

SWTII series oil-free screw compressor SWTII 75-400 SERIES

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#### Distributor/Sales Representative



SWT(II)-10707-112A000-E1



SWTII series oil-free screw compressor **SWTII 75-400 SERIES** 



SWTII series oil-free screw compressor

### Unique design optimizes efficiency

Our design minimizes pressure drop, optimizes cooling effects, and minimizes unnecessary pressure loss and heat consumption. This series of unique designs allows you to use the SWTII series of oil-free screw air compressors to obtain greater gas production. This not only means energy savings, but also the air compressor is operating in a most reliable way.

Create the ultimate effect of oil-free

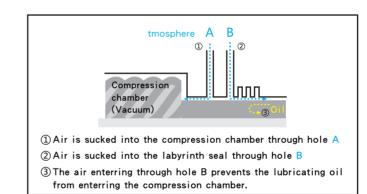
### Ultra-thin coating

We use ultra-thin coating of international patented technology, which shows amazing adhesion and durability under the relevant test, and the light weight of the coating itself prevents the possibility of shedding.

As a non-contact transmission, the gap of the rotor is precisely controlled to the best accuracy, and the air leakage area in the compression chamber is controlled to a minimum.



exclusive patented "2 atmospheric vent holes structure" prevents lubricating oil from entering the compressed air chamber through the shaft seals, even if unloading for a long time, the compression chamber is maintained 100% oil free.



#### High-strength bearing

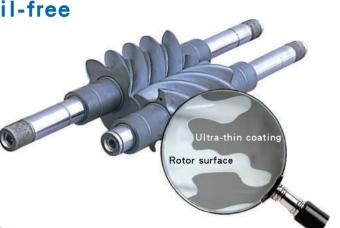
With special anti-friction bearings, it can easily carry all loads and optimize the mechanical designso that the bearing life is further guaranteed.

#### High grade gear

High-grade precision gears are used, and an improved seal is installed at the input end of the drive gear to prevent oil from penetrating into the compression chamber and ensure that the compressed air is completely oil-free.

### Independent auxiliary pump

Make sure that the supply compressor has sufficient oil pressure when starting and stopping.



# Pursuing Excellence, Enriching Life

Fusheng has always adhered to the philosophy of "providing excellent products and services through innovation" in the optimization of production design manufacturing processes, and customer service with the ISO9001 quality management system. We believe our "visible quality process," is the key. Our products are sold in more than 60 countries around the world ans have earned a notable reputation for providing extraordinary added value to outr customers.

To internationalize our markrting coverage, we have established production facilities in Taiwan, China(Beijing, Shanghai, Zhingshan). Vietnam, the U.S(Pittsburg, St, Louis). Germany and Spain, as well as branch offices in Thailand. Malaysia and Indonesia. Our well-established distribution channels ensure the highest quality service to our valued customers-worldwide.

Our continues pursuit of precisin and perfection, the orive for optimum quality, and exceedingly high expectations for personable and enthusiastic customer service, will always be our ultimate goals and measures of success. We believe our sincere commitment to these principles will benefit and enrich people's lives and bring a higher standard of excellence to the industry.



## Energy-saving overall design

#### Intake duct

- The design of independent air inlet box and air inlet duct minimizes the pressure drop of the air intake; the external air inlet ensures the air inlet temperature and improves the compression efficiency.
- The air passes through a silencing channel before entering the air filter, minimizing the intake noise.





### Large Diameter Low Pressure Drop - Intake Valve

Reduce pressure modulating band Utilizing a pneumatic diaphragm action butterfly valve for unloading, Pressure band is decreased from 0.1MPa to 0.05MPa,eliminating unnecessary energy consumption by preventing unnecessary pressure rise.

### Large capacity low pressure drop-cooler

The increased cooling area not only provides a very high heat transfer efficiency, but also provides sufficient margin for the compressed air to pass through the cooler at once. The extremely low pressure drop results in higher compression efficiency.

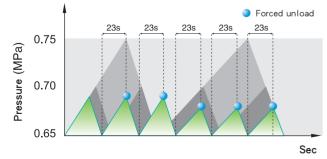


#### Integral structure reduces mechanical losses

- Direct mounting of motor on gear box.
- No coupling design to reduce mechanical loss.

