



since 1984

AIR fair

EMISSION MONITORING SYSTEMS

Premium Measurement Technology. Made in Germany

Digital manifold for demanding refrigeration applications.

MONTEC



For the installation and servicing of heat pumps, refrigeration, and air conditioning systems.

Now also available as

CO₂ 160 bar design

or



Superheat / Subcooling

18.1 bar

2.8 bar

29.7 °C

-21.3 °C

TH 47.9 °C

-1.0 °C

Subcooling 8.3 K

20.1 k

R32

F1

F2

F1

F2

ON

Germany

max. 160 bar

Uncompromising Quality

MONTEC



MONTEC

Developed for demanding refrigeration applications:

- Integrated, robust vacuum sensor
- Refrigerants A1, A2, A2L and A3 (non-Ex)
- Strong battery for long-term measurements
- App for unit and accessories control, software update and measuring protocol
- max. 50 bar



MONTEC Ex

Designed for increased security requirements:

- **ATEX Marking:**
■ **Ex II 3G Ex ic IIC T4 Gc**
- For use in potentially explosive atmospheres
- Additional silicone sleeve for protection against shocks and drops
- Integrated, robust vacuum sensor
- Refrigerant A1, A2 und A3 (e.g. Propane R290)
- Strong battery for long-term measurements
- App for unit and accessories control, software update and measuring protocol
- max. 50 bar



MONTEC 160

Proven Montec functionality even under increased demands:

- CO₂ variant suitable up to 160 bar
- Special Bluetooth pressure sensor up to 160 bar available
- Integrated, robust vacuum sensor
- Refrigerants A1, A2 and A3 (non-Ex)
- Strong battery for long-term measurements
- App for unit and accessories control, software update and measuring protocol

Large 4" IPS-TFT graphic display for optimal readability, even in sunlight

- All measuring values at a glance
- Clearly structured "hot" and "cold" indications in red and blue
- Self-explanatory menu structure

Very large battery for more than 20 h operating time at 100% display brightness

Large unit memory for many measurements. Quiet suitable for long-term measurements.

During long-term measurements the display switches off into the energy saving mode. A blinking LED informs well visibly about the units status.



Soft grip

Robust, fibreglass reinforced housing

Industrial keyboard, also suitable for glove handling

Soft grip

Integrated vacuum sensor

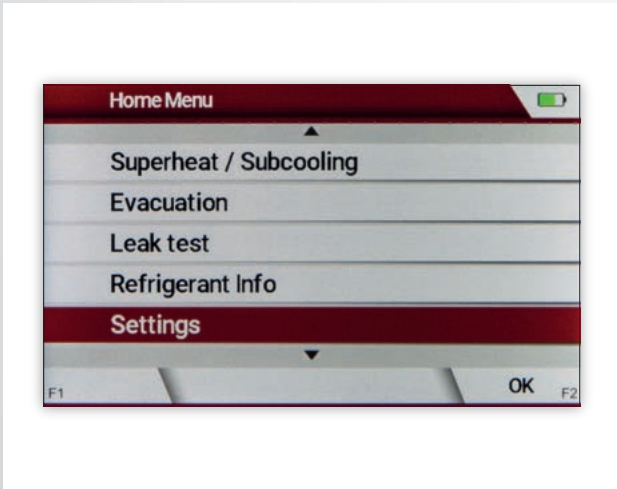
Sight glass (depending on model)

Front area of the connection plate: Clear assignment of 4 connections for hose parking

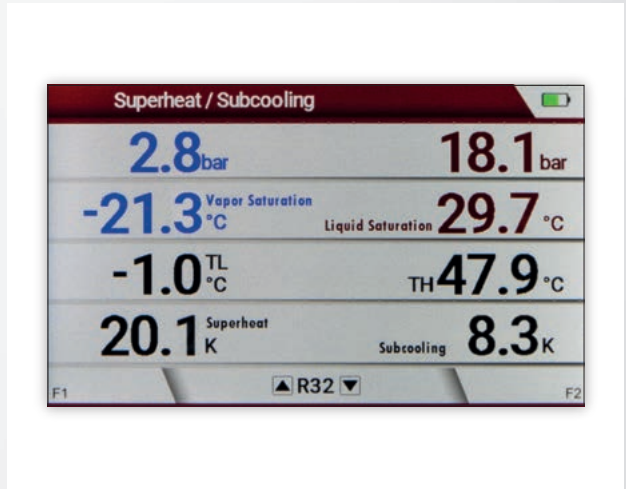
Rear area of the connection plate: Clear assignment of 4 connections (3x filling hose + 1x vacuum hose)

