

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		I4	180W x 476H x 290D	13.8
FC101-131N0192		11	23.0				
FC101-131N0194		15	31.0				
FC101-131N0196		18.5	37.0		I6	242W x 650H x 260D	27
FC101-131N0200		22	42.5				
FC101-131N0204		30	61.0				
FC101-131N0208		37	73.0		I7	308W x 680H x 310D	45
FC101-131N0212		45	90.0				
FC101-131N0216		55	106.0				
FC101-131N0220		75	147.0		I8	370W x 770H x 335D	65
FC101-131N0224	90	177.0					