

KNC-VFD-FV20-2T Series



FEATURES

- Input Voltage Range of 200-240V
- Power of up to 30.0 HP
- Frequency from 0 - 300Hz
- Methods of Control: V/F control, Sensorless Flux Vector Control, Closed-Loop Vector Control
- Built in EMI Filter and Brake Resistor
- Modbus RTU or ASCII Protocol (RS485 baud rate up to 125000bps)
- Supports Analog or Discrete Input Control, Communication Control, or Panel Control with Detachable Remote

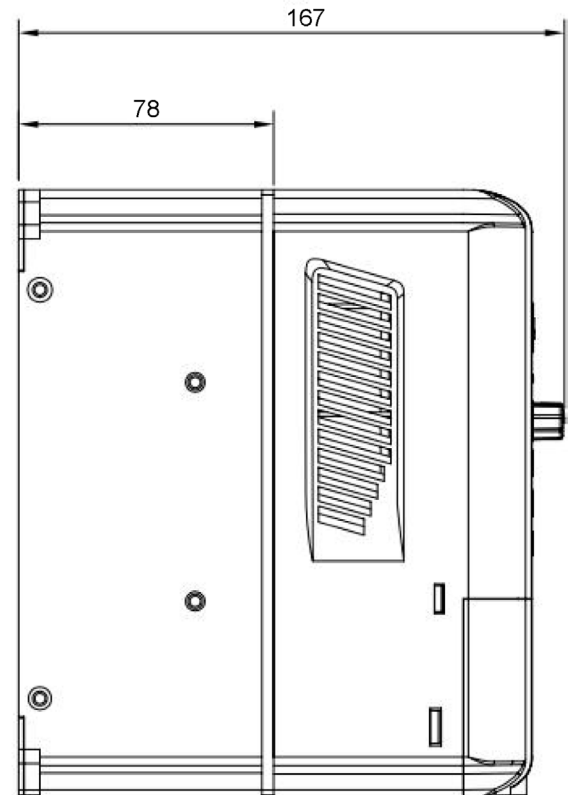
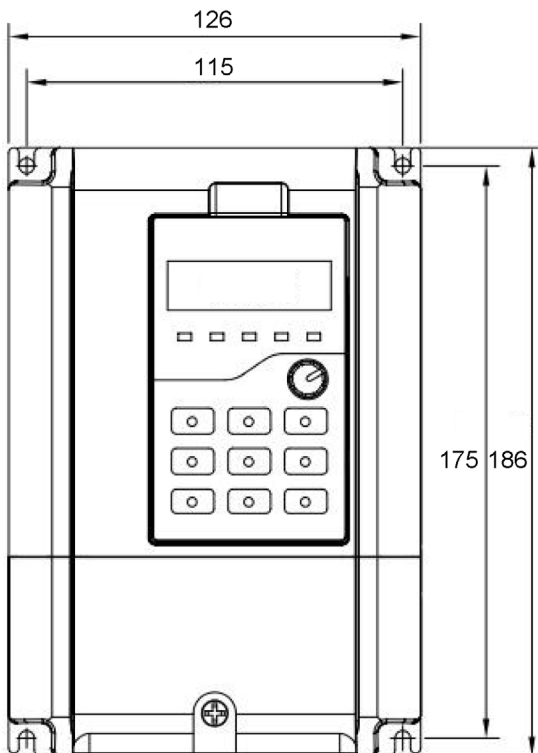


DESCRIPTION

The Kinco FV20-2T VFD Series combines power and performance into one compact package. With 240VAC Three-Phase input, this drive offers up to 22,000 Watts (30.0 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 includes flexible I/O terminals, overcurrent, overvoltage, undervoltage, and overheat protection, acceleration and deceleration times, and vector control.

