

## WIN-VC series Inverter

### 1. Features:

- ◆ Suitable for large inertia, high accuracy, potential energy load, fast response and other high-end occasion.
- ◆ Function of energy-saving control, speed control, slip compensation, torque compensation, torque control, null-servo control, self-learning, parameter copy and other high-end function.
- ◆ 4 modes of control available: V/F control, V/F with PG, speedless sensor vector control, vector control with PG.
- ◆ High boosting torque at super-low speed. 150% of rated torque can be output at zero speed in the mode of closed-loop of vector control.
- ◆ Range of speed control reaches to 1:1000.
- ◆ Precision of output frequency reaches to  $\pm 0.01\%$ ;  
precision of speed control reaches to 0.02%.
- ◆ Multi-functional terminal of input and output, multi-functional analog input and output, serial mode communication provide the user with various convenience.
- ◆ Multiple parameters online monitor function, perfect fault-analysis, alarm and protection functions maximumly ensure the reliability of the machine.



### 2. VC series Models:

| Model No.    | Input Voltage                        | Output Current: A | Suitable Motor: KW |
|--------------|--------------------------------------|-------------------|--------------------|
| WIN-VC-1R5T4 | 3 $\Phi$ 380V 50/60Hz<br>(T4 series) | 4.8               | 1.5                |
| WIN-VC-2R2T4 |                                      | 6.2               | 2.2                |
| WIN-VC-3R7T4 |                                      | 8                 | 3.7                |
| WIN-VC-5R5T4 |                                      | 14                | 5.5                |
| WIN-VC-7R5T4 |                                      | 18                | 7.5                |
| WIN-VC-011T4 |                                      | 27                | 11                 |
| WIN-VC-015T4 |                                      | 34                | 15                 |
| WIN-VC-018T4 |                                      | 41                | 18.5               |
| WIN-VC-022T4 |                                      | 52                | 22                 |
| WIN-VC-030T4 |                                      | 65                | 30                 |
| WIN-VC-037T4 |                                      | 80                | 37                 |
| WIN-VC-045T4 |                                      | 96                | 45                 |
| WIN-VC-055T4 |                                      | 128               | 55                 |
| WIN-VC-075T4 |                                      | 165               | 75                 |
| WIN-VC-093T4 |                                      | 180               | 93                 |
| WIN-VC-110T4 |                                      | 224               | 110                |
| WIN-VC-132T4 |                                      | 260               | 132                |
| WIN-VC-160T4 |                                      | 302               | 160                |
| WIN-VC-185T4 |                                      | 340               | 185                |
| WIN-VC-200T4 |                                      | 380               | 200                |
| WIN-VC-220T4 |                                      | 450               | 220                |
| WIN-VC-245T4 |                                      | 470               | 250                |
| WIN-VC-280T4 |                                      | 530               | 280                |
| WIN-VC-315T4 |                                      | 605               | 315                |
| WIN-VC-355T4 |                                      | 670               | 355                |

## WIN-VC series Inverter

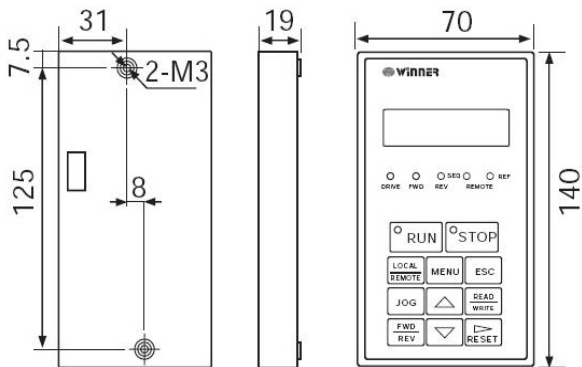
### 3.Common specifications:

