

The smoke-extraction motors operate as so-called “Dual-function motors”:

- Normal operation (no instance of fire):
Incoming/outgoing air flow
- Fault operation (in case of fire):
 - Removal of smoke from escape and access routes
 - Supporting fire fighting by creating a smoke-free zone
 - Protecting devices and equipment
 - Reducing the heat stress of components during a fire
 - Reducing secondary damage due to thermal bi-products and hot gases

The smoke-extraction motors offer the user a number of advantages:

- The assignment of standard outputs is unchanged. This means that a larger construction size is not required for smoke-extraction motors.
- Smoke-extraction motors are generally equipped with located bearings at the drive-end (DE) of the motor.
- A rating plate for conditions of fire is screwed onto the motor.
- Cables protruding from the non-drive-end (NDE) are included in the scope of supply.
- Radial-flow and axial-flow fan drive are possible.
 - Self-ventilated motors of series 1LA/1LG with a metal fan impeller can be used as radial-flow fan drives.
 - Forced-air cooled motors of series 1PP can be used as axial-flow fan drives taking into account the required volumetric flow for motor cooling. In this case the driven fan performs the ventilation.