

## FV100-2T Series

### FEATURES

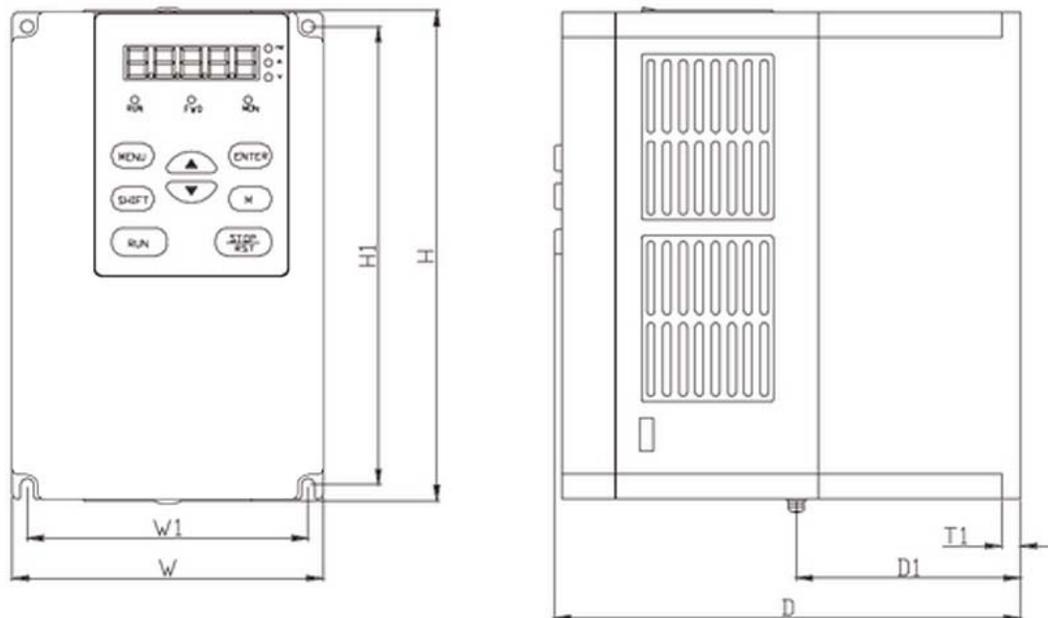
- Input Voltage Range of 240VAC
- Power up to 30 HP
- Methods of Control: V/F Control, Vector Control
- Overcurrent, Overvoltage, Undervoltage, Overheat, Overload and Missing Phase Protection
- Sleep/wake up function



### DESCRIPTION

The FV100-2T Series is a rugged line of AC Variable Frequency Drives for OEM and Industrial applications, combining high performance and cost efficiency into one powerful package. Available with an input voltage of 240VAC and capable of powering AC motors from 0.50 to 30HP, these VFDs are great for normal duty and soft-start operation. These drives provide energy savings and increased efficiency, making them ideal for fan, pump, and HVAC applications. They are equipped with a number of features such as momentary power loss restarts, auto-acceleration/deceleration, and sensorless vector control. These features make the VFDs compatible with most AC motors and allow for flexibility within an application.

