

- JRI



M E C H A N I C A L R E C O R D E R S

THE COMPLETE SOLUTION BY JRI



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MECHANICAL

Mechanical recorders are devices to measure temperature and/or relative humidity or pressure. The continuous-line recording is performed by an interchangeable fibre-tip pen, while the pre-printed paper is propelled by a mechanical or quartz clockwork movement. Autonomous, reliable, robust and easy to use, these recorders require no outside energy source and allow the measurements carried out to be instantly visualized.

SPECIAL PRESSURIZED TRANSPORT,
HEATING/AIR CONDITIONING, MAINTENANCE,
AGRONOMY...

AMBIENT and REMOTE PANORAMIQUE

The PANORAMIQUE are paper-strip recorders designed to record variations in temperature, relative humidity, pressure and/or level. Fitted with a handle, this device is easy to transport. Moreover, it is simple to set the recording time and speed (24 hours, 7 days or 4 x 7 days). The AMBIENT model allows temperature and/or hygrometry to be recorded. The REMOTE model can measure the temperature (1 or 2 channels) of liquids or gas. As for the PRESSURE-LEVEL model, it measures the relative pressure of liquids (sprinkler, vapor pressure...) as well as water levels.



Did you know?

To optimize the reading of a measurement, a diagram should be chosen with range extremities as close as possible to the measurement to be performed.



AMBIENT (T°, T°/RH)



REMOTE (T°)



PRESSURE-LEVEL

PANORAMIQUE RANGE

RECORDERS



SPECIAL FOOD AND MEDICAL COLD CHAIN, LABORATORIES...

AMBIENT and REMOTE MINIDISQUE

The MINIDISQUE are self-contained circular chart recorders designed to record variations in temperature and/or relative humidity.

According to the model chosen, three different technologies are used to take measurements: bimetallic and gas expansion for temperature and hair for relative humidity. These three technologies work by deformation on the stylus, fitted with a pen to write on the diagram.

Did you know?

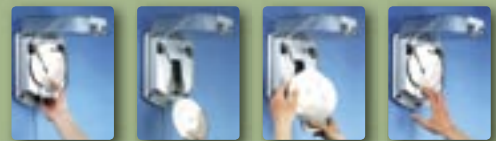
In compliance with CE regulation N° 37/2005 of 12/01/05, negative cold rooms used for the storage or the transport of foodstuffs must be equipped with a temperature recorder in compliance with the EN 12830 standard from 01/01/2006. These recorders must also be checked at regular intervals, according to the EN 13486 standard.

THERMALIM II R and S

These are temperature recorders designed to monitor the cold chain. Particularly adapted to the monitoring of cold rooms, these recorders are in keeping with a strict quality-control process (HACCP method). Both in compliance with the NF EN 12830 standard, the THERMALIM II R is recommended for the storage and warehousing of refrigerated goods, while the II S model is specifically intended for frozen foodstuffs.

TRANSALIM

Specially designed for the transport of perishable foodstuffs under controlled temperature conditions, the 1- or 2-channel TRANSALIM uses gas expansion technology. In compliance with the NF EN 12830 standard, this recorder is easily fixed either outside or inside the compartment to be monitored and it is vibration- and weather-resistant.



loading a TRANSALIM cassette

MINIDISQUE RANGE



AMBIENT (T°)



AMBIENT (T°, RH)



REMOTE (T°)