The unit in detail

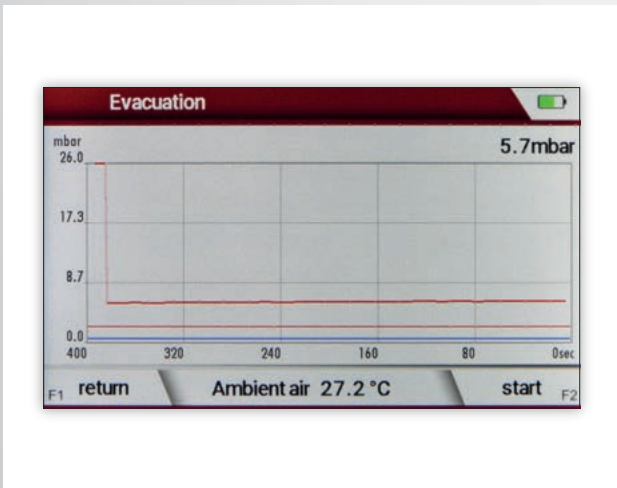
Typical program contents



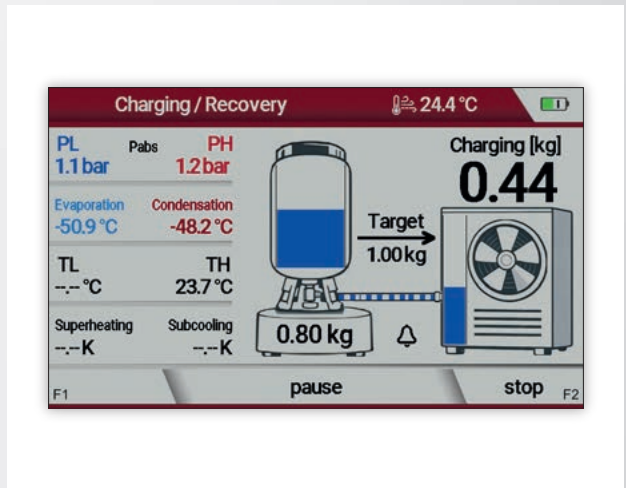
Clearly structured basic menu



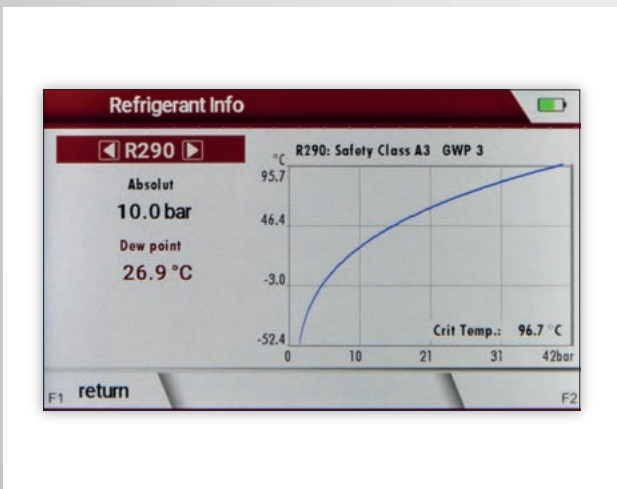
Up to 8 measuring values on screen. All important values at a glance.



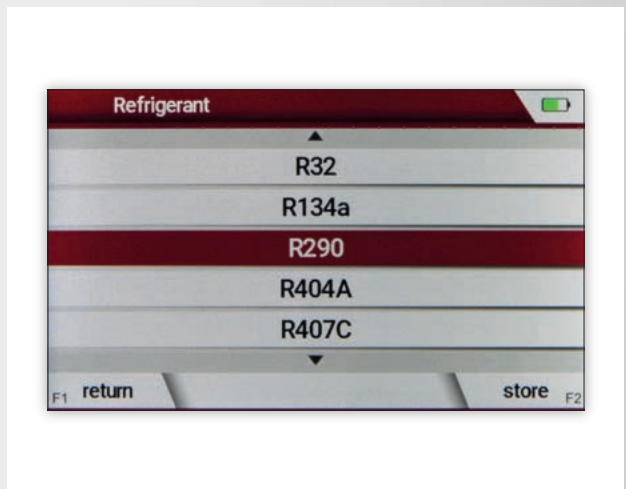
Measuring value evacuation, including graphical progression curve



