



# New Inverter Power Unit

**In Accordance with 2014 IE2 IE3, High efficiency  
for machine tool**

Power & Money saving, you can make it.  
Environment-protecting, 2014 Now Beginning.

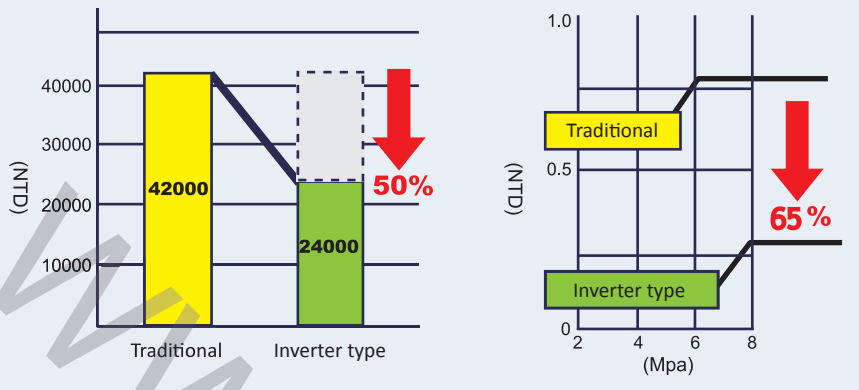
Power saving : 65%    Noise Level : 50dB    Pressure 60kg/cm<sup>2</sup>  
OIL TEMP Raise : 1°C (Stand by pressure 60/cm<sup>2</sup>, TEMP 23°C)



Patented product,  
counterfeiting not allowed.

[www.yeoshe.com.tw](http://www.yeoshe.com.tw)

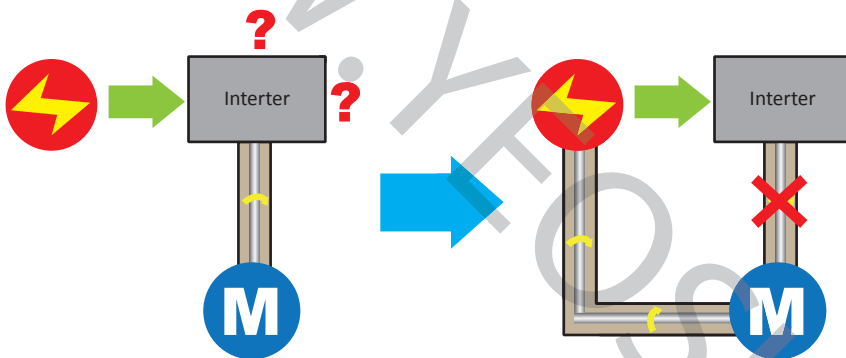
## Efficient power saving 40~65%



### Low noise level 50dB

- 6.0Mpa stand by time.
- Low noise level 50dB.

## Production lines keep running

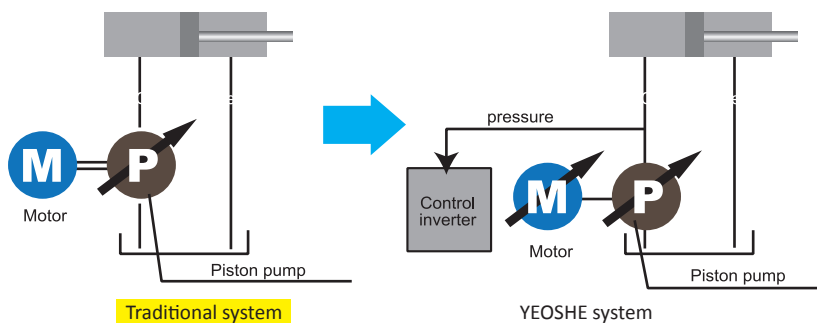


### Easy Operation & Adjustment

- No need to change usual habit.
- Turn on and start.



## System



### Environmental Protection

- Oil TEMP 2°C Raise
- 6.0Mpa stand by time.