TRANSALIM



THERMALIM II

THERMALIM II R and S	FEATURES		PRODUCT REFERENCE	DIAGRAM REFERENCE	
Movement	Model	Measurement range			
Quartz 7 days	THERMALIM II R	-35°C to +15°C	00006	00001	
	THERMALIM II S	+15°C to -35°C	00060	00059	
AMBIENT MINIDISQUE	FEATURES			PRODUCT REFERENCE	
Movement	Number of channels	Measurement range			
Quartz 7 days	1 channel	-10°C to +40°C		00066	
		-15°C to +60°C		00117	
		-10°C to +20°C		00007	
	2 channels	-10°C to +40°C	20% to 100% RH	00067	
		-15°C to +60°C		00099	
REMOTE MINIDISQUE	FEATURES			PRODUCT REFERENCE	
Movement	Number of channels	Measurement range			
Quartz 7 days	1 channel	-25°C to +25°C		01012	
		+30°C to +130°C		00135	
		0°C to +120°C		00093	
		0°C to -100°C		00077	
		-90°C to +10°C		00097	
		-100°C to +50°C		00088	
		-35°C to +15°C		00071	
		-10°C to +40°C		00069	
	2 channels	-35°C to +15°C	-10°C to +40°C	00107	
	Quartz 24 hours	2 channels	-35°C to +15°C	-10°C to +40°C	01376
AMBIENT PANORAMIQUE	FEATURES			PRODUCT REFERENCE	
Movement	Number of channels	Measurement range			
Mechanical 7 days	1 channel	-35°C to +45°C		00092	
Quartz 7 days, 24 hours and 4 x 7 days	1 channel	-25°C to +30°C		00124	
		0°C to +30°C		00084	
Quartz 7 days, 24 hours and 4 x 7 days	1 channel	-15°C to +40°C		00082	
	2 channels	-15°C to +65°C		00119	
		-20°C to +40°C		00073	
		-10°C to +65°C	20% to 100% RH	00087	
		+5°C to +35°C		00108	
		-20°C to +40°C		00081	
		-10°C to +65°C		00080	
		+5°C to +35°C	00129		
	1 channel		0% to 100% RH	00171	
REMOTE PANORAMIQUE	FEATURES			PRODUCT REFERENCE	
Movement	Number of channels	Measurement range			
Quartz 7 days, 24 hours and 4 x 7 days	1 channel	0°C to +120°C *		00096	
		-30°C to +30°C *		00116	
		-20°C to +50°C *		00132	
		0°C to +75°C *			
	2 channels	-20°C to +40°C ***	0°C to +120°C **	00814	
		0°C to +120°C *	0°C to +120°C *	00112	
PRESSURE PANORAMIQUE	FEATURES		PRODUCT REFERENCE		
Movement	Number of channels	Measurement range		7 days	
Mechanical 7 days	1 channel	0 mb to +40 mb	01731	00336	
Mechanical 4 x 7 days		0 mb to +60 mb	00115	00304	
Quartz 7 days and 24 hours		0 mb to +100 mb	01736	00306	
Mechanical 7 days		0 mb to +250 mb	00812	00332	
		0 mb to +600 mb	00150		
Quartz 7 days and 24 hours		0 B to +6 B	00111	00304	
Mechanical 4 x 7 days			00102		
Mechanical 7 days			00091		
Quartz 7 days and 24 hours		0 B to +10 B	00090	00306	
Mechanical 4 x 7 days			00098		
Mechanical 7 days			00143		
Quartz 7 days and 24 hours		0 B to +16 B	00070	00291	
Mechanical 4 x 7 days			00811		
Quartz 7 days and 24 hours		0 B to +25 B	00105	00332	
Mechanical 4 x 7 days			00110		
Mechanical 7 days			00126		
LEVEL PANORAMIQUE	FEATURES		PRODUCT REFERENCE		
Movement	Number of channels	Measurement range		7 days	
Mechanical 7 days	1 channel	0 to 4 m	00153	00335	
		0 to 6 m	00118	00304	
		0 to 10 m	00127	00306	
TRANSALIM	FEATURES		PRODUCT REFERENCE	DIAGRAM REFERENCE	
Movement	Number of channels	Measurement range			
Quartz 7 days	1 channel *	-25°C to +25°C	00839	00318	
Quartz 24 hours			00837	00405	
Quartz 28 days			00838	00748	
Quartz 7 days	1 channel **		00847	00318	
Quartz 24 hours			00845	00405	
Quartz 28 days			00846	00748	
Quartz 7 days	2 channels ***				00368
Quartz 24 hours				00858	03399
Quartz 28 days					00748

	THERMALIM II		MINIDISQUE		PANORAMIQUE			TRANSALIM
FEATURES	R Model	S Model	REMOTE	AMBIENT	REMOTE	AMBIENT	PRESSURE-LEVEL	
Measurement accuracy at 23°C	T: ± 2°C (class 2 of the EN 12830 standard)		T: ± 2% of the MR with a minimum of ± 1°C RH: ± 5% RH		T: ± 3% of the MR with a minimum of ± 2°C	T: ± 1% of the MR with a minimum of ± 0,5°C RH: ± 5% RH	Pressure (from 0.6 B to 60 B) : ± 1.5% of the MR Curved bronze tube Low pressure: ± 1.5% of the MR Beryllium copper capsule Level: ± 1.5% of the MR Beryllium copper capsule	T: ± 2°C (class 2 of the EN 12830 standard)
Measurement range (MR)	from -35°C to +15°C	from +15°C to -35°C	see preceding table					from -25°C to +25°C
Storage conditions	from -15°C to +60°C		from -35°C to +65°C		from -35°C to +65°C			from -40°C to +85°C
Operating conditions	from +5°C to +40°C		from -5°C to + 40°C	according to the MR		according to the MR		from -30°C to +65°C
Temperature sensor	Probe in stainless steel for foodstuffs of Ø 10 mm and L 100 mm connected to casing by a copper capillary of Ø 2.5 mm (L 3 m)			Bimetallic element	Probe in stainless steel for foodstuffs of Ø 10 mm and L 100 mm connected to casing by a copper capillary of Ø 2.5 mm (L 3 m)	Bimetallic element		Bulb in stainless steel for foodstuffs connected to casing by a copper capillary of Ø 1.4 mm
Humidity sensor				Hair bundle		Hair bundle		
Recording medium	Circular diagram Ø 125 mm on pre-printed paper				Pre-printed strip or roll			Circular diagram Ø 160 mm on pre-printed paper
Recording time	7 days		7 days or 24 hours		24 hours or 7 days or 4 x 7 days			24 hours or 7 days or 28 days
Diagram movement	Quartz clockwork		2-speed quartz clockwork		2-speed quartz or mechanical clockwork			Quartz clockwork
Diagram speed								At 0°C: 2 mm/H for 1 round 7 days 14 mm/H for 1 round/24 H
Power supply	1 AA-type alkaline battery (1.5V)							
Autonomy	Battery: 1 year - Pen: 90 m line length							Battery: 6 months Pen: 90 m line length
Protection	IP 20							IP 65

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