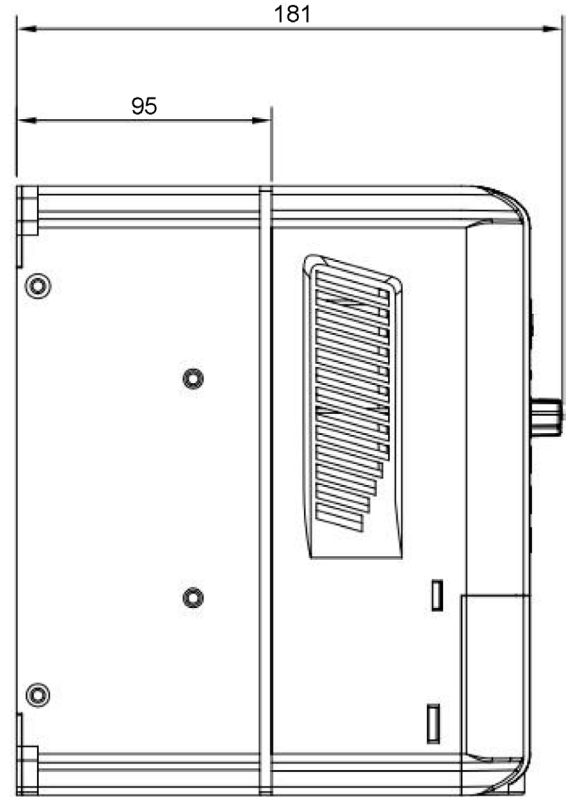
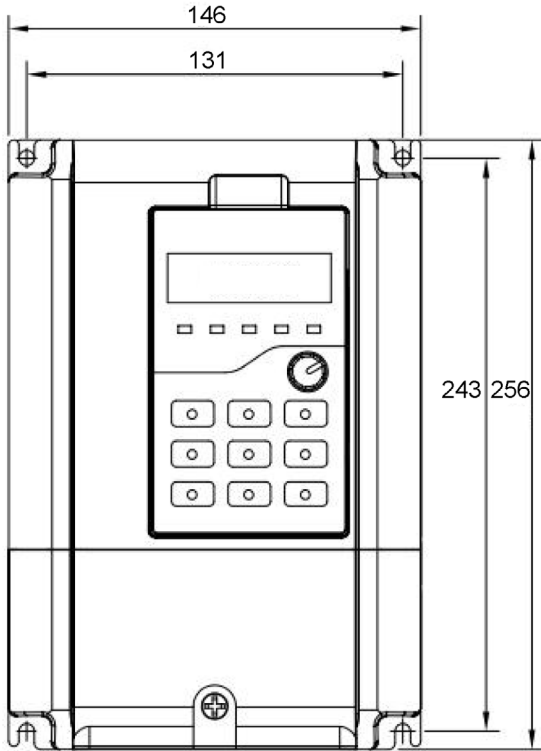
KNC-VFD-FV20-2T-0004G to KNC-VFD-FV20-2T-0037G

DIMENSIONS

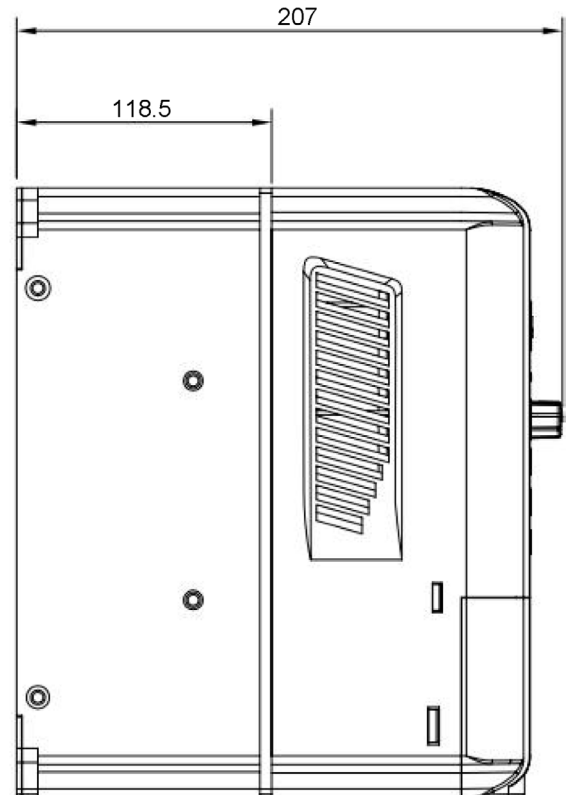
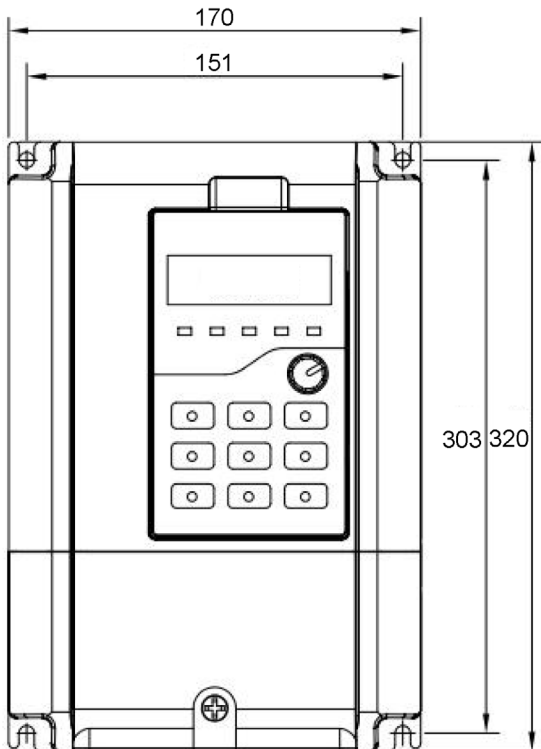