Mission of Protecting Polar Bear

## TP and TV Series

## Inverter with Energy- Saving Hydraulic Unit

### TP and TV Series : Inverter with Energy- Saving Hydraulic Unit

#### TP and TV Product Feature

|    | Temp raise | Noise under | Saving |                                                                                                                                                                                                                                                               |
|----|------------|-------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TP | About +1℃  | About 50dB  | 65%    | <ul style="list-style-type: none"> <li>Reducing oil temperature, promoting manufacturing precision of machine , extending internal components and lubrication oil lifespan, reducing air conditioner power charge to achieve power saving purpose.</li> </ul> |
| TV | About +5℃  | About 53dB  | 55%    | <ul style="list-style-type: none"> <li>60kgf/cm<sup>2</sup>(6.0MPa) stand by time</li> <li>N4 direction average. Standard power unit noise is 64dB.</li> </ul>                                                                                                |

#### TP and TV Product Character

|                                             |                                                                                                                                                                                                                                     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Easy operation.                             | <ul style="list-style-type: none"> <li>No need to change usual habit.</li> <li>Turn on the power to start operating.</li> <li>According to motor loaded speed, which is no need to precise power adj.or outer direction.</li> </ul> |
| Normal operation while inverter breaks off. | <ul style="list-style-type: none"> <li>While emergencies, changing power distribution to continue running.</li> <li>While inverter error, making nonstop production line.</li> </ul>                                                |
| Extra drive is attachable                   | <ul style="list-style-type: none"> <li>TP standard type (non-inverter drive) installs extra inverter is attachable.</li> <li>Only suitable Yeoshe brand pump&amp;motor.</li> </ul>                                                  |

#### Specification

|                          |                                                                                                  |                                                                 |                   |
|--------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------|
| Power                    | 3φAC200~240V , 50/60Hz<br>3φAC380~480V , 50/60Hz                                                 |                                                                 |                   |
| Input                    | 0.75 kW/ 1.5 kW/<br>2.2 kW/                                                                      | 3.7 kW/<br>5.5 kW/                                              | 7.5 kW/<br>11 kW/ |
| Pressure adj.            | Pressure adj.<br>A: 10~40            E:25~315<br>B: 15~70<br>C: 20~140<br>D: 25~210              | Vane pump Series<br>A: 8~20<br>B: 15~35<br>C: 30~55<br>D: 50~70 |                   |
|                          | Different place voltage, different power input, standard inverter power pack is AC220V.          |                                                                 |                   |
| Displacement (unloading) | 8, 12, 16, 22, 23, 38, 42, 50, 56, 70                                                            |                                                                 |                   |
| Hydraulic oil            | Mineral oil ( equal ISO VG32)                                                                    |                                                                 |                   |
| Oil TEMP                 | 10~60℃                                                                                           |                                                                 |                   |
| Color                    | YEOSHE Standard color :Black gray<br>Other color can be decided by customers.                    |                                                                 |                   |
| TEMP/Humidity            | 0~35 ℃/20~85%RH(No FOG) Avoiding fog environment, which under using water soluble cutting fluid. |                                                                 |                   |

#### Piston Pump Series



#### Vane Pump Series



## TP Series

## Inverter Hydraulic Unit-Piston Pump Series

## Series Instruction (※ standard type)

T P - 20 E - 15 AR 16 B 22 - F2 - 10 -

TP Series

Liter

Motor  
Capacity

Displacement

Voltage

Thread

Design no.

Character

Drive type

Pump

Pressure

Optional

Thread

Design no.

|    | Thread   |
|----|----------|
| 10 | PT(RC)   |
| 40 | BSPP(G)  |
| 60 | UNF(SAE) |

Optional

F、R Manifold Block

Voltage

22 : AC200~240V 50/60Hz

38 : AC380~480V 50/60Hz

## Pump Displacement

| Displacement |                         | Piston pump Series |   |
|--------------|-------------------------|--------------------|---|
|              |                         | AR                 | V |
| 8            | 8 cm <sup>3</sup> /rev  | ●                  | ○ |
| 12           | 12 cm <sup>3</sup> /rev | ●                  | ○ |
| 16           | 16 cm <sup>3</sup> /rev | ●                  | ○ |
| 22           | 22 cm <sup>3</sup> /rev | ●                  | ○ |
| 23           | 23 cm <sup>3</sup> /rev | ○                  | ● |
| 38           | 38 cm <sup>3</sup> /rev | ○                  | ● |
| 42           | 42 cm <sup>3</sup> /rev | ○                  | ● |

○:non-supply

## Pressure adj.

|     | Piston pump Series                             |
|-----|------------------------------------------------|
| ※ A | 10~40 kgf/cm <sup>2</sup>                      |
| ※ B | 15~70 kgf/cm <sup>2</sup>                      |
| ※ C | 20~140 kgf/cm <sup>2</sup>                     |
| D   | 25~210 kgf/cm <sup>2</sup>                     |
| E   | 25~315 kgf/cm <sup>2</sup><br>(PV series only) |

Different place voltage,  
different power input,  
standard inverter power  
pack is AC220V.