#### Condensate draining solenoid valves

They drain condensate forcibly by timers and solenoid valves, which reduce air loss as well as ensuring condensate drainage.



### Energy saving logic optimizes operation

- Has an energy-saving logic function to force the compressor to unload after the loading time has exceeded a minimum load/unload cycle (every 23
- Reduce pressure band by forced unloading to eliminate unnecessary energy consumption.

## Environmental protection, low noise

Unique noise mask and silencer eliminates noise from the source. The host, motor and cooler assembly are housed on the same set of shock mounts and are equipped

with high-efficiency shockproof pads to minimize vibration.



### Standard packaged oil mist filter

- Filter out oil mist from gearbox
- Included in standard package, eliminates extra installation of external breather pipe
- Over 99% high oil separation efficiency
- Filtered oil return into the tank, avoiding oil wastage

## Easy maintenance



### Simple day-to-day management by the electronic controller

- Electronic controller with large LCD Panel can simplify daily operation and management.
- Monitor various information on air compressor status; display maintenance, alarm, emergency stop information and their corresponding countermeasures; helps prevent emergency stop and rectify it quickly and effectively.
- Comes in standard package for the full range, with complete functionality.
- Display daily and monthly data record in charts for convenient

### The maintenance space is convenient enough

The design of the unit's housing and the arrangement of the internal parts are in order. It is only necessary to open the door panel to reach the maintenance point. This makes the maintenance work easy and guarantees the continuity of production.

- Cooling water flows through tube side for easy cleaning of scale formation.
- Cooling water flow uniformly, resulting in minimal impurity deposits and corrosion.

### Fin type cooler for convenient cleaning Convenient lubricating grease nozzle

- The grease can be easily filled just by opening a door.
- Without touching the machine, the body does not have to extend into the chassis.

### SWTII SERIES

SWTII series oil-free screw compressor

### **SWTII Constant Frequency Air Cooling Parameters**

|             | Dis. Air<br>Volume | Dis. Press | Main Motor | Noise | L    | W    | Н    | Weight |
|-------------|--------------------|------------|------------|-------|------|------|------|--------|
|             | m³/min             | Мра        | kW         | dB(A) | mm   | mm   | mm   | kg     |
| SWT75AII    | 12.8               | 0.75       | 75         | 67    | 2010 | 1500 | 2160 | 2840   |
|             | 10.1               | 0.85       | 75         | 72    | 1830 | 1400 | 1780 | 2085   |
| OM/TOO A II | 15.8               | 0.75       | 90         | 68    | 2010 | 1500 | 2160 | 3080   |
| SWT90AII    | 12.8               | 0.85       | 90         | 70    | 2010 | 1500 | 2160 | 3080   |
| SWT100AII   | 17.0               | 0.75       | 100        | 69    | 2010 | 1500 | 2160 | 3080   |

