duty



Locally customisable
Flat front to terminal cover with mounting points for switches and an internal PCB.

Switched or non-switched

Conformal coating as standard



- 1** 2 x RJ45 ports
eliminate the need for a splitter.
- 2** Easily accessible EMC disconnect
- 3** Easy to wire
due to the large, accessible chamber and removeable gland plate.

IP66/Nema 4X outdoor rated

Built with tough polycarbonate plastics specifically chosen to withstand degradation by ultra violet (UV), greases, oils and acids. Also robust enough not to be brittle at -20°C.

Dust-Tight Design

Install directly on your processing equipment and be sure of protection from dust and contaminants.

Washdown Ready

With a sealed ABS enclosure and corrosion resistant heatsink, the Optidrive E3 IP66 is ideal for high-pressure washdown applications.

Switched models

Simply wire up the drive, turn the inbuilt potentiometer and the motor will start running – allowing immediate energy savings.

Saving energy cannot be easier than this!

For ultimate ease of use

- Local Speed Potentiometer
- Run Reverse / Off / Run Forward Switch
- Lockable Mains Disconnect / Isolator



Application Macros

Switch modes at the touch of a button to optimise Optidrive E3 for your application

Single parameter application macro selection



Industrial Mode

Industrial Mode optimises Optidrive E3 for load characteristics of typical industrial applications.

Applications include:

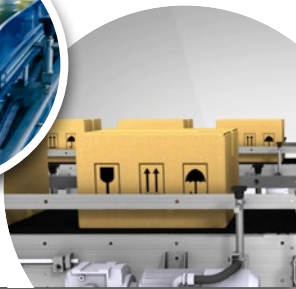
- ✓ Conveyors
- ✓ Mixers
- ✓ Treadmills

Sensorless Vector provides high starting torque and excellent speed regulation

IP20 panel mount units or **IP66** for direct machine mounting



Rapid parameter cloning using **OPTISTICK Smart**



Pump Mode

Pump Mode makes energy efficient pump control easier than ever.

Applications include:

- ✓ Dosing Pumps
- ✓ Borehole Pumps
- ✓ Transfer Pumps
- ✓ Swimming Pools
- ✓ Spas
- ✓ Fountains

- Constant or variable torque
- Internal PI control



Fan Mode

Fan Mode (inc. fire operation) makes air handling a breeze, ideal for simple HVAC systems.

Applications include:

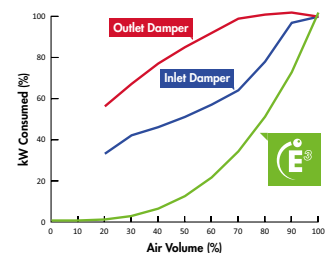
- ✓ Air Handling Units
- ✓ Ventilation Fans
- ✓ Circulating Fans
- ✓ Air Curtains
- ✓ Kitchen Extract



- High efficiency **variable torque** motor control
- Flying start capability
- Mains loss ride through
- PI control

Instant Power Savings

The graph below shows the incredible efficiency of Optidrive E3 for controlling airflow compared to traditional damper control methods.



Modbus RTU CAN

on-board as standard

How much energy could you save?

Estimate potential energy savings, CO₂ emissions and financial savings for your application with the Inverter Drives **Energy Savings Calculator** app.



www.invertekdrives.com/calculator

| | 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 | 18 | 3 | ODE - 3 - 3 2 0180 - 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 | # | | | | | | |
| | 15 | 20 | 61 | 5 | ODE - 3 - 5 2 0610 - 3 | F | 4 | 2 | | | | | | |
| 18.5 | 25 | 72 | 5 | ODE - 3 - 5 2 0720 - 3 | F | 4 | 2 | | | | | | | |
| 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 | # | | | | | | |
| | 30 | 40 | 61 | 5 | ODE - 3 - 5 4 0610 - 3 | F | 4 | 2 | | | | | | |
| 37 | 50 | 72 | 5 | ODE - 3 - 5 4 0720 - 3 | F | 4 | 2 | | | | | | | |

