

# NFO Drives PWM

## Energy Efficient Fan & Pump Control



- AC Induction (IM) Motors
- AC Permanent Magnet (PM) Motors
- Brushless DC (BLDC) Motors
- Synchronous Reluctance (SynRM) Motors
- Safe Torque off (STO) as standard

### Serial communication as standard:

- RS-485 Communication
- Modbus RTU
- BACnet MSTP

## HVAC

### Energy Efficient Air Handling

Creating comfortable building environments without high energy costs

### Stairwell Pressurisation

Stairwell (escape route) pressurisation systems are being extensively employed in large buildings and complexes to help ensure the safe evacuation of occupants during a fire.

### Fume Extraction

Many buildings now incorporate dedicated smoke management and extraction systems designed to safely extract smoke in the event of a fire.

### Fire Override

Fire override mode ignores signals and alarms, keeping the Optidrive Eco HVAC operating for as long as possible.

## PUMP CONTROL

- All drives operate at variable speed for maximum energy efficiency.
- Operating time (Hours Run) is automatically balanced and duty pumps rotated
- Automatic system reconfiguration in the event of a pump fault (including the master pump).
- Continued system operation when drives are individually powered off (including the master drive).

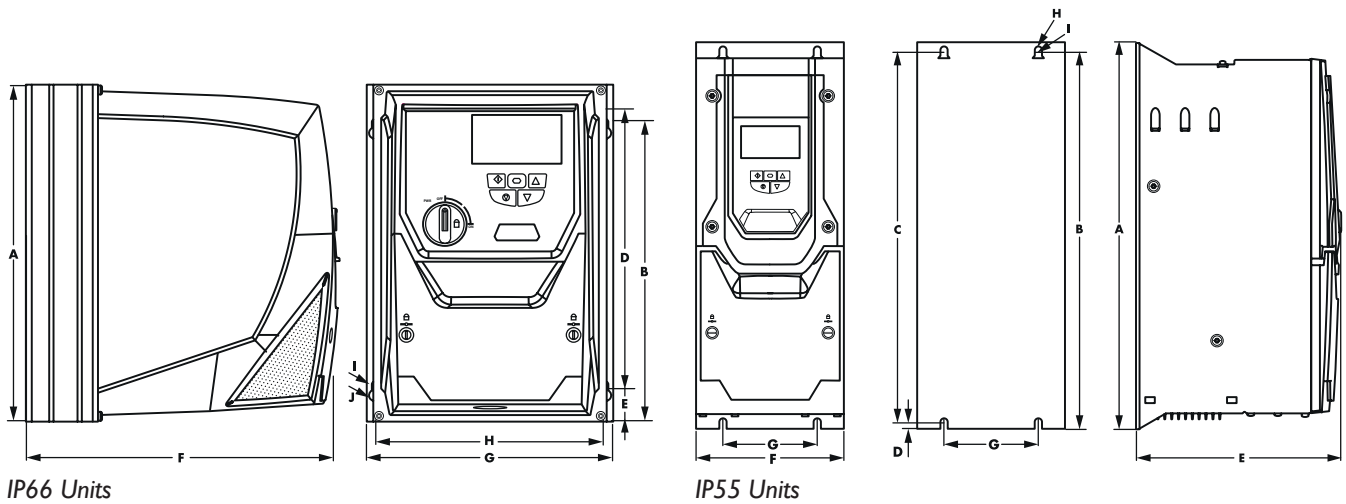
- Communication and +24V control voltage shared between drives via a standard RJ45 patch lead.
- Independent maintenance indicators for each pump.
- Any pump can be switched to Hand operation at the touch of a button, and will automatically rejoin the network when switched back to Auto.
- For waste water applications each pump can be set for blockage/ragging detection and activate an automatic de-ragging/pump cleaning cycle.
- Optional mains isolator with lock-off for safe pump maintenance.
- Optiflow function configured through simple parameter set-up and intelligent drive self configuration.



## OPTIONAL FIELDBUS INTERFACES

- Bacnet/IP
- PROFIBUS DP
- DeviceNet
- EtherNet/IP
- Modbus TCP
- PROFINET
- EtherCAT





IP66 Units

IP55 Units

### IP66 ENCLOSED UNITS, 380 – 480 Volt, 3 Phase Input

Non Switched	Frame	kW	HP	Amps	Low Harmonic
NFO5B5D3220D	2A	0.75	1	2.2	Yes
NFO5B5D3410D	2A	1.5	2	4.1	Yes
NFO5B5D3580D	2A	2.2	3	5.8	Yes
NFO5B5D3950D	2B	4	5	9.5	Yes
NFO5C5D3141D	3	5.5	7.5	14	Yes
NFO5C5D3181D	3	7.5	10	18	Yes
NFO5C5D3241D	3	11	15	24	Yes

### IP55 ENCLOSED UNITS, 380 – 480 Volt, 3 Phase Input

Model Code	Frame	kW	HP	Amps	Low Harmonic
NFO5D4D3301D	4	15	20	30	Yes
NFO5D4D3391D	4	18.5	25	39	Yes
NFO5D4D3461D	4	22	30	46	Yes
NFO5E4D3611D	5	30	40	61	Yes
NFO5E4D3721D	5	37	50	72	Yes
NFO5E4D3901D	5	45	60	90	Yes
NFO5F4D3112D	6	55	75	110	No
NFO5F4D3152D	6	75	100	150	No
NFO5F4D3182D	6	90	150	180	No

#### IP66 Units

Drive Size	A	B	D	E	F	G	H	I	J	Weight	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	lb
2	257	220	200	29	239	188	178	4.2	8.5	4.8	10.6
3	310	277	252	33	266	211	200	4.2	8.5	7.7	16.8

#### IP55 Units

Drive Size	A	B	D	E	F	G	H	I	J	Weight	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	lb
4	450	428	433	8	252	171	110	4.25	7.5	11.5	25.4
5	540	515	520	8	270	235	175	4.25	7.5	23	50.7
6	865	830	840	10	330	330	200	5.5	11	55	121.2