| Item                |                              | Specification                                                                                                                                                                                                                                                                                          |
|---------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input               | Voltage / Frequency          | T4:3-phase 380V 50/60Hz±5%; T6: 3-phase 660V 50/60Hz±5%                                                                                                                                                                                                                                                |
|                     | Allowed Volt. Fluctuation    | —15% ~ +10%                                                                                                                                                                                                                                                                                            |
| Output              | Frequency Control Range      | 0.1~400Hz                                                                                                                                                                                                                                                                                              |
|                     | Over Load Range              | 150% 1minute, 180% 6 seconds                                                                                                                                                                                                                                                                           |
| Control             | Control Method               | Current vector control, SPWM                                                                                                                                                                                                                                                                           |
|                     | Boost Torque                 | 150% 1Hz (with PG 0Hz)                                                                                                                                                                                                                                                                                 |
|                     | Speed Control Range          | 1:100 (with PG 1:1000)                                                                                                                                                                                                                                                                                 |
|                     | Speed Control Precision      | ±0.2% (with PG ±0.02%)                                                                                                                                                                                                                                                                                 |
|                     | Speed Response               | 5Hz (with PG 30Hz)                                                                                                                                                                                                                                                                                     |
|                     | Torque Limitation            | 4 modes optional                                                                                                                                                                                                                                                                                       |
|                     | Torque Precision             | ±5%                                                                                                                                                                                                                                                                                                    |
|                     | Torque Response              | 20Hz (with PG 40Hz)                                                                                                                                                                                                                                                                                    |
|                     | Frequency Precision          | Digital setting: ±0.01%(-10℃ ~ +40℃);<br>Analog setting: ±0.1%(10℃~25℃)                                                                                                                                                                                                                                |
|                     | Frequency Setting Resolution | Digital setting: 0.01Hz; analog setting: 0.03Hz / 60Hz                                                                                                                                                                                                                                                 |
|                     | Output Frequency Resolution  | 0.01Hz                                                                                                                                                                                                                                                                                                 |
|                     | Overload Capacity            | Rated output current 150% 1minute                                                                                                                                                                                                                                                                      |
|                     | Frequency Setting Source     | -10V~+10V; 0~+10V(20K Ω); 4~20mA                                                                                                                                                                                                                                                                       |
|                     | Accelerate/Decelerate Time   | 0.01-6000 seconds (acceleration or deceleration time can be set separately).                                                                                                                                                                                                                           |
|                     | V/F Characteristic           | 15 fixed V/F characteristics available and anyone can be preset.                                                                                                                                                                                                                                       |
|                     | Braking Torque               | 20% (built-in braking unit machine added with exterior braking resistor can output braking torque up to 150%)                                                                                                                                                                                          |
| Protection Function |                              | Overvoltage, undervoltage, overload(150% 1minute), thermionicrelay, overheat, stall, grounding, instananeous power failure compensation. (set the operating mode to be continue to operate when power recovered within 2seconds.)、charge protection(main loop DC voltage under 50V won't be displayed) |
| Ambient Temperature |                              | -10℃ ~ +40℃                                                                                                                                                                                                                                                                                            |
| Humidity            |                              | 20% ~ 90% RH (no condensation)                                                                                                                                                                                                                                                                         |
| Storage Temperature |                              | -20℃ ~ +60℃                                                                                                                                                                                                                                                                                            |
| Appllication Area   |                              | indoor (no dust, no corrosive odor, no direct sunlight)                                                                                                                                                                                                                                                |
| Altitude            |                              | less than 1000m                                                                                                                                                                                                                                                                                        |
| Vibration           |                              | 20Hz, less than 0.2g                                                                                                                                                                                                                                                                                   |
| Protection Level    |                              | IP20                                                                                                                                                                                                                                                                                                   |
| Cooling Mode        |                              | Fored air cooling                                                                                                                                                                                                                                                                                      |