Replace # in model code with colour-coded option

Enclosure Types

A **IP66 Outdoor Use Non-switched**

B **IP66 Outdoor Use Switched**

2 **IP20**

EMC Filter

- F** Internal EMC Filter
- 0** No Internal EMC Filter

IP20

| Size | 1 | 2 | 3 | 4 | 5 |
|-----------|------|------|------|------|------|
| mm Height | 173 | 221 | 261 | 420 | 486 |
| mm Width | 83 | 110 | 131 | 171 | 222 |
| mm Depth | 123 | 150 | 175 | 212 | 226 |
| kg Weight | 1.0 | 1.7 | 3.2 | 9.1 | 18.1 |
| Fixings | 4xM5 | 4xM5 | 4xM5 | 4xM8 | 4xM8 |

IP66

| Size | 1 | 2 | 3 | 4 |
|-----------|------|------|------|------|
| mm Height | 232 | 257 | 310 | 360 |
| mm Width | 161 | 188 | 211 | 240 |
| mm Depth | 162 | 182 | 235 | 271 |
| kg Weight | 2.3 | 3.5 | 6.6 | 9.5 |
| Fixings | 4xM4 | 4xM4 | 4xM4 | 4xM4 |

Drive Specification

| | | | | | | | | | | |
|--------------------|---------------------------|--|---------------------------|--|---|---|--|--|---|--|
| Input Ratings | Supply Voltage | 110 – 115V ± 10% 200 – 240V ± 10% 380 – 480V ± 10% | Programming | Keypad | Built-in keypad as standard Optional remote mountable keypad | I/O Specification | Power Supply | 24 Volt DC, 100mA, Short Circuit Protected 10 Volt DC, 10mA for Potentiometer | | |
| | Supply Frequency | 48 – 62Hz | | Display | 7 Segment LED | | Programmable Inputs | 4 Total 2 Digital 2 Analog / Digital selectable | | |
| | Displacement Power Factor | > 0.98 | | PC | OptiTools Studio | | Digital Inputs | 8 – 30 Volt DC, internal or external supply Response time < 4ms | | |
| | Phase Imbalance | 3% Maximum allowed | | Control Specification | Control Method | | Sensorless Vector Speed Control PM Vector Control BLDC Control Synchronous Reluctance | Analog Inputs | Resolution: 12 bits Response time: < 4ms Accuracy: ± 2% full scale Parameter adjustable scaling and offset | |
| | Inrush Current | < rated current | | | PWM Frequency | | 4–32kHz Effective | Programmable Outputs | 2 Total 1 Analog / Digital 1 Relay | |
| | Power Cycles | 120 per hour maximum, evenly spaced | | | Stopping Mode | | Ramp to stop: User Adjustable 0.1–600 secs Coast to stop | Relay Outputs | Maximum Voltage: 250 VAC, 30 VDC Switching Current Capacity: 6A AC, 5A DC | |
| 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: 0.37–18.5kW (0.5–25HP) 400V 3 Ph Input: 0.75–37kW 460V 3 Ph Input: 1–50HP | Braking | Motor Flux Braking Built-in braking transistor (not frame size 1) | Skip Frequency | Single point, user adjustable | Analog Outputs | 0 to 10 Volt 0 to 0 Volts 0 to 20mA 20 to 0mA 4 to 20mA 20 to 4mA | | |
| | Overload Capacity | 150% for 60 Seconds 175% for 2.5 seconds | | Setpoint Control | | | | | Analog Signal | Motorised Potentiometer (Keypad) Modbus RTU CANopen EtherNet/IP |
| | Output Frequency | 0 – 500Hz, 0.1Hz resolution | | | | | | | Digital | |
| | Acceleration Time | 0.01 – 600 seconds | Fieldbus | | Built-in | CANopen 125–1000 kbps Modbus RTU 9.6–115.2 kbps selectable | | | | |
| | Deceleration Time | 0.01 – 600 seconds | | Application Features | PI Control | Internal PI Controller Standby / Sleep Function | | | | |
| | Typical Efficiency | > 98% | | | Fire Mode | Bidirectional Selectable Speed Setpoint (Fixed / PI / Analog / Fieldbus) | | | | |
| Ambient Conditions | Temperature | Storage: –40 to 60°C Operating: –20 to 50°C | Maintenance & Diagnostics | | Fault Memory | Last 4 Trips stored with time stamp | | | | |
| | Altitude | Up to 1000m ASL without derating Up to 2000m maximum UL approved Up to 4000m maximum (non UL) | | Data Logging | Logging of data prior to trip for diagnostic purposes: Output Current Drive Temperature DC Bus Voltage | | | | | |
| | Humidity | 95% Max, non condensing | | Monitoring | Hours Run Meter | | | | | |
| Enclosure | Ingress Protection | IP20, IP66 | Standards Compliance | Low Voltage Directive | Adjustable speed electrical power drive systems. EMC requirements | | | | | |
| | Vibration | Conforms to EN61800-5-1 | | EMC Directive | 2014/30/EU Cat C1 according to EN61800-3:2004 | | | | | |
| | | | | Machinery Directive | 2006/42/EC | | | | | |
| | | | Conformance | CE, UL, RCM | | | | | | |
| | | | Environmental Class | Conformal Coated PCBs. Suitable for use in the following environments: IP20: 3C2, 3S2 IP66: 3C3, 3S3 | | | | | | |