### DIMENSIONS



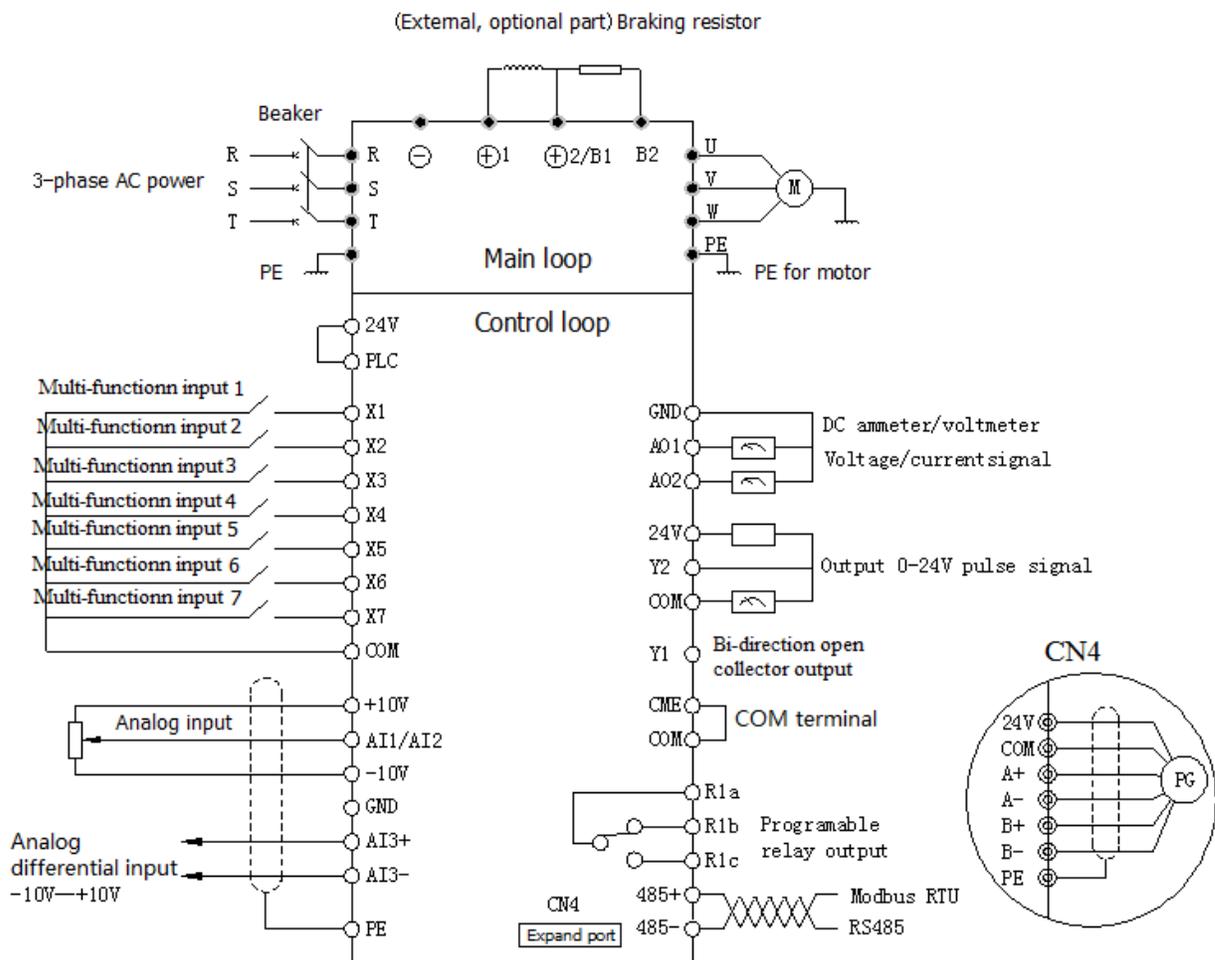
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| Item           | W   | W1  | H   | H1  | D   | D1 | T1 |
|----------------|-----|-----|-----|-----|-----|----|----|
| FV100-2T-0004G | 115 | 106 | 185 | 176 | 171 | 65 | 7  |
| FV100-2T-0007G | 115 | 106 | 185 | 176 | 171 | 65 | 7  |
| FV100-2T-0015G | 115 | 106 | 185 | 176 | 171 | 65 | 7  |
| FV100-2T-0022G | 115 | 106 | 185 | 176 | 171 | 65 | 7  |
| FV100-2T-0037G | 115 | 106 | 185 | 176 | 171 | 65 | 7  |
| FV100-2T-0055G | 165 | 110 | 274 | 264 | 193 | -  | 2  |
| FV100-2T-0075G | 165 | 110 | 274 | 264 | 193 | -  | 2  |
| FV100-2T-0110G | 194 | 120 | 324 | 312 | 197 | -  | 2  |
| FV100-2T-0150G | 297 | 200 | 451 | 433 | 224 | 89 | 3  |
| FV100-2T-0185G | 297 | 200 | 451 | 433 | 224 | 89 | 3  |
| FV100-2T-0220G | 297 | 200 | 451 | 433 | 224 | 89 | 3  |