### **SWTII Constant Frequency Water Cooling Parameters**

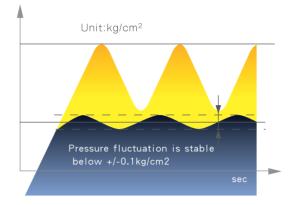
|               | Dis. Air<br>Volume | Dis. Press | Main Motor | Noise    | Cooling Wate | er L | W    | н    | Weight |
|---------------|--------------------|------------|------------|----------|--------------|------|------|------|--------|
|               | m³/min             | Мра        | kW         | dB(A)    | m³/h         | mm   | mm   | mm   | kg     |
| SWT75WII      | 13.0               | 0.75       | 75         | 65       | 6.5          | 2150 | 1335 | 1890 | 2850   |
|               | 10.3               | 0.85       | 75         | 68       | 6.4          | 1730 | 1170 | 1680 | 2135   |
|               | 10.3               | 1.0        | 75         | 69       | 6.4          | 1730 | 1170 | 1680 | 2135   |
| SWT90WII      | 16.0               | 0.75       | 90         | 66       | 8.0          | 2150 | 1335 | 1890 | 3080   |
|               | 14.1               | 0.85       | 90         | 68       | 8.0          | 2150 | 1335 | 1890 | 3080   |
|               | 12.9               | 1.0        | 90         | 71       | 8.0          | 2150 | 1335 | 1890 | 3080   |
| SWT100WII     | 17.2               | 0.75       | 100        | 67       | 8.8          | 2150 | 1335 | 1890 | 3080   |
|               | 16.0               | 0.85       | 100        | 69       | 8.8          | 2150 | 1335 | 1890 | 3080   |
|               | 14.1               | 1.0        | 100        | 71       | 8.8          | 2150 | 1335 | 1890 | 3080   |
| SWT110WII     | 17.1               | 0.85       | 110        | 69       | 9.1          | 2150 | 1335 | 1890 | 3230   |
|               | 16.0               | 1.0        | 110        | 72       | 9.1          | 2150 | 1335 | 1890 | 3230   |
| C\A/T100\A/II | 21.6               | 0.75       | 120        | 67       | 11.6         | 2900 | 1565 | 1860 | 4330   |
| SWT120WII     | 17.1               | 1.0        | 120        | 72       | 9.5          | 2150 | 1335 | 1890 | 3330   |
| SWT132WII     | 23.9               | 0.75       | 132        | 68       | 12.9         | 2900 | 1565 | 1860 | 4350   |
| 3VV   132VVII | 21.6               | 0.85       | 132        | 70       | 12.9         | 2900 | 1565 | 1860 | 4350   |
| SWT145WII     | 26.5               | 0.75       | 145        | 68       | 13.3         | 2900 | 1565 | 1860 | 4450   |
|               | 23.8               | 0.85       | 145        | 70       | 13.3         | 2900 | 1565 | 1860 | 4450   |
|               | 21.5               | 1.0        | 145        | 73       | 13.3         | 2900 | 1565 | 1860 | 4450   |
| SWT160WII     | 28.4               | 0.75       | 160        | 69       | 15.5         | 2900 | 1565 | 1860 | 4500   |
|               | 26.4               | 0.85       | 160        | 71       | 15.5         | 2900 | 1565 | 1860 | 4500   |
|               | 23.8               | 1.0        | 160        | 73       | 15.5         | 2900 | 1565 | 1860 | 4500   |
| SWT180WII     | 32.8               | 0.75       | 180        | 69       | 17.9         | 2900 | 1565 | 1860 | 4570   |
|               | 28.4               | 0.85       | 180        | 71       | 17.9         | 2900 | 1565 | 1860 | 4570   |
|               | 26.4               | 1.0        | 180        | 73       | 17.9         | 2900 | 1565 | 1860 | 4570   |
| SWT200WII     | 36.4               | 0.75       | 200        | 69       | 18.4         | 3250 | 1565 | 2140 | 5980   |
|               | 33.2               | 0.85       | 200        | 72       | 18.4         | 3250 | 1565 | 2140 | 5980   |
| SWT220WII     | 39.0               | 0.75       | 220        | 70       | 20.2         | 3250 | 1565 | 2140 | 6020   |
|               | 36.3               | 0.85       | 220        | 72       | 20.2         | 3250 | 1565 | 2140 | 6020   |
|               | 32.7               | 1.0        | 220        | 72       | 20.2         | 3250 | 1565 | 2140 | 6020   |
| SWT250WII     | 43.6               | 0.75       | 250        | 70       | 22.9         | 3250 | 1565 | 2140 | 6100   |
|               | 41.5               | 0.85       | 250        | 72       | 22.9         | 3250 | 1565 | 2140 | 6100   |
|               | 36.3               | 1.0        | 250        | 72       | 22.9         | 3250 | 1565 | 2140 | 6100   |
| SWT270WII     | 48.0               | 0.75       | 270        | 71       | 23.9         | 3250 | 1565 | 2140 | 6160   |
|               | 43.5               | 0.85       | 270        | 73       | 23.9         | 3250 | 1565 | 2140 | 6160   |
|               | 38.9               | 1.0        | 270        | 73       | 23.9         | 3250 | 1565 | 2140 | 6160   |
| SWT290WII     | 48.0               | 0.85       | 290        | 73       | 24.8         | 3250 | 1565 | 2140 | 6280   |
|               | 41.1               | 1.0        | 290        | 73       | 24.8         | 3250 | 1565 | 2140 | 6280   |
| SWT300WII     | 53.5               | 0.75       | 300        | 75       | 33.0         | 3700 | 2000 | 2395 | 7950   |
|               | 50.0               | 0.85       | 300        | 75       | 33.0         | 3700 | 2000 | 2395 | 7950   |
| SWT315WII     | 57.2               | 0.75       | 315        | 75       | 35.4         | 3700 | 2000 | 2395 | 8030   |
|               | 53.4               | 0.85       | 315        | 75       | 35.4         | 3700 | 2000 | 2395 | 8030   |
| SWT355WII     | 63.7               | 0.75       | 355        | 75<br>75 | 39.0         | 3700 | 2000 | 2395 | 8110   |
|               | 60.0               | 0.85       | 355        | 75       | 39.0         | 3700 | 2000 | 2395 | 8110   |
| SWT400WII     | 70.0               | 0.75       | 400        | 75       | 43.2         | 3700 | 2000 | 2395 | 8190   |
|               | 67.0               | 0.85       | 400        | 75       | 43.2         | 3700 | 2000 | 2395 | 8190   |

