Application note

Subject:
Reliable and flexible automation solution for production lines

Industry:
Manufacturing machinery

Product:
SPDE 2/3 PHASE SERIES

Customer:
OEMs

CUSTOMER ISSUE

The biggest benefit of 3-phase alternating current (AC) power is improved performance because there are fewer lulls in the power supplied, and tools/machinery run more smoothly allowing their wear to be monitored.

Another benefit of 3-phase power is the ability to deliver nearly twice the power of single-phase systems without requiring twice as many wires, reducing cables and component costs.

It is mandatory to create and maintain high-quality automation standards to ensure that all automatic controls work perfectly.

OUR SOLUTION

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

All the 240 W 3Phase models are only 54 mm wide.

The SPDE 2/3 Phase models come with DC OK relay contact indication.

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.

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