



## DELTA VFD Series

*Variable Speed AC Motor Drives*

**High Performance Low Noise**



ASIA  
DELTA ELECTRONICS, INC.  
Taoyuan Plant/  
31-1, SHIEN PAN ROAD, KUEI SAN  
INDUSTRIAL ZONE, TAOYUAN SHIEN,  
TAIWAN, R.O.C.  
TEL: 886-3-362-6301  
FAX: 886-3-362-7267  
www.delta.com.tw/industrialautomation

DELTA ELECTRONICS (JAPAN) INC.  
DELTA SHIBADAIMON BLDG.  
2-1-14 SHIBADAIMON, MINATO-KU,  
TOKYO, 105-0012, JAPAN  
TEL: 81-3-5733-1111  
FAX: 81-3-5733-1211

NORTH/SOUTH AMERICA  
DELTA PRODUCTS CORPORATION  
Sales Office/  
P.O. BOX 12173  
5101 DAVIS DRIVE  
RESEARCH TRIANGLE PARK,  
NC 27709, U.S.A.  
TEL: 1-919-767-3813  
FAX: 1-919-767-3969

EUROPE  
DELTRONICS (NETHERLANDS) B.V.  
DE WITBOGT 15  
NL-5652 AG EINDHOVEN  
THE NETHERLANDS  
TEL: 31-40 259-2850  
FAX: 31-40 259-2851

# DELTA VFD-Series AC Motor Drives

Approval is in progress Has Safety approvals(CE,UL,C-tick)

|   |              | S P E C I F I C A T I O N S |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|---|--------------|-----------------------------|-------|-----------|-----------|----------|---------|---------|---------|-----------|----------|---------|---------|-----------|---------|---------|---------|---------|---------|----------|----------|-----------|-----------|-----------|-----------|-----------------|--|-----------|--|--|--|--|--|---|--|--|--|
| Series  | Voltage      | Power Range                 |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           | Characteristics |  |           |  |  |  |  |  |   |  |  |  |
|   | Rating (V)   | (0.04)                      | (0.1) | 1/4 (0.2) | 1/2 (0.4) | 1 (0.75) | 2 (1.5) | 3 (2.2) | 5 (3.7) | 7.5 (5.5) | 10 (7.5) | 15 (11) | 20 (15) | 25 (18.5) | 30 (22) | 40 (30) | 50 (37) | 60 (45) | 75 (55) | 100 (75) | 125 (90) | 150 (110) | 175 (132) | 215 (160) | 250 (185) |                 |  | 300 (220) |  |  |  |  |  |   |  |  |  |
| <b>VFD-V</b><br>* High-performance vector control drive       | 230V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  | <ul style="list-style-type: none"> <li>• Sensorless vector control, speed control ratio 1:100</li> <li>• With PG feedback control, speed control ratio 1:1000</li> <li>• PID control</li> <li>• Starting torque over 150% at zero speed</li> <li>• Built-in MODBUS communication interface(2 comm ports)</li> </ul>   | <ul style="list-style-type: none"> <li>• Carrier freq. up to 15KHz</li> <li>• Auto tuning</li> <li>• Four types S curve settings</li> <li>• 3 position mode selectable</li> </ul>  |  |  |
|   | 460V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
| <b>VFD-M</b><br>* High-performance low-noise micro-type drive | 115V/1-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  | <ul style="list-style-type: none"> <li>• Built-in PLC functions</li> <li>• Easy-to-operate</li> <li>• Adjustable frequency via keypad or potentiometer</li> <li>• Low noise</li> <li>• Sleep / Revival function</li> <li>• Simple position control</li> <li>• Built-in MODBUS communication interface</li> <li>• Carrier frequency up to 15 KHz</li> <li>• 2 accel./decel.</li> </ul> | <ul style="list-style-type: none"> <li>• Built-in potentiometer</li> <li>• 1st/2nd frequency source switching</li> <li>• V / F and simple vector control</li> </ul>  |  |  |
|   | 230V/1-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 230V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 460V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 575V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
| <b>VFD-B</b><br>* High-performance user-friendly NEMA 1       | 230V/1-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  | <ul style="list-style-type: none"> <li>• V / F &amp; Sensor-less vector control</li> <li>• Auto tuning</li> <li>• Built-in PLC functions</li> <li>• PG feedback control</li> <li>• PID control</li> <li>• Mast / Auxiliary and 1st/2nd frequency Source selectable 1</li> </ul>   | <ul style="list-style-type: none"> <li>• Built-in MODBUS communication interface</li> <li>• Power-curve selection</li> <li>• 16 multi-step speed controls</li> <li>• Auto adjustable accel. / decel. times</li> <li>• Sleep / Revival function</li> <li>• Simple position control</li> </ul> |  |  |
|   | 230V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 460V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 575V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
| <b>VFD-S</b><br>* Compact low-cost NEMA 1 micro-type drive    | 115V/1-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  | <ul style="list-style-type: none"> <li>• Built-in PLC functions</li> <li>• Auto adjustable accel. / decel. Time</li> <li>• Miniature size</li> <li>• 8 multi-step speed controls</li> <li>• PID feedback control</li> <li>• Sleep/Revival function</li> <li>• Built-in MODBUS communication interface</li> </ul>  | <ul style="list-style-type: none"> <li>• Password protection over 100 parameters</li> <li>• Built-in potentiometer</li> </ul>  |  |  |
|   | 230V/1-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 230V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 460V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
| <b>VFD-L</b><br>* Sub-fractional general-purpose Drive        | 115V/1-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  | <ul style="list-style-type: none"> <li>• Torque compensation</li> <li>• DIP switch</li> <li>• Built-in MODBUS communication</li> <li>• Full protection ( OL, OC, OV, OH )</li> <li>• Electronic thermal protection</li> <li>• Built-in EMI filter</li> </ul>  |  |  |  |
|   | 230V/1-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
|   | 230V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |
| <b>VFD-F</b><br>* High-performance fan & pump AC motor drives | 230V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  | <ul style="list-style-type: none"> <li>• Automatic torque boost</li> <li>• Built-in PLC function</li> <li>• PID control</li> <li>• Built-in counter</li> <li>• Momentary power loss control</li> </ul> | <ul style="list-style-type: none"> <li>• Automatic slip compensation</li> <li>• Built-in RS-485 communication interface</li> <li>• Fan &amp; pump process control ( Time / fix amount circulation control )</li> <li>• Sleep / Revival function</li> </ul>  |  |  |  |
|   | 460V/3-Phase |                             |       |           |           |          |         |         |         |           |          |         |         |           |         |         |         |         |         |          |          |           |           |           |           |                 |  |           |  |  |  |  |  |   |  |  |  |

If you have any questions regarding this catalogue, please refer to <http://www.delta.com.tw> for further information.