

DELTA · VP3000 SERIES VFD (3-PHASE INPUT) · DATASHEET

# Delta VFD866VP43SHTCA VP3000 Series 450kW VFD

Model VFD866VP43SHTCA · Variable Frequency Drive (VFD)



460V 3-Phase input, 450KW/600HP, 3-Phase output.

**Key features**

- Rated motor output 450 kW / 600 HP

**Price and availability**

Ask Industrial Supply Syndicate for the current price, stock and a quotation with GST and freight. Call +91 89610 89611 or WhatsApp +91 89610 89611.

## Specifications

**Power Output**

|                                        |                 |
|----------------------------------------|-----------------|
| Max. Applicable Motor                  | 450 kW (600 HP) |
| Continuous Rated Output Current        | 866 A           |
| Light-Load Current (110%, 1 min/5 min) | 825 A           |
| Max. Output Current (2 s start)        | 1065 A          |
| Max. Output Frequency                  | 599 Hz          |

**Input**

|                                  |                                              |
|----------------------------------|----------------------------------------------|
| Rated Input Voltage / Freq.      | 3-Phase 380–480 V AC (-15% ~ +10%), 50/60 Hz |
| Rated Input Current              | 866 A                                        |
| Power Supply Capacity            | 690 kVA                                      |
| Displacement Power Factor (cosφ) | 0.98                                         |

**Control**

|                    |                                                |
|--------------------|------------------------------------------------|
| Control Mode       | PWM                                            |
| Control Methods    | V/F, SVC, FOC (sensorless), SynRM (sensorless) |
| Motor Types        | Induction (IM), Permanent Magnet (PM), SynRM   |
| Duty Type          | Variable torque (open-loop)                    |
| Starting Torque    | 150%+ at 0.5 Hz                                |
| Overload Tolerance | 110% rated for 1 min every 5 min               |
| Energy Saving      | Automatic Energy Saving (AES)                  |

## Control (continued)

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Built-in PLC                      | Yes (20K steps)                    |
| Drive Efficiency                  | ~98% (frame G and above)           |
| Harmonics (lower-harmonic models) | THDi as low as 35% (EN 61000-3-12) |

## Communication

|          |                                                                               |
|----------|-------------------------------------------------------------------------------|
| Built-in | Modbus & BACnet MS/TP                                                         |
| Optional | Modbus TCP, BACnet IP, EtherNet/IP, PROFIBUS DP, PROFINET, DeviceNet, CANopen |
| Keypad   | LED / LCD graphic / LCD with Bluetooth & USB (optional)                       |

## Safety & Build

|                              |                                                       |
|------------------------------|-------------------------------------------------------|
| Safe Torque Off (STO)        | SIL 3 — ISO 13849-1 PL e, EN 61508 SIL 3              |
| Predictive Maintenance (PdM) | Power module, capacitor & cooling-fan life monitoring |
| Conformal Coating            | IEC 60721-3-3 class 3C3                               |
| Built-in EMC Filter          | Available — EN 61800-3 C2 / C3                        |
| Over-current / Over-voltage  | 195% rated; DC-bus trip > 820 V                       |
| Certifications               | CE, UL, RCM, REACH, RoHS                              |

## Physical

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Frame Size            | Frame M                                                   |
| Enclosure             | IP00 chassis design (IP00 (chassis))                      |
| Dimensions W × H (mm) | 456 × 1548                                                |
| Operating Temperature | -20 to +50°C (UL Type 1); up to +60°C (UL Open / chassis) |
| Altitude              | 0–1000 m (derate above 1000 m)                            |

## Typical applications

- Large industrial pumping stations
- Centrifugal compressors
- Steel mill auxiliary drives
- Mining conveyors and crushers
- Large HVAC chillers and cooling towers
- Paper and pulp mill machinery
- Cement and quarry equipment
- Marine auxiliary drives

## Order or ask for a quotation

Industrial Supply Syndicate supplies the Delta VFD866VP43SHTCA across India with a GST invoice. Tell us the quantity and delivery location; we reply with a quotation or proforma invoice including freight.

**Phone** +91 89610 89611  
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**GSTIN** 19ACDPC1843J1ZR



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