

| Series | | ME300 Series | | | | | | | | | | | MS300 Series | | | | | | | | | | | | | | | | | |
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| | | single phase | | | | | three phase | | | | | | single phase | | | | | three phase | | | | | | | | | | | | |
| Model number | VFD-__ME/MS/E | 1A6 | 2A8 | 4A8 | 7A5 | 11A | 1A5 | 2A7 | 4A2 | 5A5 | 9A0 | 13A | 17A | 1A6 | 2A8 | 4A8 | 7A5 | 11A | 1A5 | 2A7 | 4A2 | 5A5 | 9A0 | 13A | 17A | 25A | 32A | 38A | 45A | |
| Frame size | | A | A | B | C | C | A | A | B | C | C | D | D | B | B | B | C | C | B | B | B | C | C | D | D | E | E | F | F | |
| Max. applicable motor output | kW | 0.2 | 0.4 | 0.75 | 1.5 | 2.2 | 0.4 | 0.75 | 1.5 | 2.2 | 3.7 | 5.5 | 7.5 | 0.2 | 0.4 | 0.75 | 1.5 | 2.2 | 0.4 | 0.75 | 1.5 | 2.2 | 3.7 | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | |
| Output rating | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated output capacity | NORMAL DUTY | kVA | 0.7 | 1.2 | 1.9 | 3.2 | 4.8 | 1.4 | 2.3 | 3.5 | 5 | 8 | 12 | 15.6 | 0.7 | 1.2 | 1.9 | 3.2 | 4.8 | 1.4 | 2.3 | 3.5 | 5 | 8 | 9.9 | 13 | 19.1 | 24.4 | 29 | 34.4 |
| | | A | 1.8 | 3.2 | 5 | 8.5 | 12.5 | 1.8 | 3 | 4.6 | 6.5 | 10.5 | 15.7 | 20.5 | 1.8 | 3.2 | 5 | 8.5 | 12.5 | 1.8 | 3 | 4.6 | 6.5 | 10.5 | 15.7 | 20.5 | 28 | 36 | 41.5 | 49 |
| Output frequency | Hz | 0.0 - 599Hz | | | | | | | | | | | 0.0 - 599Hz | | | | | | | | | | | | | | | | | |
| Carrier frequency | kHz | 2 - 15kHz | | | | | | | | | | | 2 - 15 kHz (default 4) | | | | | | | | | | | | | | | | | |
| Rated output capacity | HEAVY DUTY | kVA | 0.6 | 1.1 | 1.8 | 2.9 | 4.2 | 1.1 | 2.1 | 3.2 | 4.2 | 6.9 | 9.9 | 13 | 0.6 | 1.1 | 1.8 | 2.9 | 4.2 | 1.1 | 2.1 | 3.2 | 4.2 | 6.9 | 9.9 | 13 | 19.1 | 24.4 | 29 | 34.3 |
| | | A | 1.6 | 2.8 | 4.8 | 7.5 | 11 | 1.5 | 2.7 | 4.2 | 5.5 | 9 | 13 | 17 | 1.6 | 2.8 | 4.8 | 7.5 | 11 | 1.5 | 2.7 | 4.2 | 5.5 | 9 | 13 | 17 | 25 | 32 | 38 | 45 |
| Carrier frequency | kHz | 2 - 15kHz | | | | | | | | | | | 2 - 15kHz (default 4) | | | | | | | | | | | | | | | | | |
| Input rating | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Input current (heavy duty) | A | 3.4 | 5.9 | 10.1 | 15.8 | 23.1 | 1.7 | 3 | 4.6 | 6.1 | 9.9 | 14.3 | 18.7 | 3.4 | 5.9 | 10.1 | 15.8 | 23.1 | 2.1 | 3.7 | 5.8 | 6.1 | 9.9 | 14.3 | 18.7 | 27.5 | 35.2 | 41.8 | 49 | |
| Input current (normal duty) | A | 3.8 | 6.7 | 10.5 | 17.9 | 26.3 | 2 | 3.3 | 5.1 | 7.2 | 11.6 | 17.3 | 22.6 | 3.8 | 6.7 | 10.5 | 17.9 | 26.35 | 2.5 | 4.2 | 6.4 | 7.2 | 11.6 | 17.3 | 22.6 | 30.8 | 39.6 | 45.7 | 53.9 | |
| Rated voltage | V | 1-phase 200-240V (-15~+10%) | | | | | 3-phase AC 380V ÷ 480V (-15~+10%) | | | | | | 1-phase 200-240V (-15~+10%) | | | | | 3-phase AC 380V ÷ 480V 50/60Hz | | | | | | | | | | | | |
| Operating voltage range | V | 170 - 265V | | | | | 323 - 528V | | | | | | 170 - 264V | | | | | 342 - 528V | | | | | | | | | | | | |
| Frequency range | Hz | 47 - 63Hz ± 5% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cooling method | | convection | | | | | fan | | | | | | convection | | | | | fan cooling | | | | | | | | | | | | |
| Braking chopper | | built-in | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DC reactor | | optional | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Control method | | V/F, SVC | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Starting torque | % | up to 150% at 3 Hz including auto-torque/slip | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. output frequency | Hz | 0.00-599.00 Hz | | | | | | | | | | | 0.00-599.00 Hz | | | | | | | | | | | | | | | | | |
| Frequency output accuracy | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency setting resolution | Hz | 0.01Hz | | | | | | | | | | | 0.01Hz | | | | | | | | | | | | | | | | | |
