

## IDDXF54 – HVAC INVERTER THREE PHASE IP54

**DEMAND INDEPENDENT, SWITCHED AND PROPORTIONAL DRIVE – FOR AXIAL AND CENTRIFUGAL FANS**

### FEATURES

- 400V, 2.2-177A, 0.75-90kW 3 Ph
- Designed for HVAC applications i.e. Fire mode, Flying Start...
- Enclosures IP54 (see IDDXF20 for IP20 and IDDXF66 for IP66)
- Asynch and PM motor control. Max shielded cable length 25m
- Simple installation wizard.  
Alpha-numeric display
- In built motor overheat protection via motor thermistors
- EMC A1/C2 integrated filters and DC choke for harmonic mitigation
- 4xDI, 2xAI, 1xAO/DO and 2xRO / RS485. Modbus RTU, N2, FLN and BACnet
- Maximum ambient 50°C

### OPTIONAL ACCESSORIES

- PIR
- Temp Sensor
- CO<sub>2</sub> Sensor
- Pressure Sensor
- 0-10 V pot - (10 volt)

### DESCRIPTION

Designed specifically for three phase fan applications our IDDXF Frequency converters control speed, torque, and the overall performance of AC and PM motors by controlling the power input. Independent, Switched and Proportional demand control from the included digital, and HVAC protocols ensures maximum efficiency and comfort to the level required.

A safety isolator/switch disconnecter should be installed on the mains side of all motor drives; refer to SISO.

### RANGE

Model	Ph.	V	IP	Amps	kW	FWG Part	Enc.
<b>IDDXF-54-2.2</b>	3-3	400V	54	2.2	0.75	<b>EA901016</b>	I2
<b>IDDXF-54-3.7</b>	3-3	400V	54	3.7	1.5	<b>EA901017</b>	I2
<b>IDDXF-54-5.3</b>	3-3	400V	54	5.3	2.2	<b>EA901018</b>	I2
<b>IDDXF-54-7.2</b>	3-3	400V	54	7.2	3.0	<b>EA901019</b>	I2
<b>IDDXF-54-9</b>	3-3	400V	54	9	4.0	<b>EA901020</b>	I2
<b>IDDXF-54-12</b>	3-3	400V	54	12	5.5	<b>EA901021</b>	I3
<b>IDDXF-54-15.5</b>	3-3	400V	54	15.5	7.5	<b>EA901022</b>	I3
<b>IDDXF-54-23</b>	3-3	400V	54	23	11.0	<b>EA901023</b>	I4
<b>IDDXF-54-31</b>	3-3	400V	54	31	15.0	<b>EA901024</b>	I4
<b>IDDXF-54-37</b>	3-3	400V	54	37	18.5	<b>EA901025</b>	I4
<b>IDDXF-54-42.5</b>	3-3	400V	54	42.5	22.0	<b>EA901026</b>	I6
<b>IDDXF-54-61</b>	3-3	400V	54	61	30.0	<b>EA901027</b>	I6
<b>IDDXF-54-73</b>	3-3	400V	54	73	37.0	<b>EA901028</b>	I6
<b>IDDXF-54-90</b>	3-3	400V	54	90	45.0	<b>EA901029</b>	I7
IDDXF-54-106	3-3	400V	54	106	55.0	EA901069	I7
IDDXF-54-147	3-3	400V	54	147	75.0	EA901070	I8
IDDXF-54-177	3-3	400V	54	177	90.0	EA901071	I8

Please note:

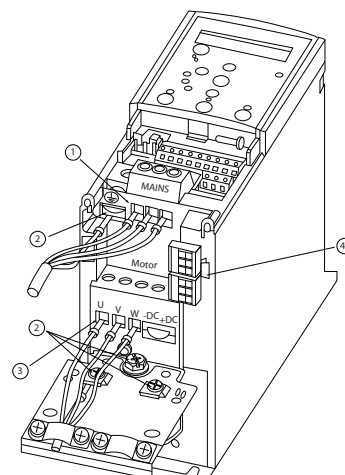
If running in hand (manual) mode a external link is required between 12 and 27. If running in auto mode a external link is required between 12 and 18.



