**Model #:** VFD45AMS43ANSAA

| Description | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| (MS300) 30HP (HD 45A) / 30HP (ND 49A), 3 Ø 460VAC 0-599.0Hz (op) (V/Hz SVC PM) IP20 Frame F1 | | | | | | | | |
| **Manufacturer** | **Heavy Duty Output Rating** | | **Normal Duty Output Rating** | | **-** | | **Single Phase Duty Rating** | |
| **Delta Electronics** | Input Amps Rating | 49,5 | Input Amps Rating | 53,9 | Input Amps Rating | - | 1 Ø Input Amps Rating | 53,9 |
| | **Rated HP** | **Rated Amps** | **HP** | **Rated Amps** | **HP** | **Rated Amps** | **HP** | **Amps** |
| | 30,0 | 45,0 | 30,00 | 45,0 | 30,0 | 49,0 | 15,0 | 22,5 |
| | **Max. HP** | **Max. Amps** | **Max. HP** | **Max. Amps** | **Max. HP** | **Max. Amps** | **Max. HP** | **Max. Amps** |
| **Max. Capacity** | 40,0 | 54,0 | 40,00 | 54,0 | 40,0 | 58,8 | 15,0 | 22,5 |
| **Line Reactor** | **Heavy Duty** | | **-** | | **-** | | **1 Ø Phase** | |
| | **Line** | **Load** | **Line** | **Load** | **Line** | **Load** | **Line** | **Load** |
| **Model** | KDRE2H | KDRD2L | KDRF4H | KDRC1L | - | - | KDRE2H | KDRB2L |
| **HP Rating** | 30,0 | 30,00 | 40,0 | 40,00 | - | - | 30,00 | 15,00 |
| **Max Amps** | 45,0 | 45,0 | 60,0 | 55,0 | - | - | 45,0 | 30,0 |
| **Inductance uH** | 850 | 469 | 581,0 | 387 | - | - | 850 | 912 |
| **Nema 1 Encl.Size** | C2 | C2 | C3 | C2 | - | - | C2 | C1 |
| **Motor Models Compatible** | **Heavy Duty** | | **-** | | **-** | | **1 Ø Phase** | |
| | Model | HP | Model | HP | Model | HP | Model | HP |
| | MQP-52 | 30 | MQP-62 | 50 | - | - | MQP-37 | 15 |
| | FLA | 35,3 | FLA | 58,3 | FLA | - | FLA | 18,2 |
| **VFD Dimensions** | **Width (mm)** | **Width (in.)** | **Height (mm)** | **Height (in.)** | **Depth (mm)** | **Depth (in)** | **Wgt (Kg)** | **Wgt (lbs)** |
| | 175 | 6,88975 | 300 | 11,811 | 192 | 7,55904 | 8,5 | 19,72425 |