OPTIDRIVE™

For Single Phase Motors



IP20

IP66

Up to 1.1kW

Single Phase Motor Control for PSC & Shaded-Pole Motors

Key Features

- ✓ 110–115V and 200–240V models
- ✓ Small mechanical envelope
- ✓ Rugged industrial operation
- ✓ Fast setup, and simple operation with 14 basic parameters
- ✓ Unique motor control strategy optimised for single phase motors
- ✓ Motor current and rpm indication
- ✓ Built in PI control, EMC filter (C1) & brake chopper
- ✓ Application macros for industrial, fan and pump operation
- ✓ Bluetooth® connectivity

Modbus RTU
CAN

on-board as standard

150% overload for 60 secs
(175% for 2 secs)



Pump control in swimming pools & spas



Simple airflow control

Dedicated to Single Phase Motor Control

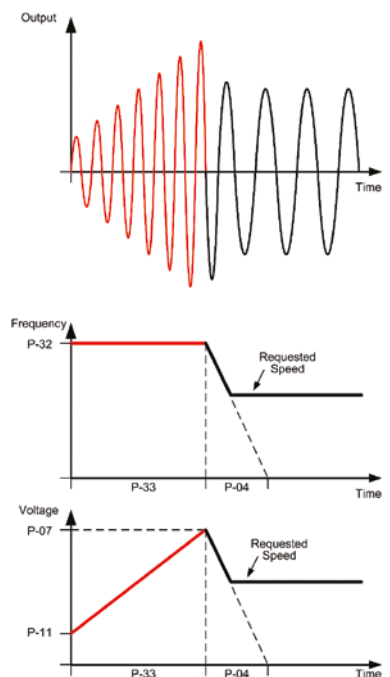
Designed to be cost effective and easy to use, the Optidrive E3 for Single Phase Motors is for use with PSC (Permanent Split Capacitor) or Shaded-Pole Single Phase induction motors.

Optidrive E3 for Single Phase Motors uses a revolutionary motor control strategy to achieve reliable intelligent starting of single phase motors.

- Removes the need for 3 phase supply wiring
- Provides the same performance features as the 3 phase Optidrive E3
- The ideal energy saving solution where high starting torque is not required — typically including fans, blowers, centrifugal pumps, fume extractors and air flow controllers

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.



OPTIDRIVE™ E³

For Single Phase Motors

| Model Code | Product Family | Generation | Frame Size | Voltage Code | Capacity | Supply Phases | EMC Filter | Brake Transistor | Enclosure Type | Single Phase Output |
|---------------------------------|----------------|------------|------------|--------------|------------------------|---------------|------------|------------------|----------------|---------------------|
| 110-115V ± 10% 1 Phase Input | 0.37 | 0.5 | 7 | 1 | ODE - 3 - 1 1 0070 - 1 | # 1 | # - | 01 | | |
| | 0.55 | 0.75 | 10.5 | 2 | ODE - 3 - 2 1 0105 - 1 | # 4 | # - | 01 | | |
| 200-240V ± 10% 1 Phase Input | 0.37 | 0.5 | 4.3 | 1 | ODE - 3 - 1 2 0043 - 1 | # 1 | # - | 01 | | |
| | 0.75 | 1 | 7 | 1 | ODE - 3 - 1 2 0070 - 1 | # 1 | # - | 01 | | |
| | 1.1 | 1.5 | 10.5 | 2 | ODE - 3 - 2 2 0105 - 1 | # 4 | # - | 01 | | |