| ITEM #         | Input Voltage | Max Power (KW) | Max Power (HP) | Rated Current (A) | Overload Tolerance for One Minute (A) | Installation Type    |
|----------------|---------------|----------------|----------------|-------------------|---------------------------------------|----------------------|
| FV100-2T-0004G | 3-Phase, 240V | 0.4            | 0.5            | 2.5               | 2                                     | Cabinet or Enclosure |
| FV100-2T-0007G | 3-Phase, 240V | 0.7            | 1              | 4.0               | 3                                     | Cabinet or Enclosure |
| FV100-2T-0015G | 3-Phase, 240V | 1.5            | 2              | 7.5               | 6                                     | Cabinet or Enclosure |
| FV100-2T-0022G | 3-Phase, 240V | 2.2            | 3              | 10                | 11                                    | Cabinet or Enclosure |
| FV100-2T-0037G | 3-Phase, 240V | 3.7            | 5              | 16                | 15                                    | Cabinet or Enclosure |
| FV100-2T-0055G | 3-Phase, 240V | 5.5            | 7.5            | 24.5              | 36                                    | Cabinet or Enclosure |
| FV100-2T-0075G | 3-Phase, 240V | 7.5            | 10             | 30                | 45                                    | Cabinet or Enclosure |
| FV100-2T-0110G | 3-Phase, 240V | 11             | 15             | 42                | 63                                    | Cabinet or Enclosure |
| FV100-2T-0150G | 3-Phase, 240V | 15             | 20             | 55                | 82                                    | Cabinet or Enclosure |
| FV100-2T-0185G | 3-Phase, 240V | 18.5           | 25             | 70                | 105                                   | Cabinet or Enclosure |
| FV100-2T-0220G | 3-Phase, 240V | 22             | 30             | 80                | 120                                   | Cabinet or Enclosure |

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| MODEL                            | FV100-2T   |      |      |      |      |      |      |      |      |      |      |
|----------------------------------|--|------|------|------|------|------|------|------|------|------|------|
|                                  | 0004   | 0007 | 0015 | 0022 | 0037 | 0055 | 0075 | 0110 | 0150 | 0185 | 0220 |
| The Power of Suitable Motor (KW) | 0.4  | 0.7  | 1.5  | 2.2  | 3.7  | 5.5  | 7.5  | 11   | 15   | 18.5 | 22   |
| Voltage (V)                      | 3-Phase, 0~ Rated Input Voltage  |      |      |      |      |      |      |      |      |      |      |
| Rated Output Current (A)         | 2.5  | 4.0  | 7.5  | 10   | 16   | 24.5 | 30   | 42   | 55   | 70   | 80   |
| Overload Capacity                | 150% 1 Minute; 180% 10 Seconds; 200% 0.5 Second; 10 Minutes Interval (Inverse Time Limit Speciality) |      |      |      |      |      |      |      |      |      |      |
| Rated Voltage/Frequency          | 2T: 3 Phase, 240VAC; 50Hz/60Hz   |      |      |      |      |      |      |      |      |      |      |
| Allowable Voltage Range          | 180-260VAC, Voltage Unbalanceness:<3%; Frequency: ± 5%   |      |      |      |      |      |      |      |      |      |      |
| Rated Input Current (A)          | 3.2  | 6.3  | 9    | 15   | 22   | 30   | 35   | 43   | 56   | 71   | 81   |
| Brake Unit                       | Built-In   |      |      |      |      |      |      |      |      |      |      |
| Protection Class                 | IP20   |      |      |      |      |      |      |      |      |      |      |
| Cooling Method                   | Cooling by Fan   |      |      |      |      |      |      |      |      |      |      |



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|                                 | INPUT  |
|---------------------------------|--|
| Rated Voltage/Frequency         | 2T: 3-Phase, 240V; 50Hz/60Hz   |
| Allowable Voltage Range         | 2T: 180-260VAC; Voltage Unbalanceness:<3%; Frequency: ±5%  |
|                                 | OUTPUT   |
| Voltage                         | 0~Rated Input Voltage  |
| Frequency                       | 0Hz-300Hz (Customized 0Hz-3000Hz Custom)   |
| Overload Capacity               | G Type: 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 0.05%  |
| 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-De-rating 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  |
|                                 | CUSTOMIZED FUNCTION  |
| Operation Command               | Keypad Setting, Terminal Setting, Communication Setting  |
| Frequency Command Setting       | 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. |
|                                 | 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  |