

# SPEED VARIATOR



## INTRODUCE

MONTROLI® UD Series Speed Variator are made to IEC Standards, also up to the international latest design technology. The power range of UD Series is from 0.12kw up to 7.5kw in 7 frame sizes from 63 up to 132 to satisfy variable applications.

## FEATURES

- \* High precision for the speed adjustment. The speed iterative precision is between 0.5~1 cycle.
- \* Can be duplexing operated continuously.
- \* The output transmission ratio between 1:1.4 to 1:7 (except UDL-002) and is adjustable, speed variation ratio can reach 5.
- \* High operate efficiency, stable and quiet operation.
- \* Good sealing and good adaptability in the operation environment.
- \* Can combine with all kinds of reducers to handle various kinds of transmission projects.
- \* Compact size, simple construction & light weight.
- \* Good appearance.
- \* Superior life.
- \* Ease of maintenance.

## MAIN MATERIALS

- \* Cover: Aluminium alloy for UDL and cast iron for UDT.
- \* Inner parts: Gcr15 harden steel with heat treatment.
- \* Shaft: 20Cr harden steel with heat treatment and tempered with low temperature.

## PAINTING

- \* Aluminium alloy: Short blasting and anti-corrosive treatment on the surface of the aluminium alloy or painted with RAL5010 blue epoxy-polyester powder.
- \* Cast iron: Painted with blue epoxy-polyester powder.

## UDL SERIES



## UDT SERIES



| Model                                | Power |      | Ratio<br><i>i</i> | Output Speed<br><i>n</i> <sub>2min</sub><br>(rpm) | Output Speed<br><i>n</i> <sub>2max</sub><br>(rpm) | Output Torque<br>(N.m.) | Output Torque<br>(N.m.) |
|--------------------------------------|-------|------|-------------------|---|---|-------------------------|-------------------------|
|                                      | (KW)  | (HP) |                   |   |   |                         |                         |
| 415V/50Hz Speed 2800r.p.m. (2 Poles) |       |      |                   |   |   |                         |                         |
| UDL-002                              | 0.25  | 0.34 | 0.129~0.645       | 361   | 1806  | 1.1                     | 2.9                     |
|                                      | 0.37  | 0.50 |                   |   |   | 1.6                     |                         |
| UDL-005                              | 0.55  | 0.75 | 0.143~0.714       | 400   | 2000  | 2.2                     | 5.9                     |
|                                      | 0.75  | 1    |                   |   |   | 3                       |                         |
| UDL-010                              | 1.1   | 1.5  | 0.143~0.714       | 400   | 2000  | 4.4                     | 11.9                    |
|                                      | 1.5   | 2    |                   |   |   | 6                       |                         |
| 415V/50Hz Speed 1400r.p.m. (4 Poles) |       |      |                   |   |   |                         |                         |
| UDL-002                              | 0.12  | 0.16 | 0.129~0.645       | 181   | 903   | 1.1                     | 2.9                     |
|                                      | 0.18  | 0.25 |                   |   |   | 1.6                     |                         |
| UDL-005                              | 0.25  | 0.34 | 0.143~0.714       | 200   | 1000  | 2.2                     | 5.9                     |
|                                      | 0.37  | 0.5  |                   |   |   | 3                       |                         |
| UDL-010                              | 0.55  | 0.75 | 0.143~0.714       | 200   | 1000  | 4.4                     | 11.9                    |
|                                      | 0.75  | 1    |                   |   |   | 6                       |                         |
| UDT-020                              | 1.1   | 1.5  | 0.143~0.714       | 200   | 1000  | 8.8                     | 24                      |
|                                      | 1.5   | 2    |                   |   |   | 12                      |                         |
| UDT-030S                             | 2.2   | 3    | 0.143~0.714       | 200   | 1000  | 17.9                    | 36                      |
| UDT-030L                             | 3     | 4    | 0.143~0.714       | 200   | 1000  | 24                      | 64                      |
|                                      | 4     | 5.5  |                   |   |   | 32                      |                         |
| UDT-050S                             | 5.5   | 7.5  | 0.143~0.714       | 200   | 1000  | 44.9                    | 90.1                    |
| UDT-050L                             | 7.5   | 10   | 0.143~0.714       | 200   | 1000  | 59                      | 118.1                   |
| 415V/50Hz Speed 900r.p.m. (6 Poles)  |       |      |                   |   |   |                         |                         |
| UDL-005                              | 0.18  | 0.25 | 0.143~0.714       | 129   | 643   | 2.2                     | 5.9                     |
|                                      | 0.25  | 0.34 |                   |   |   | 3.0                     |                         |
| UDL-010                              | 0.37  | 0.5  | 0.143~0.714       | 129   | 643   | 4.4                     | 11.9                    |
|                                      | 0.55  | 0.75 |                   |   |   | 6.8                     |                         |
| UDT-020                              | 0.75  | 1    | 0.143~0.714       | 129   | 643   | 8.8                     | 24                      |
|                                      | 1.1   | 1.5  |                   |   |   | 13.0                    |                         |
| UDT-030S                             | 1.5   | 2    | 0.143~0.714       | 129   | 643   | 17.9                    | 36.0                    |
| UDT-030L                             | 2.2   | 3    | 0.143~0.714       | 129   | 643   | 26.4                    | 64                      |
| UDT-050L                             | 5.5   | 4    | 0.143~0.714       | 129   | 643   | 61                      | 118.1                   |