Model: V3-540720-3F1N-T

IDA V3 Application Specific Variable Speed Drive

37 kW • 72 A • 380-480 Vac • 3 Phase

IP55 Enclosed with internal EMC filter and TFT Display



Input Ratings

Supply Voltage	**380-480 Vac**
Input Phases	**3 Phase**
Supply Current (Cont.)	**58 A**
Supply Fuse / MCB (Type B)	**80 A**

Output Ratings

Motor Output Rating	**37 kW (50 HP)**
Output Voltage	**0 – 480 V, 3-ph**
Output Current	**72 A**

Cable Information

Max Supply Cable	**35 mm²**
Max Motor Cable	**35 mm²**
Max Motor Cable Length	**100 m (328 ft)**

Factory Build Options

EMC Filter	**Yes**
Brake Transistor	**No**
Enclosure	**IP55 Enclosed**
Display	**TFT Display**
PCB Coating	**Standard**

Control & Communications

Sensorless Vector Control	**Yes**
PM Motor Support	**Yes**
Integrated PLC	**Yes**
PID Control	**Yes**
Standby (Sleep) Mode	**Yes**
Communications	**Modbus RTU**
Safe Torque Off	**Yes**

Drive Dimensions

Frame Size	**Size 5**
Height	**540 mm (21.26 in)**
Width	**235 mm (9.25 in)**
Depth	**270 mm (10.63 in)**
Weight	**23 kg (50.7 lb)**
Fixings	**4 × M8 (see page 2)**

Packaged Dimensions

Height	**360 mm (14.17 in)**
Width	**360 mm (14.17 in)**
Depth	**660 mm (25.98 in)**
Weight	**25 kg (55.1 lb)**

Environmental Ratings

Operating Temperature	**-10°C to 50°C (14°F to 122°F) — IP55/ IP66 UL-approved to 40°C, derated 40-50°C**
Storage Temperature	**-40°C to 60°C (-40°F to 140°F)**
Altitude	**Up to 1000m ASL without derating (4000m max, non-UL)**
Humidity	**95% max, non-condensing**

Certifications & Compliance

EU Directives	**Low Voltage 2014/35/EU, EMC 2014/30/EU, Machinery 2006/42/EC**
Additional Conformance	**CE, UKCA, UL Listed, cUL, RoHS, EAC**
Functional Safety	**TUV Rheinland Functional Safety Type Approved — SIL2/PLd (SIL3/ PLe on IP66)**

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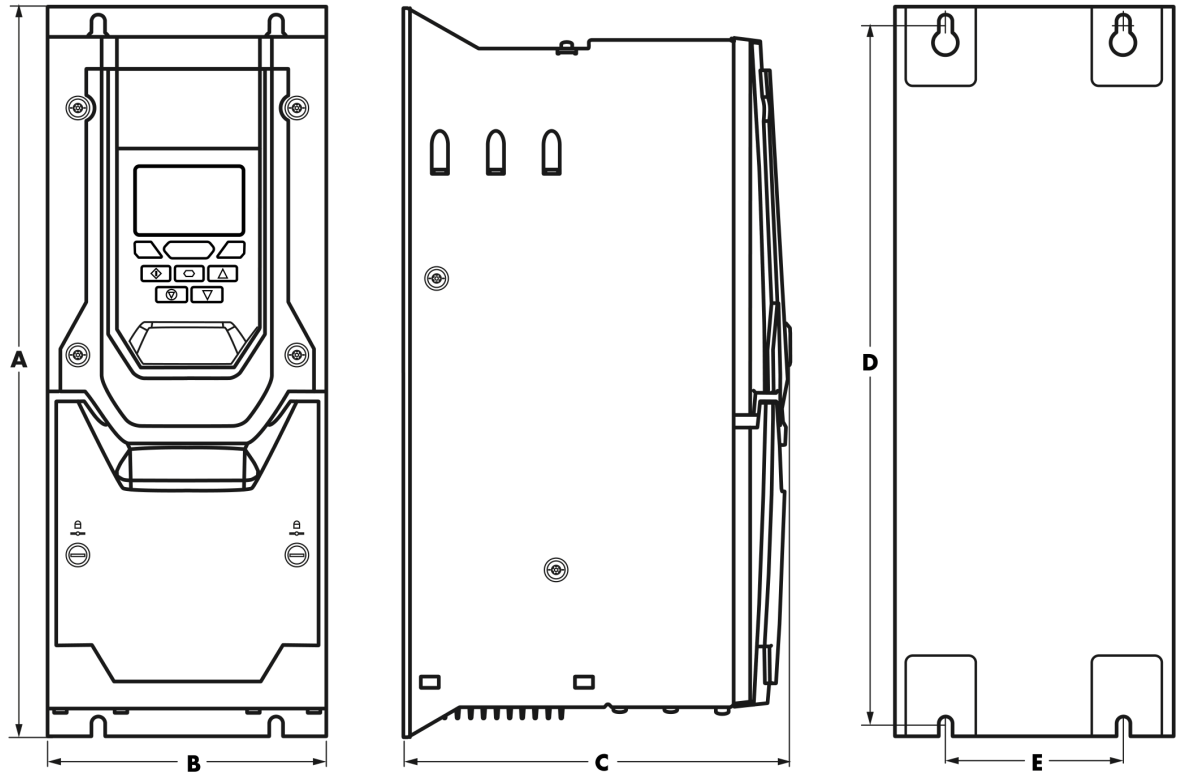
Mounting Details

Size 5 • IP55 Enclosed • 37 kW • 72 A



Dimensions (refer to drawing)

Ref	Dimension	mm	in
A	**Overall height**	**540**	**21.26**
B	**Overall width**	**235**	**9.25**
C	**Overall depth**	**270**	**10.63**
D	**Mounting hole centres, vertical**	**520**	**20.47**
E	**Mounting hole centres, horizontal**	**175**	**6.89**

Mounting & Installation

Item	Value
Mounting bolts	**4 × M8 (5/16 UNF)**
Weight	**23 kg (50.7 lb)**
Clearance above & below	**200 mm (7.9 in) minimum**
Clearance either side	**10 mm (0.394 in) minimum**
Power terminal torque	**4 Nm (35.5 lb-in), rising clamp**
Control terminal torque	**0.5 Nm (4.5 lb-in), rising clamp**
Orientation	**Vertical only, on a flat, flame-resistant, vibration-free surface**

Notes: IP55 units do not need to be fitted inside a control cabinet. The drive is supplied with a plain, undrilled gland plate - remove it from the drive and cut gland holes to suit the cables before fitting. Typical heat loss is approximately 3% of operating load power. Use hand tools only on the terminals.