

# KNC-VFD-FV100-5T Series



## FEATURES

- **Input Voltage Range of 480-540VAC**
- **Power Rating 7.5kW - 90kW Watts**
- **Methods of Control: V/F Control, Closed-Loop Vector, Open Loop Vector**
- **Open Phase (optional), Overcurrent, Overvoltage, Undervoltage, Overheat, and Overload Protection**
- **Sleep/Wake Up Function**



## DESCRIPTION

The Kinco KNC-VFD-FV100-5T Series combines power and performance into one compact package. With 480 VAC Three-Phase input, this drive offers from 7.5kW - 90kW (10 - 120 HP) of power to drive your Three-Phase AC motor. This series offers unique control methods to achieve high torque and accuracy, and variable speed range. Other features for this drive include flexible I/O terminals, overcurrent, overvoltage, undervoltage, and overheat protection, acceleration and deceleration times, and vector control.

## SPECIFICATIONS

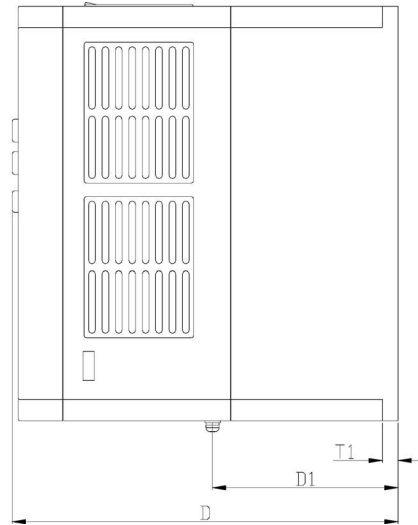
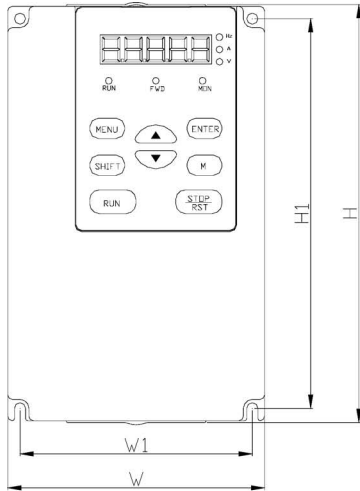
SERIES #	Input Voltage Range	Max Power (KW)	Max Power (HP)	Rated Current (A)	Overload Tolerance for One Minute (A)	Installation Type
KNC-VFD-FV100-5T-0075G	3-Phase, 480V	7.5	10	17	25	Wall Mount
KNC-VFD-FV100-5T-0110G	3-Phase, 480V	11	15	25	37	Wall Mount
KNC-VFD-FV100-5T-0150G	3-Phase, 480V	15	20	32	48	Wall Mount
KNC-VFD-FV100-5T-0185G	3-Phase, 480V	18.5	25	37	55	Wall Mount
KNC-VFD-FV100-5T-0220G	3-Phase, 480V	22	30	45	67	Wall Mount
KNC-VFD-FV100-5T-0300G	3-Phase, 480V	30	40	60	90	Wall Mount
KNC-VFD-FV100-5T-0370G	3-Phase, 480V	37	50	75	112	Wall Mount
KNC-VFD-FV100-5T-0450G	3-Phase, 480V	45	60	90	135	Wall Mount
KNC-VFD-FV100-5T-0550G	3-Phase, 480V	55	74	110	165	Wall Mount
KNC-VFD-FV100-5T-0750G	3-Phase, 480V	75	100	152	228	Wall Mount
KNC-VFD-FV100-5T-0900G	3-Phase, 480V	90	120	176	264	Wall Mount

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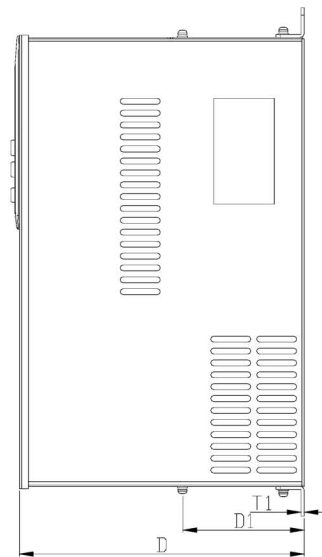
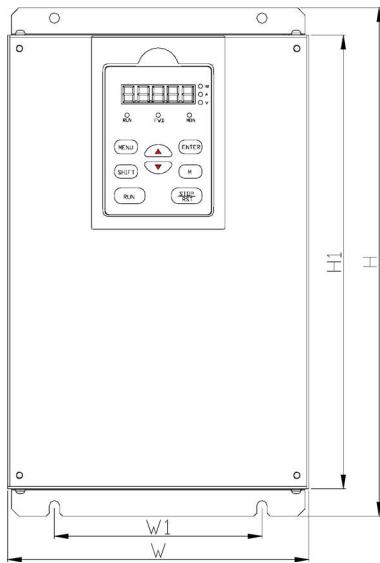
# KNC-VFD-FV100-5T Series