Graphical representation for the charging and discharging of refrigerants



Important information about refrigerants stored in unit



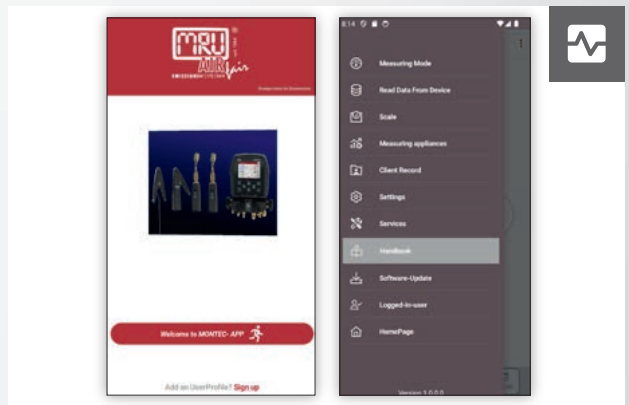
Large selection of refrigerants

The Concept at a Glance



High-quality, robust valve block and hose connectors

Separate areas for functional and parking connections. Separate parking connections prevent soiling of the hose set.



MRU App

For refrigerant updates, measuring protocols and Over-the-Air updates.



Temperature clamps

For measurements at metal- or plastic pipes, wired or with Bluetooth technology in App or MONTEC (non-Ex).



Refrigerant scale

Capacity up to 100 kg and bottle bottoms up to Ø 250 mm



Pressure transmitter

With Bluetooth for wireless use, simple measurement of high and low pressure, connection SAE 1/4"



Modular transportation case

With foam inserts for unit, accessories or scale, optional adapter plate for system "Sortimo LBOXX and Tanos Systemainer"

Technical data

MONTEC

Measured values			
Pressure	MONTEC	MONTEC Ex	MONTEC 160
Number of pressure sensors	2	2	2
Measuring range	-1...50 bar	-1...50 bar	-1...160 bar
Overload	60 bar	60 bar	170bar
Resolution (measurement program-dependent)	0.01 bar	0.01 bar	0.01 bar
Accuracy	±(0.5% of measured value + 0.1 bar)	±(0.5% of measured value + 0.1 bar)	±(0.8% of measured value + 0.4 bar)

Measured values			
Vacuum	MONTEC	MONTEC Ex	MONTEC 160
Measuring range	0 ... 26 mbar (0 ... 19500 micron)	0 ... 26 mbar (0 ... 19500 micron)	0 ... 26 mbar (0 ... 19500 micron)
Accuracy @25°C	±(10% of measured value + 0.010 mbar), 0.10 to 1.50 mbar		

General technical data			
	MONTEC	MONTEC Ex	MONTEC 160
Operating temperature	-20°C ... +50°C	0°C ... +40°C	-20°C ... +50°C
Storage temperature	-20°C ... +50°C	0°C ... +45°C	-20°C ... +50°C
Internal data storage	256 MB	256 MB	256 MB
Interfaces	USB-C, Bluetooth™ (Data transfer to smart phone, tablet, or PC)		
External power supply	100–240 V / 5V DC / 1200 mA		
Internal power supply	Lithium-ion, > 20h (100% brightness), up to 40 h at 50% brightness, up to 150 h at display off		
Connections	3x SAE 1/4" male / 1x SAE 3/8" male		
Weight	1.75 kg	1.95 kg	1.80 kg
Dimensions (W x H x D)	190x208x89 mm	190x212x90 mm	196x208x90 mm
Nominal diameter of the refrigerant ducts	Valve block: 7 mm / Port SAE 3/8": 7mm / Port SAE 1/4": 5 mm		
Housing material	PA6GF30	PA6GF30 / Silicone	PA6GF30
Type of protection with protective cap		IP64	

Subject to technical changes | * The higher value applies

MRU – Competence in gas analysis. Since 1984.



MRU – Messgeraete für Rauchgase und Umweltschutz GmbH

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