| Overload tolerance (normal duty) | | 120% of rated output current for 60 seconds; 150% for 3 seconds | | | | | | | | | | | 120% of rated output current for 60 seconds; 150% for 3 seconds | | | | | | | | | | | | | | | | | |
| Overload tolerance (heavy duty) | | 150% of rated output current for 60 seconds; 200% for 3 seconds | | | | | | | | | | | 150% of rated output current for 60 seconds; 200% for 3 seconds | | | | | | | | | | | | | | | | | |
| Frequency setting signal | | 0 - 10V / 4(0)-20mA, PWM pulse width input (1kHz), pulse input (10kHz) | | | | | | | | | | | 0 ~ +10 V / -10 V ~ +10 V, 4 - 20 mA / 0 ~ +10 V, 1 pulse input (33 kHz), 1 pulse output (33 kHz) | | | | | | | | | | | | | | | | | |
| Accel./decel. Time | | 0.1 - 600 sec. (2 settings accel/decel time) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Main control functions | | 2 independent motor parameter settings, fast run, deceleration energy back (DEB) function, fast deceleration function, selectable master and auxiliary frequency source, momentary power loss ride through, speed search, over-torque detection, 16-step speed accel/decel timer, S-curve accel/decel, JOG frequency, upper/lower limits frequency ref, DC injection braking at start and stop, PID control, simple positioning function, Modbus integrated as standard | | | | | | | | | | | Multiple motor switches (max. 4 independent motor parameter settings), fast run, deceleration energy back (DEB) function, wobble frequency function, fast deceleration function, master and auxiliary frequency source selectable, momentary power loss ride thru, speed search, over-torque detection, 16-step speed (max.), accel/decel time switch, S-curve accel/decel, 3-wire sequence, JOG frequency, upper/lower limits for frequency reference, DC injection braking at start and stop, PID control, built-in PLC (2k steps), simple positioning function, MODBUS is integrated as standard | | | | | | | | | | | | | | | | | |
| Fan control | | fan control | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Motor protection | | electronic thermal relay and phase failure protection | | | | | | | | | | | over/under-volt/current, external fault, overload, IGBT short circuit, PTC | | | | | | | | | | | | | | | | | |
| Over-current protection | | yes | | | | | | | | | | | yes | | | | | | | | | | | | | | | | | |
| Over-voltage protection | | yes | | | | | | | | | | | yes | | | | | | | | | | | | | | | | | |
| Over-temperature protection | | yes | | | | | | | | | | | yes | | | | | | | | | | | | | | | | | |
| Stall prevention | | Stall prevention during acceleration, deceleration and running independently | | | | | | | | | | | Stall prevention during acceleration, deceleration and running independently | | | | | | | | | | | | | | | | | |
| Re-start after momentary power off | | yes | | | | | | | | | | | yes | | | | | | | | | | | | | | | | | |
| Ground current protection | | yes | | | | | | | | | | | yes | | | | | | | | | | | | | | | | | |
| EMI filter | | no | | | | | | | | | | | no | | | | | built-in Class A (C2) | | | | | | | | | | | | |
| Dimensions (H) x (W) x (D) | H | mm | 128 | 128 | 142 | 157 | 128 | 128 | 142 | 157 | 207 | | | 142 | 157 | 142 | 157 | 207 | 250 | 300 | | | | | | | | | | |
| | W | mm | 68 | 68 | 72 | 87 | 68 | 68 | 72 | 87 | 109 | | | 72 | 87 | 72 | 87 | 109 | 130 | 175 | | | | | | | | | | |
| | D | mm | 78 | 107 | 127 | 136 | 113 | 127 | 127 | 136 | 138 | | | 159 | 179 | 159 | 179 | 187 | 219 | 244 | | | | | | | | | | |
| Weight | kg | 0.4 | 0.5 | 0.8 | 1 | 0.55 | 0.7 | 0.8 | 1 | 2 | | | 1.32 | 1.8 | 1.32 | 1.8 | 2.07 | 3.97 | 6.25 | | | | | | | | | | | |
| Optional accessories | | DIN rail mount adaptor | | | | | | | | | | | DeviceNet, Ethernet/IP, Profibus DP, Modbus TCP, CANopen communication cards, external 24 VDC power supply card, DIN rail mount adaptor, cable for remote mounting of digital keypad | | | | | | | | | | | | | | | | | |