## Pump Type

| Piston pump Series |           |
|--------------------|-----------|
| AR                 | AR series |
| V                  | V series  |

## KW

| KW(HP) |             | Tank (L) |     |     |     |
|--------|-------------|----------|-----|-----|-----|
|        |             | 10L      | 20L | 30L | 40L |
| 07     | 0.75KW(1HP) | ●        | ●   | ○   | ○   |
| 15     | 1.5KW(2HP)  | ●        | ●   | ○   | ○   |
| 22     | 2.2KW(3HP)  | ●        | ●   | ●   | ●   |
| 37     | 3.7KW(5HP)  | ○        | ○   | ●   | ●   |

○:non-supply

## Drive type

| Drive type                                       | Tank (L) |     |     |     |
|--------------------------------------------------|----------|-----|-----|-----|
|                                                  | 10L      | 20L | 30L | 40L |
| C : Inside drive type<br>*Back side open         | ●        | ●   | ●   | ●   |
| R : Inside drive type<br>*Right side open        | ●        | ●   | ●   | ●   |
| ※ L : Inside drive type<br>*Left side open       | ●        | ●   | ●   | ●   |
| N : YEOSHE standard type<br>(non-inverter drive) | ●        | ●   | ●   | ●   |

○:non-supply

Tank (L)

10: 10L  
20: 20L  
30: 30L  
40: 40L  
60: 60L  
80: 80L

Piston pump Series

High Efficiency &amp; High pressure

Inverter drive

# TV Series

## Inverter Hydraulic Unit-Vane Pump Series

### Series Instruction (※ standard type)

T V - 20 E - 15 VD 16 B 22 - F2 - 10 - [ ] [ ]

TP Series    Liter    Motor Capacity    Displacement    Voltage    Thread    Design no.

Character

Drive type

Pump

Pressure

Optional

|    | Thread   |
|----|----------|
| 10 | PT(RC)   |
| 40 | BSPP(G)  |
| 60 | UNF(SAE) |

Optional

F、R Marifold Block

Voltage

22 : AC200~240V 50/60Hz

38 : AC380~480V 50/60Hz

Pump Displacement

| Displacement |                         | Vane pump Series |     |
|--------------|-------------------------|------------------|-----|
|              |                         | VD               | SVD |
| 8            | 8 cm <sup>3</sup> /rev  | ○                | ●   |
| 12           | 12 cm <sup>3</sup> /rev | ○                | ●   |
| 16           | 16 cm <sup>3</sup> /rev | ●                | ○   |

○:non-supply

Pressure adj.

|     | Vane pump Series          |
|-----|---------------------------|
| ※ A | 8~20 kgf/cm <sup>2</sup>  |
| ※ B | 15~35 kgf/cm <sup>2</sup> |
| ※ C | 30~55 kgf/cm <sup>2</sup> |
| ※ D | 50~70 kgf/cm <sup>2</sup> |

Different place voltage, different power input, standard inverter power pack is AC220V.

Pump Type

| Vane pump Series |            |
|------------------|------------|
| VD               | VD series  |
| SVD              | SVD series |

KW

| KW(HP) |              | Tank (L) |     |     |     |
|--------|--------------|----------|-----|-----|-----|
|        |              | 10L      | 20L | 30L | 40L |
| 07     | 0.75KW (1HP) | ●        | ●   | ○   | ○   |
| 15     | 1.5KW (2HP)  | ●        | ●   | ○   | ○   |
| 22     | 2.2KW (3HP)  | ●        | ●   | ●   | ●   |
| 37     | 3.7KW (5HP)  | ○        | ○   | ●   | ●   |

○:non-supply

Drive type

| Drive type                                       | Tank (L) |     |     |     |
|--------------------------------------------------|----------|-----|-----|-----|
|                                                  | 10L      | 20L | 30L | 40L |
| C : Inside drive type<br>*Back side open         | ●        | ●   | ●   | ●   |
| R : Inside drive type<br>*Right side open        | ●        | ●   | ●   | ●   |
| L : Inside drive type<br>*Left side open         | ●        | ●   | ●   | ●   |
| E : YEOSHE standard type<br>(non-inverter drive) | ●        | ●   | ●   | ●   |

○:non-supply

Tank (L)