Description	FWG Part
Local Control Panel	EA901031
Local Control Panel mounting kit inc. 3m cable	EA901032
Decoupling plate H1 & H2	EA901033
Decoupling plate H3	EA901034
Decoupling plate H4 & H5	EA901035
IP21 option H1	EA901036
IP21 option H2	EA901037
IP21 option H3	EA901038
IP21 option H4	EA901039
IP21 option H5	EA901040

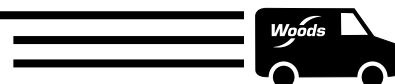
### WIRING DIAGRAM

For detail please refer to the specific diagrams supplied with each drive.



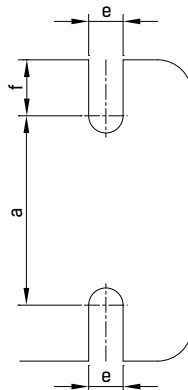
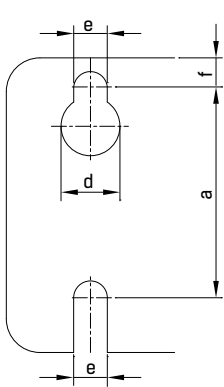
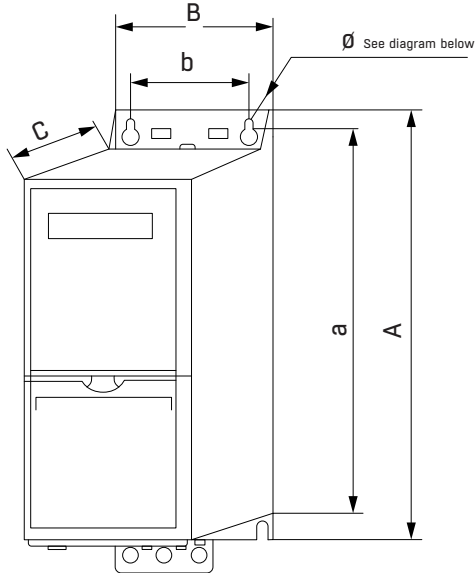
- 1 - Line
- 2 - Earth
- 3 - Motor
- 4 - Relay

Products in **bold** are available from our UK Distributors on next day delivery, if ordered by 4pm. Please call to confirm availability on 01206 222 555.





## DIMENSIONS AND WEIGHTS

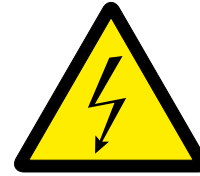


## COMPATIBILITY

Please refer to the specific instructions & software supplied with each drive.



General danger



Electrical hazard

All works may only be carried out by skilled personnel following the local regulations, reference to the installation guide and **AFTER** the controller is completely isolated from the mains.

Enclosure	Power [kW]	Height [mm]	Width [mm]	Depth [mm]	Mounting hole [mm]			Max Weight [kg]			
					a	B	b		c	d	e
Frame IP Class	3x 380-480 V	A	"A incl Decoupling Plate"	a	B	b	c	d	e	f	kg
I2 IP54	0.75-4.0	332	-	318.5	115	74	225	11	5.5	9	5.3
I3 IP54	5.5-7.5	368	-	354	135	89	237	12	6.5	9.5	7.2
I4 IP54	11-18.5	476	-	460	180	133	290	12	6.5	9.5	13.8
I5 IP54	11-18.5	480	-	454	242	210	260	19	9	9	23
I6 IP54	22-37	650	-	624	242	210	260	19	9	9	27
I7 IP54	45-55	680	-	648	308	272	310	19	9	9.8	45
I8 IP54	75-90	770	-	739	370	334	335	19	9	9.8	65