

C H A P T E R ③

OEM300 Specifications

WARNING

NO USER-SERVICEABLE PARTS INSIDE THE OEM300!
The OEM300 contains potentially lethal voltages. Do not attempt to repair it.
Return it to Compumotor for any repairs.

AC INPUT SPECIFICATIONS

INPUT VOLTAGE

Low Range: Jumper installed	90VAC to 132VAC
High Range: Jumper removed	180VAC to 265VAC
Forbidden Range:	132VAC to 180VAC

WARNING

High voltage is present on the jumper. Use insulated wire for safety.

CAUTION

Do not use AC input voltage in the range 132-180VAC.
Voltage in this range can cause excessive voltages to be generated within the
OEM300, and may damage the unit.

INPUT FILTER

The Power Module has a line filter at the AC input that minimizes noise energy sent out to the power line.

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INRUSH CURRENT

The Power Module has an initial power up current limiter.

Input Limit: 40A Maximum Inrush Current

DC OUTPUT SPECIFICATIONS

OUTPUT VOLTAGE

75VDC \pm 5% (Fixed—Not Adjustable)

OUTPUT CURRENT

2.7A at 75VDC Continuous Current

4.0A at 75VDC Peak Current

OUTPUT POWER

200W Continuous

300W Peak

30 seconds maximum at peak
10% duty cycle at maximum
(Example: 30 seconds at 300W,
followed by a minimum of 270
seconds at 200W or less.)

OUTPUT GROUNDS

Output grounds are internally connected to each other, to the AC input ground (labeled EARTH), and to the cover of the OEM300.

VOLTAGE REGULATION

\pm 5% maximum

EFFICIENCY

The Power Module has a minimum of 80% efficiency at full output load.

OVER-TEMPERATURE PROTECTION

The Power Module will shut down if its heatplate reaches a temperature of 60°C (140°F). This is a *LATCHED* condition. To resume normal operations, turn off AC power, cool the Power Module below 30°C (86°F), and then turn on AC power.

POWER DUMP

The OEM300 has a power dump circuit that can dissipate excess energy from load regeneration conditions.

THRESHOLD VOLTAGE: 85VDC ± 3VDC

ENERGY DISSIPATION: Consult Power Dump section in Chapter ④ *Protective Circuits*

AVERAGE POWER DISSIPATION RATE: 8 Watts

PEAK POWER DISSIPATION RATE: 722.5 Watts

EQUIVALENT ENERGY: Two 83-135 motors, each turning loads with 10:1 Rotor Inertia at 50 rps, simultaneously decelerate to a full stop in 0.3 sec.

SHORT CIRCUIT PROTECTION

The Power Module shuts down the 75VDC output if there is a short circuit in output cables or drives. This is a *LATCHED* condition. Cycle AC power to resume normal operations.

<u>Short Circuit Current</u>	<u>Response Time</u>
9 Amps	Immediate (output shuts down)
6 Amps	Responds in 3 seconds

OVERVOLTAGE PROTECTION

The Power Module has an output overvoltage protection circuit. It shuts down the Power Module if the power dump stays on continuously for more than one-half second. This is a *LATCHED* condition. Correct the problem, then cycle AC power to resume normal operations.

OPERATING TEMPERATURES

MAXIMUM AMBIENT: STILL AIR

35°C (95°F)

With a 200W Load

40°C (104°F)

With a 170W Load

MAXIMUM AMBIENT: MOVING AIR

45°C (113°F)

With a 200W Load

50°C (122°F)

With a 170W Load

MAXIMUM HEATPLATE TEMPERATURE

60°C (140°F)

MINIMUM AMBIENT TEMPERATURE

0°C (32°F)