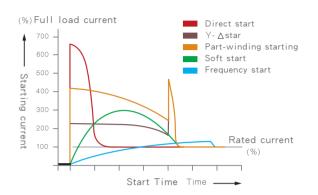
#### Constant pressure gas supply

Variable frequency control instantly responds to changes in air volume used by customers. Supply air pressure fluctuations are stable below +/-0.1kg/cm2, which can significantly save running electricity tariffs by up to 35%.

#### Variable frequency star

Variable frequency soft start, smooth linear operation, no traditional direct start or star delta startup current, reduce the impact on the circuit, power, greatly extend the life of the contactor, motor and compressor body.





### **SWTII VSD Air Cooling Parameters**

|            | Dis. Air<br>Volume | Dis. Press | Main Motor | Noise | L    | W    | Н    | Weight |
|------------|--------------------|------------|------------|-------|------|------|------|--------|
|            | m³/min             | Мра        | kW         | dB(A) | mm   | mm   | mm   | kg     |
| SWTV75AII  | 12.8               | 0.75       | 75         | 67    | 2470 | 1500 | 2160 | 2976   |
|            | 10.1               | 0.85       | 75         | 72    | 2385 | 1400 | 1780 | 2290   |
| SWTV90AII  | 15.8               | 0.75       | 90         | 68    | 2470 | 1500 | 2160 | 3140   |
|            | 12.8               | 0.85       | 90         | 70    | 2470 | 1500 | 2160 | 3140   |
| SWTV100AII | 17.0               | 0.75       | 100        | 69    | 2470 | 1500 | 2160 | 3190   |
|            | 15.7               | 0.85       | 100        | 71    | 2470 | 1500 | 2160 | 3190   |