| | **Input Voltage** | **Input Frequency** | **Input Phase** | **Enclosure** | **Control Method** | V/Hz, Sensorless Vector, PM Motor Control | | |
|---|---|---|---|---|---|---|---|---|
| | 380 ~ 480VAC (± 10%) | 50/60Hz (±5%) | 3 | NEMA1 Optional | | | | |
| **Regulated Output Voltage** | **Efficiency** | **Motor Current Protection Range** | **Stall Prevention Level SHD / HD** | **Stall Prevention Level ND** | **Stall Prevention Level LD** | **Carrier Frequency** | **Accel / Decel Time** | **Default Rating** |
| 0.0 ~510Vac | ≥97% | 4.50 ~ 58.80 A | 0 ~ 200% | 0 ~ 150% | - | 2 ~ 15kHz | 0.00 ~ 600.00 | Heavy Duty |
| **Over Torque Level** | **DC Injection** | **Braking Chopper** | **Equivalent Braking Resistor Circuit** | **Minimum Braking Resistance Value** | **Starting Torque @** | | | |
| | | | | | **V/Hz** | **SVC** | **VC+PG** | |
| 10 ~ 250% | 0 ~ 100.0 % | Builtin | 3000W 26Ω | 23 Ω | 10 ~ 200% @ 3Hz | 10 ~ 200% @ 0.3Hz | - | |
| **Analog Inputs** | | | **Analog Outputs** | | | **Keypad** | **Fault Record** | **Reel Time Stamp** |
| **AVI** | **ACI** | **AUI** | **AFM1** | **AFM2** | **DFM** | | | |
| 0 ~ 10vdc or -10 ~ +10vdc | 0/4 ~ 20ma or 0 ~ 10vdc | - | 0/4 ~ 20ma or 0 ~ 10vdc | - | - | Removable | 10 last faults | Thru PLC |
| **Digital Inputs** | | | | | **Signal mode** | | | |
| **Dedicated** | | **Safe Torque Off** | **Programmable** | **Control Voltage** | | | | |
| STO1, STO2 | | Yes | 7 | 24vdc | Sink (NPN) / Source (PNP) | | | |
| **Digital Outputs** | | | | **Built in Controllers** | | | | |
| **DO1** | **DO2** | **DO3** | **DO4** | **Preset speeds** | **Process Control** | **PLC** | **PID** | **Position** |
| 1NO/NC Form C relay, ≤ 240VAC, ≤ 24vdc | Optocoupler NPN ≤ 48vdc | Optocoupler NPN ≤ 48vdc | - | 15 | No | 2K Steps | Yes | No |
| **Communication** | | | | **Built In Protocol 1** | **Built In Protocol 2** | **Built In Protocol 3** | | |
| **Comm Port 1** | **Comm Port 2** | **Comm port 3** | **Comm port 4** | | | | | |
| USB type B | RJ45 (RS-485) / SG+, SG- | - | - | Modbus ACSII | Modbus RTU | - | | |

| Options | | |
|---|---|---|
| **Option 1** | **KPC-CC01** | (C2000+ / CP2000, MS300) Standard keypad shipped with C2000 / CP2000 series. Also compatible, MS-300. |
| **Option 2** | **MKC-KPPK** | (C2000+ / CP2000), Keypad Remote Panel Adapter, IP66 |
| **Option 3** | **MKM-EPF** | (MS300), EMC Shieled Cable Earthing Plate, Frame F |
| **Option 4** | **KPC-CE01** | (C2000+ / CP2000), LED English Keypad for C2000 |
| **Option 5** | **MKM-CBF** | (MS300), NEMA1 conduit box kit, frame F |
| **Option 6** | **CMM-COP01** | VFD-MH/MS300, CANopen Communication Card |
| **Option 7** | **CMM-DN01** | VFD-MH/MS300, DeviceNet Communication Card |
| **Option 8** | **CMM-EIP01** | VFD-MH/MS300, EtherNet/IP Communication Card |
| **Option 9** | **CMM-EC02** | VFD-MS/MH300, EtherCAT Communication Card |
| **Option 10** | **CMM-MOD01** | VFD-MH/MS300, Modbus TCP Communication Card |
| **Option 11** | **CMM-PD01** | VFD-MH/MS300, Profibus DP Communication Card |
| **Option 12** | **EMM-BPS01** | VFD-MH/MS300, Back-up Power Supply card |
| **Option 13** | **-** | - |
| **Option 14** | **EG1010A** | 1 meter Extension Cable for remote Keypad mounting, compatible with B, M, E, MH-300 & MS-300 series removable Keypads |
| **Option 15** | **EG2010A** | 2 meter Extension Cable for remote Keypad mounting, compatible with B, M, E, MH-300 & MS-300 series removable Keypads |
| **Option 16** | **EG3010A** | 3 meter Extension Cable for remote Keypad mounting, compatible with B, M, E, MH-300 & MS-300 series removable Keypads |
| **Option 17** | **EG5010A** | 5 meter Extension Cable for remote Keypad mounting, compatible with B, M, E, MH-300 & MS-300 series removable Keypads |
| **Option 18** | **CBM-CL02A** | MS/MH300 Communication Card Connection Cable for CMM-xxx02 |