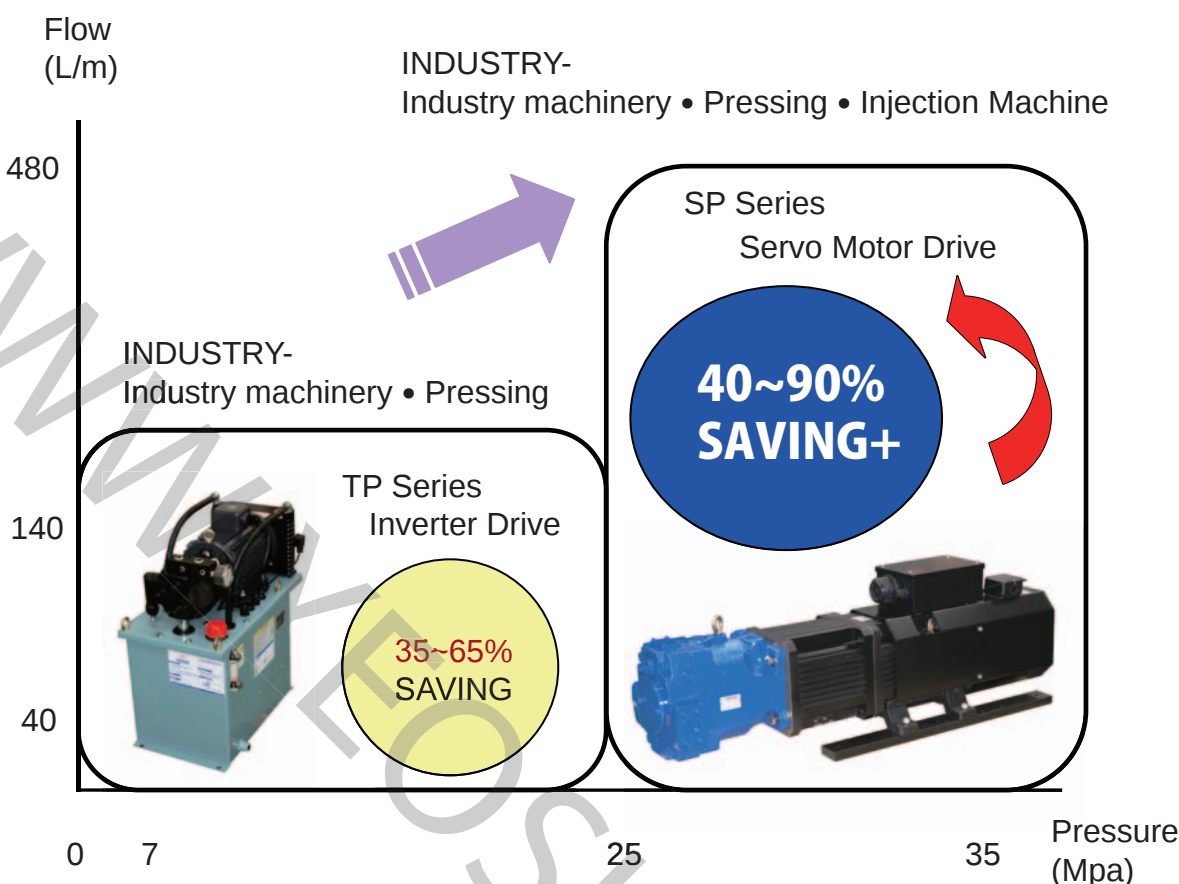
10: 10L  
20: 20L  
30: 30L  
40: 40L  
60: 60L  
80: 80L

Vane Pump Series

Economic & Light weight

Inverter drive

## High Efficiency High Power Saving \* Hydraulic System



## Easy Operation and Reliable Performance

PLUS(1)

All In One Pressure Voltage Speed

Immediate start just by turning on the power



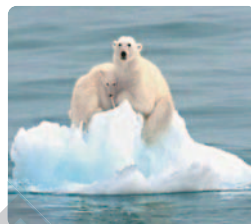
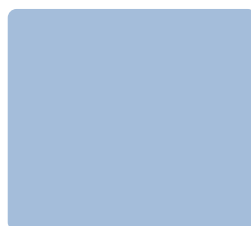
Multifunctional PID Module Compact System

PLUS(2)

Auto Error Display system

### Error Display List 1

| RMSG/SP Error trouble shooting                                                                                                                                                                                          |                                                                                                                                                                                |                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>EEr</p> <p>Memory device (EEPROM) OE</p> <p>Over power protection OH</p> <p>Over heat protection OHO</p> <p>Over load protection OLO</p> <p>Over load inspecting protection SC</p> <p>Inverter inside fuse broke</p> | <p>Ad Err</p> <p>Analog digital transferring LEI</p> <p>Rotation power over low protection OL</p> <p>Motor over load protection thr</p> <p>Outside collect heat protection</p> | <p>OC</p> <p>Current protection GF</p> <p>loading protection OL1</p> <p>Inverter over load protection PADr</p> <p>KP-202C Operation error protection</p> |



**YEOSHE**

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Distributor

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