

## Back-channel cooling

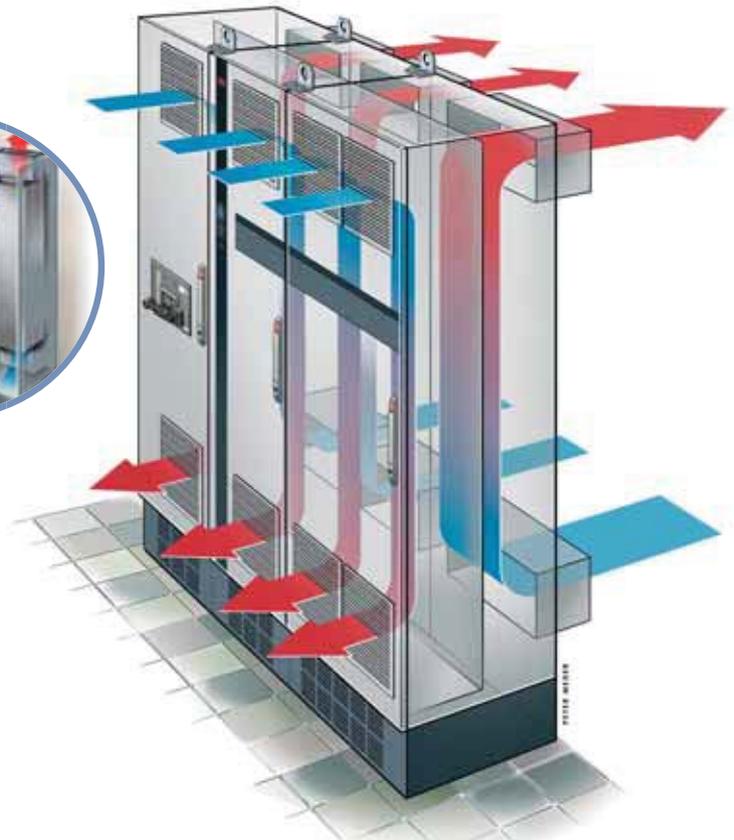
The intelligent heat management of VLT® drives removes up to 90% of the heat losses via finned heat sinks, which transfer the heat to the back channel cooling air. This back-channel is separated from the electronics area by an IP 54 seal. This method of cooling greatly reduces contamination of the control electronics area, resulting in longer life and higher reliability.

The remaining heat losses are removed from the control electronics area using door fans.

The heat from the back-channel can be dispersed into the control room or entirely removed from the area.

An optional back-channel cooling duct kit is available to aid in the installation of IP 00/IP 20/Chassis drives into Rittal TS8 enclosures.

- Separate cooling path for power and control components
- Up to 90% of heat losses are removed through the back channel
- Back-channel can be ducted outside to reduce heat gain in control room and lower operational costs



- IP 54 seal between power and control areas
- Reduced airflow through the controls side of the enclosure results in the control electronics being exposed to fewer contaminants
- Two back-channel airflow possibilities: back inlet/back exhaust or bottom inlet/top exhaust

## Up to 10 drives side-by-side

Up to 10 drives can be placed on a 6 meter (20 foot wall) wall, providing 6.3 MW (at 690 V) or 4.5 MW (at 400 V).

### Zero clearance, side-by-side mounting

Up to 10 drives can be placed on a 20-foot (6-meter) wall, providing 6.3 MW (at 690 V) or 4.5 MW (at 400 V).

The process heat from these drives is less than 95 kW. If the drives are mounted on an outside wall and the back channel cooling air is vented directly outside, approximately 10 kW of heat loss is dispersed inside the room.