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KNC-VFD-FV20-2T-0055G to KNC-VFD-FV20-2T-0075G



KNC-VFD-FV20-2T-0110G to KNC-VFD-FV20-2T-0185G



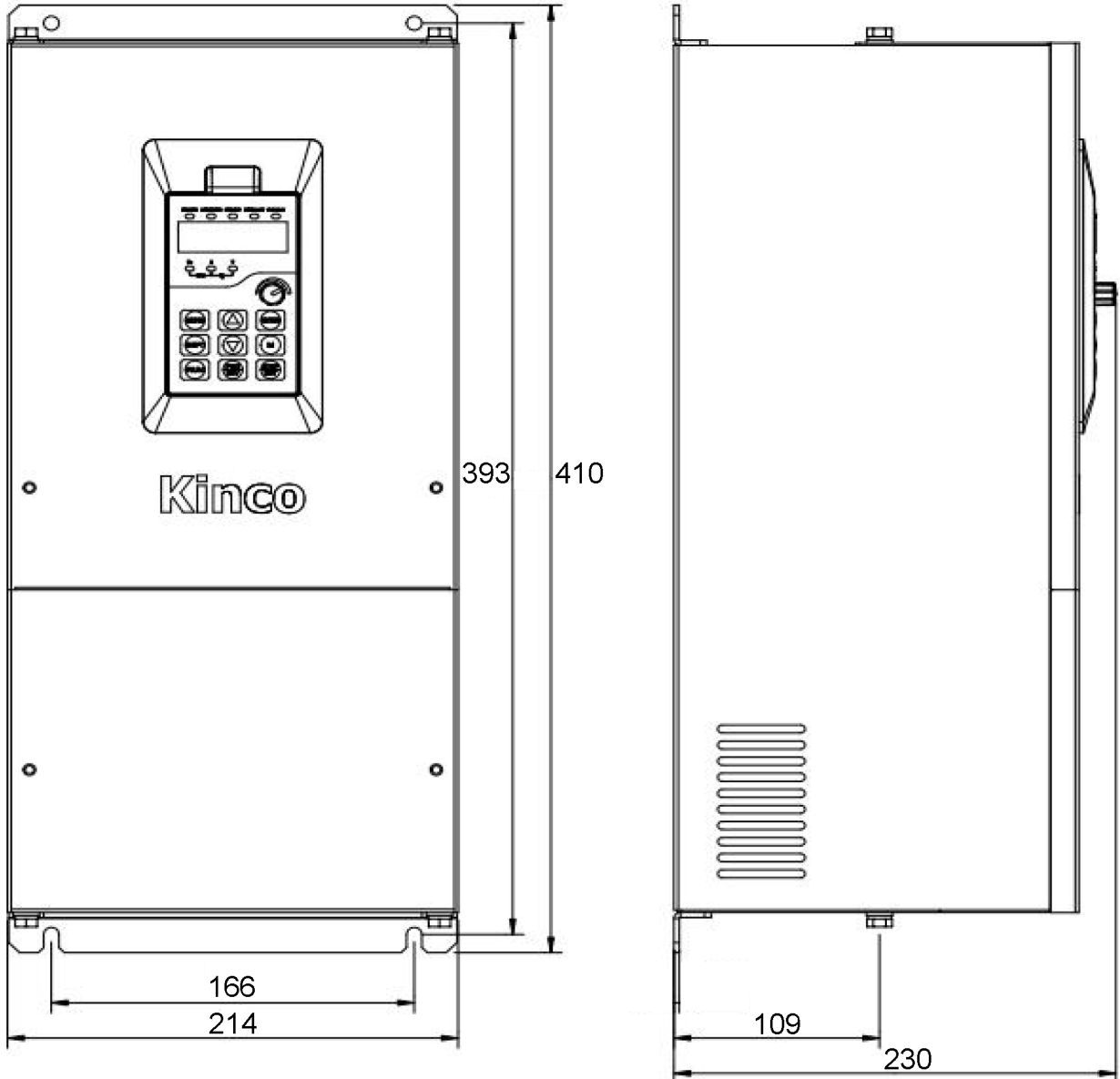
DIMENSIONS

KNC-VFD-FV20-2T Series



DIMENSIONS

KNC-VFD-FV20-2T-0220G



KNC-VFD-FV20-2T Series



SPECIFICATIONS

Item	W	W1	H	H1	D	D1	Mounting Holes(d)	Weight (lbs)
FV20-2T-0004G	126	115	186	175	167	78	4.7	4.4
FV20-2T-0007G	126	115	186	175	167	78	4.7	4.4
FV20-2T-0015G	126	115	186	175	167	78	4.7	4.4
FV20-2T-0022G	126	115	186	175	167	78	4.7	4.4
FV20-2T-0037G	126	115	186	175	167	78	4.7	4.4
FV20-2T-0055G	146	131	256	243	181	95	5.8	13.2
FV20-2T-0075G	146	131	256	243	181	95	5.8	13.2
FV20-2T-0110G	170	151	320	303	207	118.5	5.8	17.6
FV20-2T-0150G	170	151	320	303	207	118.5	5.8	17.6
FV20-2T-0185G	170	151	320	303	207	118.5	5.8	17.6
FV20-2T-0220G	214	166	410	393	230	109	7	39.7

SERIES #	Input Voltage Range	Max Power (KW)	Max Power (HP)	Rated Current (A)	Overload Tolerance for One Minute (A)	Installation Type
FV20-2T-0004G	3-Phase, 240V	0.4	0.53	2.5	3	Wall-Mount
FV20-2T-0007G	3-Phase, 240V	0.75	1	2.3	6	Wall-Mount
FV20-2T-0015G	3-Phase, 240V	1.5	2	3.7	11	Wall-Mount
FV20-2T-0022G	3-Phase, 240V	2.2	3	5.5	15	Wall-Mount
FV20-2T-0037G	3-Phase, 240V	3.7	5	8.8	24	Wall-Mount
FV20-2T-0055G	3-Phase, 240V	5.5	7.5	13.0	36	Wall-Mount
FV20-2T-0075G	3-Phase, 240V	7.5	10	17.0	45	Wall-Mount
FV20-2T-0110G	3-Phase, 240V	11	15	25.0	63	Wall-Mount