KNC-VFD-FV100-5T-0075G ~ KNC-VFD-FV100-5T-0450G



KNC-VFD-FV100-5T-0550G ~ KNC-VFD-FV100-5T-0900G



DIMENSIONS

Item	W	W1	H	H1	D	D1	T1
KNC-VFD-FV100-5T-0075G	165	110	274	264	193	-	2
KNC-VFD-FV100-5T-0110G	194	120	324	312	197	-	2
KNC-VFD-FV100-5T-0150G	194	120	324	312	197	-	2
KNC-VFD-FV100-5T-0185G	194	120	324	312	197	-	2
KNC-VFD-FV100-5T-0220G	297	200	451	433	224	-	3
KNC-VFD-FV100-5T-0300G	297	200	451	433	224	-	3
KNC-VFD-FV100-5T-0370G	320	220	535	512	224	88.5	3
KNC-VFD-FV100-5T-0450G	320	220	535	512	224	88.5	3
KNC-VFD-FV100-5T-0550G	373	240	649	628	262	102.5	3
KNC-VFD-FV100-5T-0750G	373	240	649	628	262	102.5	3
KNC-VFD-FV100-5T-0900G	440	340	758	737	285	102	2.5

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TECHNICAL SPECIFICATIONS

INPUT	
Rated Voltage/Frequency	3-phase, 480-540V AC; 50Hz/60Hz
Allowable Voltage Range	420-560V AC; Voltage Tolerance:<3%; Frequency: ±5%
OUTPUT	
Rated Voltage	0~Rated Input Voltage
Frequency	0Hz-300Hz (0Hz-3000Hz Custom)
Overload Capacity	150% Rated Current for 1 Minute, 180% Rated Current for 10 Seconds
MAIN CONTROL CHARACTERISTICS	
Control Method	Vector Control Without PG, V/F Control
Modulation Mode	Space Vector PWM Modulation
Starting Torque	0.5Hz: 150% Rated Torque (Vector Control Without PG)
Frequency Accuracy	Digital Setting: Max. Frequency x ±0.01%; Analog Setting: Max. Frequency x ±0.2%
Frequency Resolution	Digital Setting: 0.01Hz; Analog Setting: Max. Frequency x 0.05%
Torque Boost	Manual Torque Boost: 0%-30.0%
V/F Pattern	4 Patterns: 1 V/F Curve Mode Set by User and 3 Kinds of Torque-Derating Modes (2.0 Power, 1.7 Power, 1.2 Power)
Acceleration/Deceleration Curve	Linear Acceleration/Deceleration. Four Kinds of Acceleration/Deceleration Time
Auto Current Limit	Limit Current During Operation Automatically to Prevent Frequent Overcurrent Trip
Jog	Range of Jog Frequency: 0.20Hz-50.00Hz; Acc/Dec Time of Jog Operation: 0.1-60.0s, Interval of Jog Operation is also settable.
Multiple Speed Operation	Implement Multiple Speed Operation by Digital Inputs
FUNCTIONS	
Operation Command	Keypad Setting, Terminal Setting, Communication Setting
Frequency Command Setting	Digital Setting, Analog Voltage Setting, Analog Current Setting
Auxiliary Frequency Setting	Implement Flexible Auxiliary Frequency Trim and Frequency Synthesis
Pulse Output Terminal	0.1-100kHz Pulse Output. For example setting frequency, output frequency
Analog Output Terminal	1 Channel Analog Output (0/4~20mA or 0/2~10V)
LED Display	Display frequency setting, frequency output, voltage output, current output and so on, about 20 parameters
Parameters Copy	Copy parameters by operation panel
Keys Lock and Function Selection	Lock part of keys or all the keys. Define the function of part of keys, in case of misoperation
Protection Function	Open Phase Protection (optional), Overcurrent Protection, Overvoltage Protection, Undervoltage Protection, Overheat Protection, and Overload Protection
ENVIRONMENT	
Altitude	Derated Above 1000m, The Rated Output Current Shall be Decreased by 10% for Every Rise of 1000m
Ambient Temperature	-10°C~ + 40°C (Derated at 40°C~50°C)
Humidity	5%~95%RH, Non-Condensing
Vibration	Less Than 5.9m/s <sup>2</sup> (0.6g)
Storage Temperature	-40°C~ + 70°C