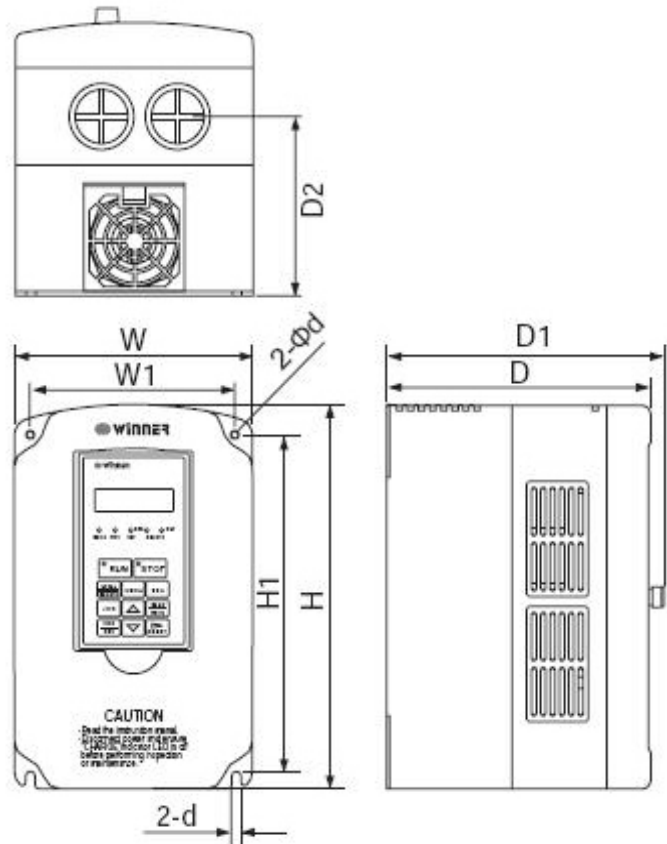
## WIN-VC series Inverter

### 4. Dimension:

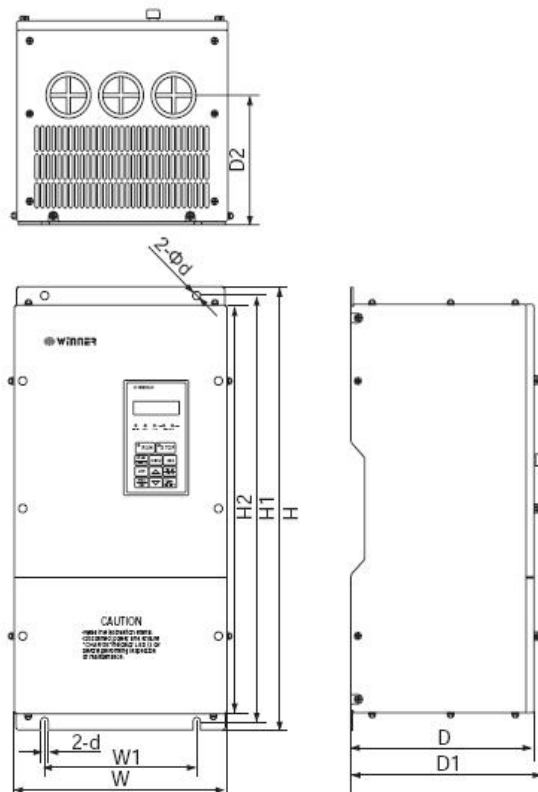
#### a). Keypad:



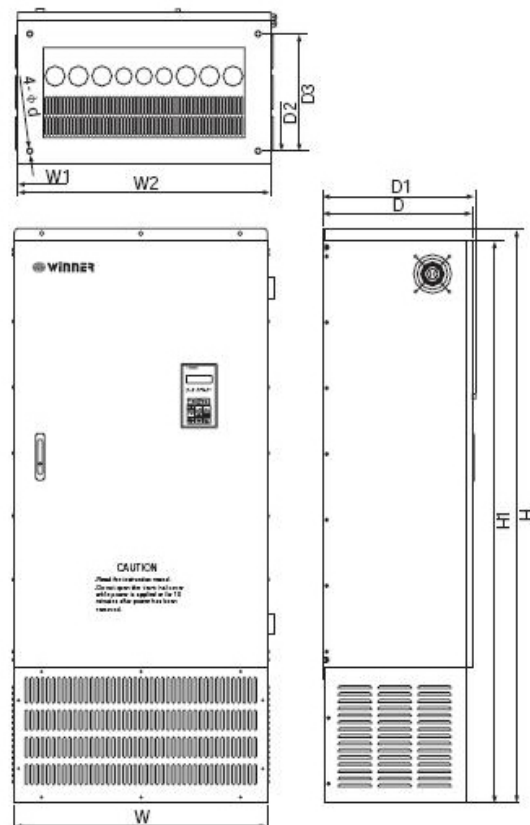
#### b). 380V 1.5KW~7.5KW:



#### c). 380V 11KW~400KW:



#### d). 380V 160KW~400KW (cabinet type):



## WIN-VC series Inverter

Unit: mm

| Picture | Model        | W   | W1  | W2 | H    | H1   | H2   | D   | D1  | D2  | D3  | d   |
|---------|--------------|-----|-----|----|------|------|------|-----|-----|-----|-----|-----|
| b).     | 1R5 ~ 3R7 T4 | 150 | 130 | —  | 252  | 205  | —    | 167 | 175 | 109 | —   | 5.5 |
|         | 5R5 ~ 7R5 T4 | 190 | 170 | —  | 290  | 260  | —    | 187 | 195 | 105 | —   | 5.5 |
| c).     | 011 ~ 015 T4 | 245 | 200 | —  | 410  | 390  | 367  | 240 | 245 | 170 | —   | 7   |
|         | 018 ~ 030 T4 | 278 | 200 | —  | 550  | 530  | 490  | 250 | 260 | 155 | —   | 10  |
|         | 037 T4       | 348 | 200 | —  | 550  | 530  | 490  | 250 | 260 | 185 | —   | 10  |
|         | 037 ~ 045 T4 | 348 | 240 | —  | 700  | 680  | 640  | 335 | 345 | 215 | —   | 10  |
|         | 055 ~ 075 T4 | 375 | 300 | —  | 785  | 760  | 717  | 335 | 345 | 240 | —   | 12  |
|         | 093 ~ 132 T4 | 530 | 420 | —  | 920  | 490  | 852  | 335 | 345 | 250 | —   | 12  |
|         | 160 ~ 200 T4 | 695 | 580 | —  | 1140 | 1110 | 1072 | 335 | 345 | 250 | —   | 14  |
|         | 220 ~ 400 T4 | 820 | 600 | —  | 1334 | 1300 | 1260 | 450 | 460 | 240 | —   | 14  |
| d).     | 160 ~ 200 T4 | 395 | 620 | 40 | 1800 | 1760 | —    | 450 | 460 | 40  | 345 | 18  |
|         | 220 ~ 400 T4 | 820 | 690 | 40 | 1800 | 1760 | —    | 450 | 460 | 40  | 345 | 18  |