### **SWTII VSD Water Cooling Parameters**

|            | Dis. Air<br>Volume   | Dis. Press          | Main Motor        | Noise                      | Cooling Wate      | r L                  | W                    | н                    | Weight               |
|------------|----------------------|---------------------|-------------------|----------------------------|-------------------|----------------------|----------------------|----------------------|----------------------|
|            | m³/min               | Мра                 | kW                | dB(A)                      | m³/h              | mm                   | mm                   | mm                   | kg                   |
| SWTV75WII  | 13.0                 | 0.75                | 75                | 65                         | 6.5               | 2600                 | 1335                 | 1890                 | 2976                 |
|            | 10.3                 | 0.85                | 75                | 68                         | 6.4               | 2120                 | 1170                 | 1680                 | 2310                 |
|            | 10.3                 | 1.0                 | 75                | 69                         | 6.4               | 2120                 | 1170                 | 1680                 | 2310                 |
| SWTV90WII  | 16.0                 | 0.75                | 90                | 66                         | 8.0               | 2600                 | 1335                 | 1890                 | 3140                 |
|            | 14.1                 | 0.85                | 90                | 68                         | 8.0               | 2600                 | 1335                 | 1890                 | 3140                 |
|            | 12.9                 | 1.0                 | 90                | 71                         | 8.0               | 2600                 | 1335                 | 1890                 | 3140                 |
| SWTV100WII | 17.2<br>16.0<br>14.1 | 0.75<br>0.85<br>1.0 | 100<br>100<br>100 | 67<br>69<br>71<br>69<br>72 | 8.8<br>8.8<br>8.8 | 2600<br>2600<br>2600 | 1335<br>1335<br>1335 | 1890<br>1890<br>1890 | 3190<br>3190<br>3190 |
| SWTV110WII | 17.1                 | 0.85                | 110               | 69                         | 9.1               | 2600                 | 1335                 | 1890                 | 3290                 |
|            | 16.0                 | 1.00                | 110               | 72                         | 9.1               | 2600                 | 1335                 | 1890                 | 3290                 |
| SWTV120WII | 17.1<br>21.6         | 1.0<br>0.75         | 120<br>120        | 67<br>72<br>68             | 9.5<br>11.6       | 2600<br>2900         | 1335<br>1565         | 1890<br>1860         | 3330<br>4520         |
| SWTV132WII | 23.9<br>21.6         | 0.75<br>0.85        | 132<br>132        | 70                         | 12.9<br>12.9      | 2900<br>2900         | 1565<br>1565         | 1860<br>1860         | 4550<br>4550         |
| SWTV145WII | 26.5                 | 0.75                | 145               | 68                         | 13.3              | 2900                 | 1565                 | 1860                 | 4650                 |
|            | 23.8                 | 0.85                | 145               | 70                         | 13.3              | 2900                 | 1565                 | 1860                 | 4650                 |
|            | 21.5                 | 1.0                 | 145               | 73                         | 13.3              | 2900                 | 1565                 | 1860                 | 4650                 |
| SWTV160WII | 28.4                 | 0.75                | 160               | 69                         | 15.5              | 2900                 | 1565                 | 1860                 | 4720                 |
|            | 26.4                 | 0.85                | 160               | 71                         | 15.5              | 2900                 | 1565                 | 1860                 | 4720                 |
|            | 23.8                 | 1.0                 | 160               | 73                         | 15.5              | 2900                 | 1565                 | 1860                 | 4720                 |
| SWTV180WII | 32.8                 | 0.75                | 180               | 69                         | 17.9              | 2900                 | 1565                 | 1860                 | 4815                 |
|            | 28.4                 | 0.85                | 180               | 71                         | 17.9              | 2900                 | 1565                 | 1860                 | 4815                 |
|            | 26.4                 | 1.0                 | 180               | 73                         | 17.9              | 2900                 | 1565                 | 1860                 | 4815                 |
| SWTV200WII | 36.4<br>33.2         | 0.75<br>0.85        | 200<br>200        | 73<br>69<br>72             | 18.4<br>18.4      | 3250<br>3250         | 1565<br>1565         | 2145<br>2145         | 6250<br>6250         |
| SWTV220WII | 39.0                 | 0.75                | 220               | 70                         | 20.2              | 3250                 | 1565                 | 2145                 | 6310                 |
|            | 36.3                 | 0.85                | 220               | 72                         | 20.2              | 3250                 | 1565                 | 2145                 | 6310                 |
|            | 32.7                 | 1.0                 | 220               | 72                         | 20.2              | 3250                 | 1565                 | 2145                 | 6310                 |
| SWTV250WII | 43.6                 | 0.75                | 250               | 70                         | 22.9              | 3250                 | 1565                 | 2145                 | 6390                 |
|            | 41.5                 | 0.85                | 250               | 72                         | 22.9              | 3250                 | 1565                 | 2145                 | 6390                 |
|            | 36.3                 | 1.0                 | 250               | 72                         | 22.9              | 3250                 | 1565                 | 2145                 | 6390                 |
| SWTV270WII | 48.0                 | 0.75                | 270               | 71                         | 23.9              | 3250                 | 1565                 | 2145                 | 6450                 |
|            | 43.5                 | 0.85                | 270               | 73                         | 23.9              | 3250                 | 1565                 | 2145                 | 6450                 |
|            | 38.9                 | 1.0                 | 270               | 73                         | 23.9              | 3250                 | 1565                 | 2145                 | 6450                 |
| SWTV290WII | 48.0                 | 0.85                | 290               | 73                         | 24.8              | 3250                 | 1565                 | 2145                 | 6570                 |
|            | 41.4                 | 1.0                 | 290               | 73                         | 24.8              | 3250                 | 1565                 | 2145                 | 6570                 |

<sup>\*</sup>Optional permanent magnet motor (IPM). Please contact Fusheng for details.

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