Replace # in model code with colour-coded option

Enclosure Types



IP20

| Size | 1 | 2 |
|-----------|------|------|
| mm Height | 173 | 221 |
| mm Width | 83 | 110 |
| mm Depth | 123 | 150 |
| kg Weight | 1.0 | 1.7 |
| Fixings | 4xM5 | 4xM5 |

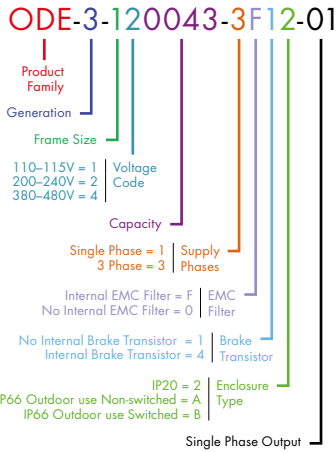
IP66

| Size | 1 | 2 |
|-----------|------|------|
| mm Height | 232 | 257 |
| mm Width | 161 | 188 |
| mm Depth | 162 | 182 |
| kg Weight | 2.3 | 3.5 |
| Fixings | 4xM4 | 4xM4 |

EMC Filter

| | |
|---|------------------------|
| F | Internal EMC Filter |
| 0 | No Internal EMC Filter |

Model Code Guide:



Drive Specification

| | | | | | | | | | | | |
|--------------------|---|--------------------------------------|--|----------------|--|--|---|---|---|--|--|
| Input Ratings | Supply Voltage | 110 – 115V ± 10% 200 – 240V ± 10% | Control Specification | Control Method | V/F Voltage Energy Optimised V/F | Application Features | PI Control | Internal PI Controller Standby / Sleep Function | | | |
| | Supply Frequency | 48 – 62Hz | | PWM Frequency | 4–32kHz Effective | | Fire Mode | 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 (frame size 2) | | | 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 | | Output Ratings | 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 Compliance | Low Voltage Directive | Adjustable speed electrical power drive systems. EMC requirements |
| Overload Capacity | 150% for 60 Seconds 175% for 2.5 seconds | Digital | Motorised Potentiometer (Keypad) Modbus RTU CANopen EtherNet/IP | | | EMC Directive | 2014/30/EU 230V 1Ph. Filtered Units : Cat C1 according to EN61800-3:2004 | | | | |
| Output Frequency | 0 – 500Hz, 0.1Hz resolution | Fieldbus | Built-in | | | CANopen | 125–1000 kbps | Machinery Directive | | 2006/42/EC | |
| Acceleration Time | 0.01 – 600 seconds | | | | Modbus RTU | 9.6–115.2 kbps selectable | Conformance | CE, UL, RCM | | | |
| Deceleration Time | 0.01 – 600 seconds | | I/O Specification | | Power Supply | 24 Volt DC, 100mA, Short Circuit Protected 10 Volt DC, 10mA for Potentiometer | Environmental Class | Environmental Class | | Conformal Coated PCBs. Suitable for use in the following environments: IP20: 3C2, 3S2 IP66: 3C3, 3S3 | |
| Typical Efficiency | > 98% | Programmable Inputs | | | 4 Total 2 Digital 2 Analog / Digital selectable | Ambient Conditions | | Temperature | | Storage: –40 to 60°C Operating: –20 to 50°C | |
| Enclosure | Ingress Protection | | | IP20, IP66 | Digital Inputs | | | 8 – 30 Volt DC, internal or external supply Response time < 4ms | Altitude | Up to 1000m ASL without derating Up to 2000m maximum UL approved Up to 4000m maximum (non UL) | |
| | | Analog Inputs | | | | | | Resolution: 12 bits Response time: < 4ms Accuracy: ± 2% full scale Parameter adjustable scaling and offset | Humidity | 95% Max, non condensing | |
| | | | | | Programmable Outputs | | | 2 Total 1 Analog / Digital 1 Relay | Relay Outputs | Maximum Voltage: 250 VAC, 30 VDC Switching Current Capacity: 6A AC, 5A DC | Vibration |
| | | Programming | | | | | | Keypad | | Built-in keypad as standard Optional remote mountable keypad | PC |

Options & Accessories

Optistick Smart



Optistick Smart **OPT-3-STICK-IN**
Rapid Commissioning Tool

- Allows copying, backup and restore of drive parameters
- Provides Bluetooth interface to a PC running OptiTools Studio or the OptiTools Mobile app on a smartphone
- Onboard NFC (Near Field Communication) for rapid data transfer