FV20-2T-0150G	3-Phase, 240V	15	20	32.0	82	Wall-Mount
FV20-2T-0185G	3-Phase, 240V	18.5	25	37.0	105	Wall-Mount
FV20-2T-0220G	3-Phase, 240V	22	30	45.0	120	Wall-Mount

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INPUT	
Rated Voltage/Frequency	2T: 3-phase, 200-240VAC; 50Hz/60Hz
Allowable Voltage Range	2T: 180-260VAC; Voltage Unbalanceness:<3%; Frequency: ±5%
OUTPUT	
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, Vector Control with PG, V/F Control
Starting Torque	0.5Hz 150% Rated Torque (Vector Control Without PG) , 0Hz 200% Rated Torque (Vector Control with 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 0.1%
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 are Optional
Auto Current Limit	Limit Current During Operation Automatically to Prevent Frequent Overcurrent Trip
CUSTOMIZED FUNCTION	
Operation Command	Keypad Setting, Terminal Setting, Communication Setting
Frequency Command	Digital Setting, Analog Voltage Setting, Analog Current Setting, Pulse Setting
Auxiliary Frequency Setting	Implement Flexible Auxiliary Frequency Trim and Frequency Synthesis
Analog Output	2 Channels Analog Output (0/4~20mA or 0/2~10V)
Protection Function	Open Phase Protection (Optional), Overcurrent Protection, Overvoltage Protection, Undervoltage Protection, Overheat Protection, Overload Protection, and So On
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 ² (0.6g)
Storage Temperature	-40°C ~ +70°C

