

## DANFOSS VLT HVAC BASIC DRIVE FC 101



### DESCRIPTION

The VLT HVAC Basic is a dedicated drive designed to work with heating, ventilation and air conditioning systems. The drive is easy to install, and features a trouble-free set up which ensures fast and efficient commissioning. It incorporates a highly effective heat management system that makes it ideal for demanding environments and where drive space is restricted.

### Features

- User friendly interface with start-up wizard for quick and easy configuration.
- Integrated fan / pump control for a more efficient startup.
- Automatic Energy Optimizer function to automatically maximise motor efficiency under any operating condition.
- Built-in PI controller for smooth variable speed control
- Fire Mode for continuous vital fan operation regardless of control signals, warnings or alarms.
- Built-in RFI filters to remove electromagnetic interference and lower harmonic levels.
- DC choke to mitigate harmonics and balance voltage drops and spikes.
- Thermistor input to prevent motors from overheating.
- IP54 class protection enclosure.
- Up to 50°C ambient temperature with derating

### Typical Application

Speed control of commercial and industrial fan applications in shopping centres, office buildings and car parks, through to industrial processes and equipment ventilation applications.

### Electrical Supply

380–480V, three-phase, 50Hz

### Testing

Harmonics Standard EN 61000-3-12

EMC Standard EN/IEC 61800-3  
(C1 & C2 – cable length restrictions apply)

### Wiring Diagram

Please refer all enquires to Fantech sales engineers.

### Standard I/O

- 4 x Digital Inputs
- 2 x Analogue Inputs 0-10V or 0/4-20mA
- 2 x Analogue Outputs 0/4-20mA  
(Can be used as digital outputs)
- 2 x Relay Output

### Fieldbus Communication

- BACnet MSTP
- Modbus RTU
- FC Protocol
- N2 Metasys
- FLN Apogees

### TECHNICAL DATA

Model	Input / Output	Motor kW	Amps @ 40°C	Protection Class	Frame Size	Dimensions, mm	Weight, kg.
FC101-131N0178	3 phase / 3 phase	0.75	2.2	IP54	I2	115W x 332H x 225D	5.3
FC101-131N0180		1.5	3.7				
FC101-131N0182		2.2	5.3				
FC101-131N0184		3	7.2		I3	135W x 368H x 237D	7.2
FC101-131N0186		4	9.1				
FC101-131N0188		5.5	12.0				
FC101-131N0190		7.5	15.5				
FC101-131N0192		11	23.0		I4	180W x 476H x 290D	13.8
FC101-131N0194		15	31.0				
FC101-131N0196		18.5	37.0				
FC101-131N0200		22	42.5		I6	242W x 650H x 260D	27
FC101-131N0204		30	61.0				
FC101-131N0208		37	73.0				
FC101-131N0212		45	90.0		I7	308W x 680H x 310D	45
FC101-131N0216		55	106.0				
FC101-131N0220		75	147.0				
FC101-131N0224	90	177.0	I8	370W x 770H x 335D	65		