Remote Keypads



Optipad **OPT-3-OPPAD-IN**
Remote Keypad & TFT Display

Optiport 2 **OPT-2-OPORT-IN**
Remote Keypad & LED Display

RJ45 Accessories



Ideal for simple and fast connection of Modbus RTU/CAN networks

- OPT-J4505-IN** RJ45 Cable 0.5m
- OPT-J4510-IN** RJ45 Cable 1.0m
- OPT-J4530-IN** RJ45 Cable 3.0m
- OPT-J455P-IN** RS485 3 Way Data Cable Splitter RJ45

EtherNet Module



EtherNet Module **OPT-2-ETHEG-IN**

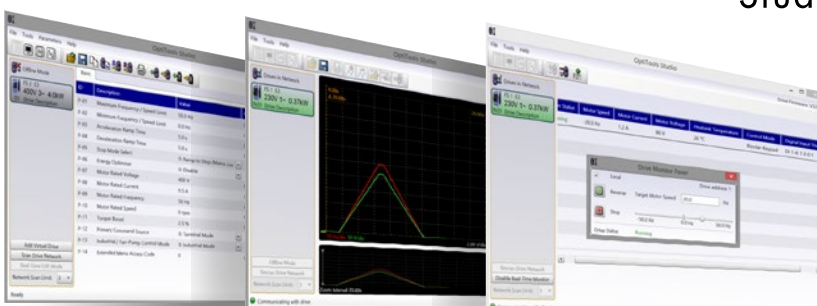
- ODVA compliant EtherNet/IP Modbus Translator Device
- Compatible with all drive platforms: P2, E3 & Eco
- Integrated network switch: simplifying network architecture
- Compatible with RSLogix and CoDeSys PLCs

External EMC Filters, Input Chokes & Output Filters are available

See www.invertekdrives.com for details



OptiTools Studio



Drive commissioning and parameter backup

- Real-time parameter editing
- Drive network communication
- Parameter upload, download and storage
- Simple PLC function programming
- Real-time scope function and data logging
- Real-time data monitoring

Compatible with:
Windows Vista & Windows 7, Windows 8, Windows 8.1 & Windows 10

Proven Worldwide in Low Power Applications



Cooling loop for solar energy research
Solar Tech Lab, Italy

Chain wax development for Team Sky cycling team
Muc-Off, UK

Business-critical climate control for commercial horticulturist
Hatziminas Flowers, Greece

Chilled water pump control predicted to save AED 12385 per year
Al Jahili Fort, UAE

Efficient water circulation gives energy savings of 60% per annum
Leisure World, Australia

Pallet handling in **UK**

Olive oil decanting in **Greece**

Seed processing in **Netherlands**

Pizza making in **Belgium**

Chamfering machines in **Italy**

Machine tool OEM in **UK**

Chemical fume removal in **Singapore**

Sawmill optimisation in **UK**

Precision polishing in **Switzerland**

See www.inverterdrives.com/solutions for full case studies



Optidrive E3

✓ Low Power Applications

Dedicated to low power applications, Optidrive E3 combines innovative technology, reliability, robustness and ease of use in a range of compact IP20 & IP66 enclosures.

✓ Simple Commissioning

14 parameter basic setup. Default settings suitable for most applications. Contactor style connection for simple wiring.

✓ Optidrive E3 IP66

Environmentally protected, IP66 rated models can be mounted directly on your processing equipment.



✓ Washdown Ready

With a sealed ABS enclosure and corrosion resistant heatsink, Optidrive E3 IP66 models are ideal for high-pressure washdown applications.

✓ On-drive Control

IP66 models feature optional, convenient controls for speed control, REV/OFF/FWD and Power ON/OFF, complete with safety lock.

✓ Single Phase Motor Control

Optidrive E3 for Single Phase Motors provides accurate speed control of single phase PSC or shaded pole motors. Special boost phase ensures reliable starting, initially ramping the motor voltage up to rated voltage whilst maintaining a fixed starting frequency, before reducing the frequency and voltage to the desired operating point.



About Invertek Drives

- ✓ Sales, service & application support in over 80 countries
- ✓ World-class production, innovation & training facilities at UK headquarters
- ✓ Global assembly cells controlled by cloud-based manufacturing database
- ✓ ISO 14001 environmental & ISO 9001 quality management systems



www.invertekdrives.com/optidrive-e3

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