Application note

Subject:
Reliable, small foot-print and efficient

Industry:
Data center

Product:
SPDE 2/3 PHASE SERIES

Customer:
System integrators

CUSTOMER ISSUE

Three-phase alternating current (AC) power is commonly used to supply electricity to data centers that house energy-intensive machinery because 3-phase power can deliver more power more efficiently, than single-phase AC power.

The ability to supply ever-increasing amounts of power is especially important as data centers and server rooms continue to see higher densities.

More powerful computing systems are crammed into the same spaces that once housed servers that drew only a fraction of the electrical power required by today's computers and networks.

OUR SOLUTION

The SPDE 2/3 Phase power supply series is extremely compact thus facilitating installation in tight spaces.

All the 480 W 3Phase models are only 80 mm wide.

These devices feature built-in PFC (240 W 2Ph/ 480 W 3Ph) which ensures high operating efficiency up to 95.6%.

The SPDE 2/3 Phase series has universal input range with AC voltage, (2-Ph -Single and two phase - 180 VAC to 600 VAC and 3-Ph - Dual-phase operation possible - 320 VAC to 600 VAC) or with DC voltage (2-Ph 254 VDC to 848 VDC and 3-Ph 450 VDC to 850 VDC), and a wide operating temperature range (up to -40°C to +70°C / -40°F to 158°F) with derating starting from 60°C (140°F) for most models.

This series is also compliant with the latest industry standards UL 61010.

BENEFITS

- Takes up less panel space
- Wide selection of power outputs (120/240/480 W)
- 4 power ranges, 3 enclosures:
  120 W 2Ph 41 mm wide
  240 W 2Ph 54 mm wide
  240 W 3Ph 54 mm wide
  480 W 3Ph 80 mm wide
- Wide selection of voltage outputs (24/48 VDC)
- Works with different AC/DC power supply voltages
- Short Circuit, Over Current, Over Voltage, Over Temperature output protections
- PFC (240 W 2Ph/480 W 3Ph)
- DC OK Relay contact
- PC monitoring and remote control functions (only SPDE..4803R)
- Green LED for status indication
- Voltage output adjustment
- Efficiency up to 95.6%
- Insulation voltage 4 kVAC
- Overvoltage category III (120/240 W)
- Wide operating temperature range (up to -40°C to +70°C / -40°F to 158°F)
- Derating starting from 60°C
- CE, UKCA, UL 61010 approved