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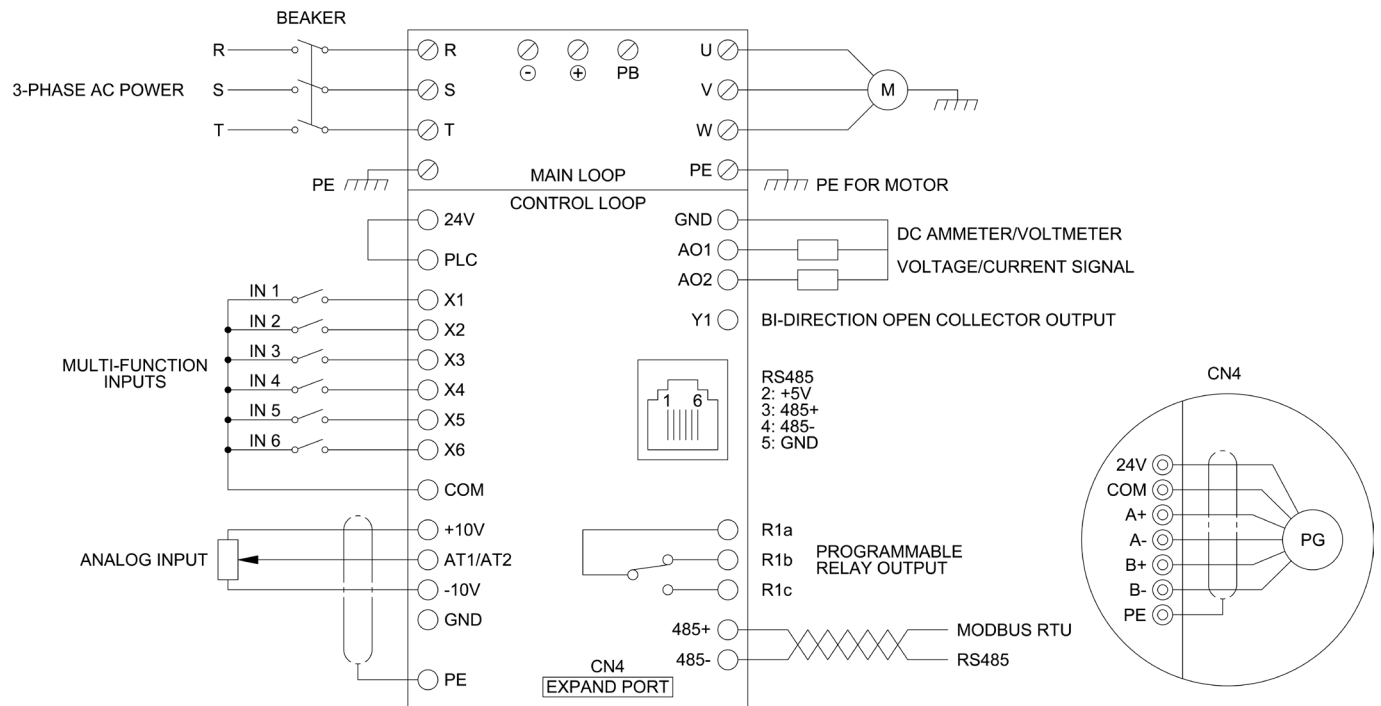
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SPECIFICATIONS

MODEL	FV20-2T										
	0004	0007	0015	0022	0037	0055	0075	0110	0150	0185	0220
The Power of Suitable Motor (KW)	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
OUTPUT											
Voltage (V)	3-Phase, 0~ Rated Input Voltage										
Rate Output Current (A)	2.5	2.3	3.7	5.5	8.8	13.0	17.0	25.0	32.0	37.0	45.0
Overload Capacity	150% Rated Current for 1 Minute, 180% Rated Current for 10 Seconds										
INPUT											
Rated Voltage/Frequency	3 Phase, 200V~240V AC; 50Hz/60Hz										
Allowable Voltage Range	180V~260VAC; Voltage Unbalancedness:<3%; Allowable Frequency Fluctuation; ± 5%										
Rated Input Current (A)	3.0	3.4	5.0	5.8	10.5	14.5	20.5	26.0	35.0	38.5	46.5
Brake Unit	Built-In										
Protection Class	IP20										
Cooling Method	Air Cooling, with Fan Control										

WIRING DIAGRAM



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