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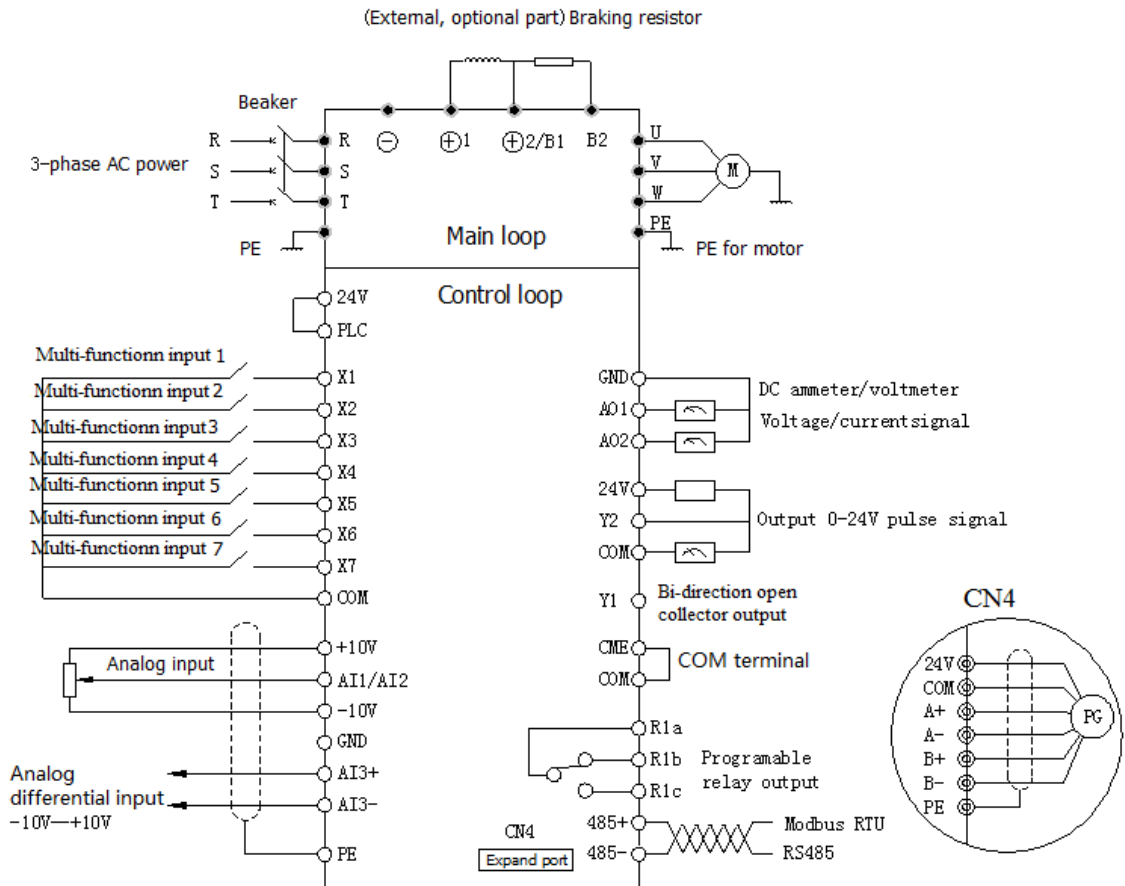


SPECIFICATIONS

SPECIFICATIONS	
Protection Class	IP20
Cooling Method	Air Cooling, with Fan Control
Installation Method	Wall-Mounted
Efficiency	Power Under 45kW $\geq$ 93%; Power Above 55kW $\geq$ 95%

MODEL	KNC-VFD-FV100-5T										
	0075	0110	0150	0185	0220	0300	0370	0450	0550	0750	0900
The Power of Suitable Motor (KW)	7.5	11	15	18.5	22	30	37	45	55	75	90
<b>OUTPUT</b>											
Voltage (V)	3-Phase, 0~ Rated Input Voltage										
Rate Output Current (A)	17	25	32	37	45	60	75	90	110	152	176
Overload Capacity	150% Rated Current for 1 Minute; 180% Rated Current for 10 Seconds;										
<b>INPUT</b>											
Rated Voltage/Frequency	3 Phase, 480V~540V AC; 50Hz/60Hz										
Allowable Voltage Range	420V~560VAC; Voltage Tolerance: <3%; Frequency: $\pm$ 5%										
Rated Input Current (A)	20.5	26	35	38.5	46.5	62	76	92	113	157	180
Brake Unit	Built-In (optional)										

WIRING DIAGRAM



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