

## OPTIDRIVE E

*Easy to use, low power, low cost*

AC Variable Speed Drive 0.37- 4.0kW

Rich in features the Optidrive E is the most commercially competitive Optidrive in the Optidrive family.

Innovative and compact the Optidrive E range combines good looks with robustness, reliability and easy to use performance.

The product is dedicated to low power applications where total costs are ultra-competitive, including:

- Competitive purchase price
- Low installation costs
- Low commissioning costs
- Low technical support costs

Optidrive E has only 14 standard parameters to adjust in its basic form, thus Optidrive's legendary ease of use could not be easier or quicker to get started with.

Optidrive E can be supplied with or without an internal rfi filter.

### Key Benefits

- Small mechanical envelope
- Rugged industrial 50°C ambient rating for hot and tough applications
- Simple mechanical & electrical installation
- Simple operation, powerful features easy to use
- Fast setup, factory default settings ok for most applications, only 14 basic parameters (40 max)
- Motor current and rpm indication
- Debugging using troubleshooting & P-00
- 150% overload for 60 secs (175% for 2 secs)
- Keypad control
- Integral RFI filter option



### Key Physical Features

- Easy access key slots for simple installation
- Easy access contactor style power terminals for intuitive easy wiring
- Help card for basic parameter description and terminal layout
- Easy to use keypad with bright LED display
- IP20
- 5mm pitch, rising clamp control terminals

### Key Control I/O Features

- Programmable I/O for flexible control
- Analogue input 12 bit resolution for accuracy
- Positive logic digital inputs (active high)
- Galvanically isolated and short circuit proof

### Key Programming Features

- Silent motor running with 32kHz ultra-quiet switching
- 4 preset speeds
- "DC Injection" braking on enable to stop free wheeling motors
- Mains dip ride through
- Skip frequencies
- Last 4 trips stored
- Parameter lock
- Hours run meter
- Speed scaling factor for master- slave arrangements
- Emergency (fast) stop function



# ELECTRICAL DATA

## OPTIDRIVE E & EF (INTEGRAL RFI FILTER) SIZE 1

Model	ODE/ ODEF-xxxx-IN	12037	12075	12150	14075	14150
Motor output rating	kW	0.37	0.75	1.5	0.75	1.5
Model	ODE/ ODEF-xxxx-USA	12005	12010	12020	14010	14020
Motor output rating	HP	0.5	1.0	2.0	1.0	2.0
Supply voltage/ phases	V +/- 10%	220-240/ 1Ø			380-480/ 3Ø	
Supply fuse or MCB rating	A	10	10	20	5	10
Output voltage/ phases	V	0-240/ 3Ø			0-480/ 3Ø	
Output current	A	2.3	4.3	7.0	2.2	4.1
Max motor cable length	m	25			25	

## OPTIDRIVE E & EF (INTEGRAL RFI FILTER) SIZE 2

Model	ODE/ ODEF-xxxx-IN	22220	24220	24400
Motor output rating	kW	2.2	2.2	4
Model	ODE/ ODEF-xxxx-USA	22030	24030	24050
Motor output rating	HP	3.0	3.0	5.0
Supply voltage/ phases	V +/- 10%	220-240/ 1Ø	380-480/ 3Ø	
Supply fuse or MCB rating	A	30	10	16
Output voltage/ phases	V +/- 10%	0-240/ 3Ø	0-480/ 3Ø	
Output current	A	10.5	5.8	9.5
Max motor cable length	m	100		

## OPTIDRIVE E “VOLTAGE DOUBLER” SIZE 1 & 2 (-USA/ HP ONLY)

Model	ODE-xxxx-USA	11005	21010	21015
Motor output rating	HP	0.5	1.0	1.5
Frame size		1	2	
Supply voltage/ phases	V +/- 10%	110-115/ 1Ø		
Supply fuse or MCB rating	A	20	20	30
Output voltage/ phases	V	0-230/ 3Ø		
Output current	A	2.3	4.3	5.8
Max motor cable length	m	25	100	

## OPTIDRIVE DIMENSIONS

	Size 1	Size 2
Length / mm	155	260
Width / mm	80	100
Depth / mm	130	175
Weight/ kg	1.1	2.6
Fixings	2 * M4	
Power terminal torque settings	1 Nm	1 Nm
Control terminal torque settings	0.5 Nm	0.5 Nm

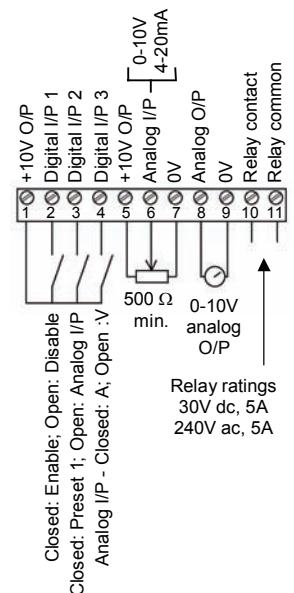
## ENCLOSURE - NON VENTED DIMENSIONS (mm)

DRIVE POWER RATING	SEALED UNIT		
	W	H	D
Size 1 0.37kW 200V	200	250	200
Size 1 0.75kW 200V / 400V	250	300	200
Size 1 1.5kW 200V / 400V	300	400	250
Size 2 2.2kW 400V	300	400	300
Size 2 2.2kW 200V / 4.0kW 400V	450	600	300

## ENCLOSURE – VENTED DIMENSIONS (mm)

DRIVE POWER RATING	VENTED UNIT			FORCE VENTED (WITH FAN)			
	W	H	D	W	H	D	Air Flow
Size 1 All ratings	300	400	150	200	300	150	> 15m³ / h
Size 2 All ratings	400	600	250	200	400	250	> 45m³ / h

## Control Terminal Arrangement (default)



## SPECIFICATION

- Supply frequency 48 to 62 Hz
- Max. permissible 3-phase supply imbalance 3%
- Max. ambient temperature 50 °C
- Max. altitude 2000 m
- Derate above 1000 m, 1% / 100 m
- Derate output current 5%/°C above max. ambient temp up to 50°C
- I x t protection above 100% output current
- 150% overload protection for 60 sec
- 175% overload allowable for 2 sec
- Storage temperature -40 to +60 °C
- Options:
  - Optifilter
  - Input Chokes & Output Filters
  - 2ANIN, dual analogue input
  - 2ROUT, dual relay output
  - PICON, feedback control (PI)
  - HVACO, HVAC relay output