

Dräger MSI EM200 Flue Gas Analysis

The Dräger MSI EM200 allows exact and easy adjustments at gas-, oil- and auxiliary solid fuel heatings. By the use of a shock-proof and shock-resistant construction the Dräger MSI EM200 is extra robust. The instrument is checked according to the European Standard EN 50379-1 and EN 50379-2. The MSI EM200 is certified and approved for official measurements.



Measured values

The Dräger MSI EM200 measures:

- Oxygen, O₂
- Carbon monoxide, CO
- Nitrogen monoxide, NO (Option)
- Nitrogen dioxide, NO₂ (Option) or sulphur dioxide, SO₂ (Option)
- Combustion air temperature
- Exhaust gas temperature
- Differential pressure (Pa, hPa, mbar)

and calculates:

- Carbon dioxide, CO₂
- O₂-reference values
- Concentration values in ppm, mg/Nm³, mg/ kWh or mg/MJ
- Average values
- Dewpoint
- NO_x (option, only with NO-Sensor)
- Draft, P in hPa
- Pressure, P in mbar
- Exhaust gas losses
- Exhaust gas losses at condensing boiler
- Excess air

You can easily transfer the measured and calculated values from the analyser to the PC or from PC to the measuring device.

The Dräger MSI EM200 is equipped with

a CO- measuring range of 8000 ppm as standard. As an option, the MSI EM200 can also be fitted with CO measurement range extension up to 3 Vol. % (corresponds to 30,000 ppm) with sensor protection by scavenging pump.

Features

The Dräger MSI EM200 is equipped with:

- Electrochemical sensors
- Integrated pump
- Data memory
- Data transfer to the PC
- Integrated infrared transmitter
- Graphic display (backlit)
- Gas conditioner, shock-resistant
- extremely shock-resistant and shock-proof by fixation of components in the inner body out of EPP-foam
- Magnetic plate
- Option: Download of diagnostic data from digital burner controller by MSI Dual BCI-S

Data transfer

By the use of our software Dräger EM Tools you are able to transfer the measured and calculated values to the PC or from PC to the instrument. Via Dexas (software) you can display all results online on a PC or you can save it as file.



Dräger MSI EM200:

Special protection of all components by innovative technology of the body.

TECHNICAL DATA

Approvals	EN 50379 part 1 to part 3, TÜV By RgG 255 and ZIV M-KC 1071-00/08
Display	LC-Display, graphic, backlit, manually adjustable
Interface	USB for PC-interface, infrared for printer, multifunction connector for additional equipment
Operating temperature	+ 5 °C up to + 40 °C
Storage temperature	- 20 °C up to + 50 °C
Electric power supply	Internal NiMH battery, 4.8 V 2000 mAh, display of battery charge condition, charger
Gas extraction	Membrane pump for gas probe
Gas processing	Integrated gas conditioning cartridge with condensate trap and particle filters
Weight	1,100 g
Dimensions	165 mm x 195 mm x 75 mm (H x W x D)

Display	Principle	Range	Resolution	Accuracy
T-combustion air temperature	PTC	- 10 up to + 100°C	0.1 °C	≤ 1 °C
T-gas	Thermocouple	- 10 up to 1000 °C depends on probe	0.1 °C	< ± 2 °C or < 1,5 % of MV*
O ₂ , oxygen	El. chem. sensor	0 up to 25 Vol. %	0.1 Vol. %	0,3 Vol. %
CO, carbon monoxide	El. chem. sensor H ₂ -compensated	0 up to 8,000 ppm	1 ppm	0... 4000 ppm: ± 20 ppm or 5 % of MV*
NO (Option) Nitrogen monoxide	El. chem. sensor	0 up to 4,000 ppm	1 ppm	± 5 ppm or 5 % of MV*
NO ₂ (Option) Nitrogen dioxide	El. chem. sensor	0 up to 200 ppm	1 ppm	± 5 ppm or 5 % of MV*
SO ₂ (Option), sulphur dioxide	El. chem. sensor	0 up to 4.000 ppm	1 ppm	± 10 ppm or 5 % of MV*
CO, undiluted	Calculated	0 up to 9.999 ppm	1 ppm	
CO ₂ , carbon dioxide	Calculated	0 up to 20 Vol. %	0.1 Vol.-%	
Low pressure	Piezo-resistive	- 100 Pa up to + 100 Pa	0.1 Pa	
Draft	Piezo-resistive	- 10 up to + 100 hPa	0.01 hPa	
Pressure	Piezo-resistive	- 10 up to + 100 mbar	0.01 mbar	
CO, NO, NO ₂ , SO ₂	Calculated in mg/ Nm ³ , mg/ kWh or mg/MJ			
Exhaust gas losses	Calculated	- 20 up to + 100 %	0.1 %	
Excess air	Calculated	1.00 up to 9.99 %	0.01 %	

*MV = Measured Value

ORDER INFORMATION

See price list

SUBSIDIARIES

AUSTRALIA

Dräger Safety Pacific Pty. Ltd.
Axxess Corporate Park
Mt. Waverley. Vic 3149
Tel +61 3 92 65 50 00
Fax +61 3 92 65 50 95

FRANCE

Dräger Safety France S.A.S.
3c, Route de la Fédération
67025 Strasbourg Cedex
Tel +33 388 40 76 76
Fax +33 388 40 76 67

SINGAPORE

Dräger Safety Asia Pte. Ltd.
67 Ayer Rajah Crescent # 06 03
139950 Singapore
Tel +65 68 72 92 88
Fax +65 67 73 20 33

UNITED KINGDOM

Dräger Safety UK Ltd.
Kitty Brewster Industrial Estate
Blyth, Northumberland NE24 4RG
Tel +44 1670 352 891
Fax +44 1670 356 266

CANADA

Dräger Canada Ltd.
7555 Danbro Crescent
Mississauga, Ontario L5N 6P9
Tel +1 905 821 8988
Fax +1 905 821 2565

MEXICO

Dräger Safety S.A. de C.V.
Av. Peñuelas No. 5
Querétaro, Qro México
Tel +52 442 246 1113
Fax +52 442 246 1114

REP. OF SOUTH AFRICA

Dräger South Africa (Pty) Ltd.
P.O. Box 68601
Bryanston
Tel +27 11 465 99 59
Fax +27 11 465 69 53

USA

Dräger Safety, Inc.
101 Technology Drive
Pittsburgh, PA 15275
Tel +1 412 787 8383
Fax +1 412 787 2207

P.R. CHINA

Beijing Fortune Dräger
Safety Equipment Co., Ltd.
Beijing 101300
Tel +86 10 80 49 80 00
Fax +86 10 80 49 80 05

NETHERLANDS

Dräger Safety Nederland B.V.
Edisonstraat 53
2700 AH Zoetermeer
Tel +31 79 344 46 66
Fax +31 79 344 47 90

SPAIN

Dräger Safety Hispania S.A.
Calle Xaudaró 5
28034 Madrid
Tel +34 91 728 34 00
Fax +34 91 729 48 99

Dräger Safety MSI GmbH

Rohrstrasse 32
58093 Hagen, Germany
Tel +49 2331 9584 0
Fax +49 2331 9584 29
www.draeger-msi.de