W22 Smoke Extraction

Motor for Smoke Exhaustion

Driving efficiency and sustainability

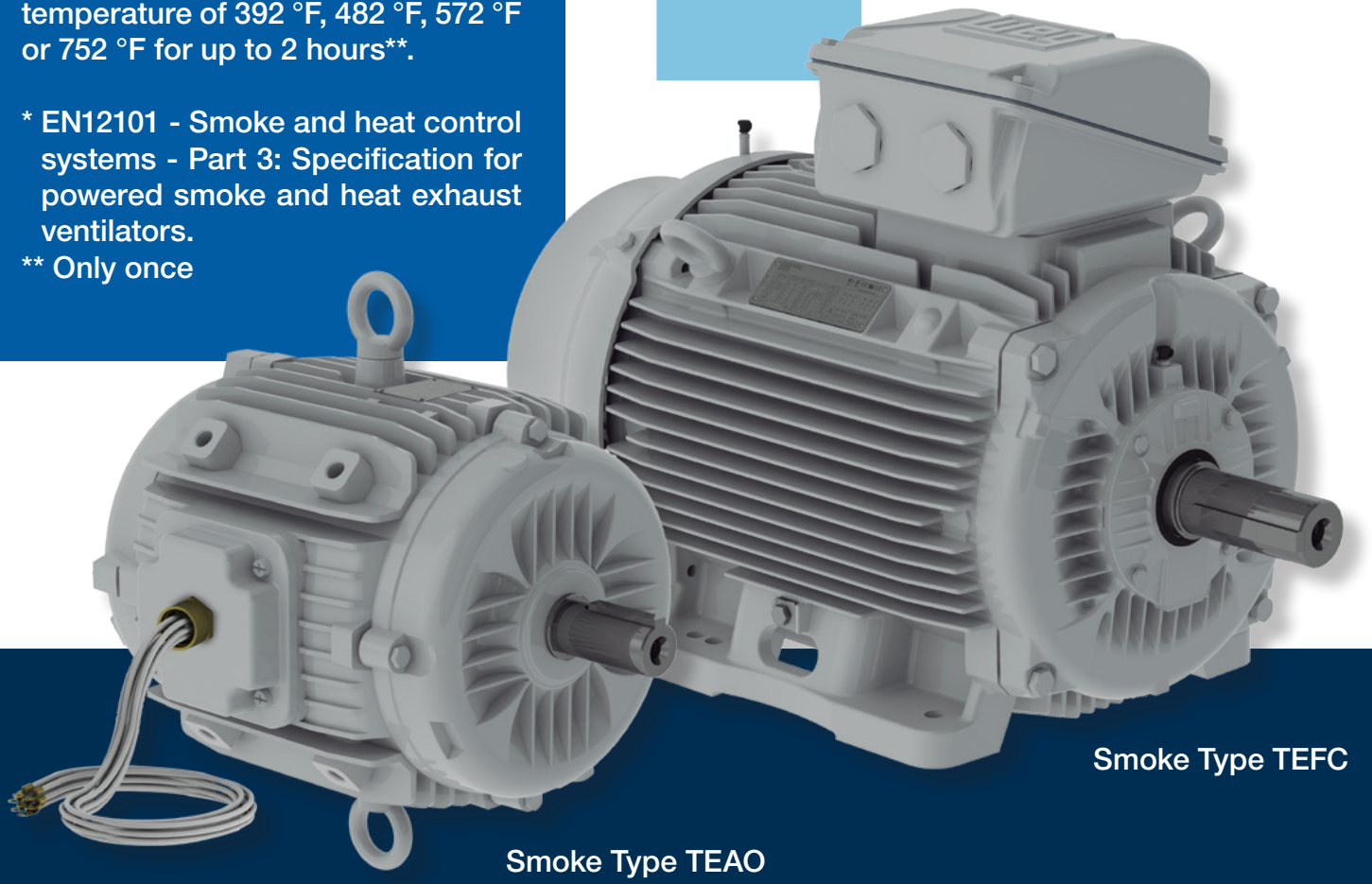
W22 Smoke Extraction

Ensuring security in business and industrial installations is one of the main concerns of designers and company owners in the conception of business centers, factories, warehouses, parking garages, tunnels and other places with great concentration of people.

The Smoke Extraction motors were developed so as to ensure the air circulation in closed environments. In emergency situations, they withstand operation at high temperatures and ensure fast smoke extraction and heat, besides delaying the fire propagation, allowing free access to the emergency exits.

The project of the Smoke Extraction motor is based on the requirements of the European safety standard for smoke and heat control systems - EN12101*:
Designed to operate at the maximum temperature of 392 °F, 482 °F, 572 °F or 752 °F for up to 2 hours.**

*** EN12101 - Smoke and heat control systems - Part 3: Specification for powered smoke and heat exhaust ventilators.**
**** Only once**



Smoke Type TEFC

Smoke Type TEAO

W22 Smoke Extraction Characteristics

- Efficiency*: Nema Premium Efficiency (IE3)
- Cooling method: TEFC (Totally Enclosed Fan Cooled)
- Mounting: Foot mounted, Pad mounted or Flange mounted
- Rated output: HP 1HP - 500 HP
- Number of poles: 2 to 8
- Frequency: 60//50 Hz and 60 Hz
- Voltage: 50//60 Hz: 208–230 / 460 // 380 V (up to 444/5T)
  208–230 / 460 // 200 / 400 V (up to 588/9T)
  60 Hz: 230 V / 400 V / 415 V / 460 V (up to 588/9T)
  208–230 V (up to 588/9T)
  230 / 460 V (up to 588/9T)
  208–230 / 460 V (up to 588/9T)
- Frames: 140 up to 580
- Colour: RAL 9006 - Grey
- Standard temperature: -20 ºC (68 °F) to 40 ºC (104 °F).
- Class “H” insulation
- Degree of protection: IP55
- Special impregnation system to withstand high temperatures
- Special terminal block to withstand high temperatures
- Duty: S1 / S2 (according to temperature class – only once).
- Motors designed to operate at maximum temperatures:
  200 ºC (392°F) - for 2 hours, 250 ºC (482°F) - for 2 hours,
  300 ºC (572°F) - for 1 and 2 hours or 400 ºC (752°F) - for 2 hours.
- CSA / UL certification

Optional Features

- Other outputs – available upon request
- Other number of poles (10 or 12 poles) – available upon request
- Other mounting forms: Flange FF, C-DIN, NEMA C or D
- Other voltages
- Degree of protection: IP56, IP65, IP66
- Without terminal box (with 1 meter flying leads, extra length available upon request)
- Maximum ambient temperature 50 ºC (122°F)
- Two-speed motor (Dahlander winding or two windings)
- TEAO Cooling (Available upon request)

WISE® (WEG *Insulation System Evolution*)

Motor suitable to operate with frequency inverter**, thanks to the exclusive insulation system WISE®, developed by WEG, which enhances the winding insulation resistance.

**IE1 Standard Efficiency is also available.*
***Insulation for voltages above 575 V, upon consultation.*




Operating with a frequency inverter, the ventilation and air circulation systems may save up to 70% of electric energy.

The scope of WEG Group solutions
is not limited to products and solutions
presented in this catalogue.
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