Ministry of Business, Innovation & Employment

Wellington, New Zealand

CERTIFICATE OF APPROVAL

Weights and Measures Regulations 1999
Part 1 Regulations 5 and 6

Current Date of Issue: 18 December 2020
Original Date of Issue: 17 March 2006

Certificate 1813

Overseas Certificate No: NMi-T6822

This certifies that the RINSTRUM R 420, Instrument described overleaf has been approved as suitable for trade use subject to any conditions stated in the schedule:

Rinstrum R420 Weighing Indicator

S R Bobbala **J P Crane**

Under delegated authority from the Chief Executive of The Ministry of Business, Innovation & Employment

Note: This is not an approval to any person but only with respect to the type and pattern of weight, measure, or weighing or measuring instrument.

SCHEDULE

Pattern: Indicating Device

Make: RINSTRUM

Model: R 420

Manufacturer: Rinstrum Pty Ltd, Queensland, Australia.

Submitter: Rinstrum Pty Ltd, Queensland, Australia.

Description:

The Rinstrum Model R 420 Series of weighing indicators are capable of single/multi interval or multi range indication. The maximum number of verification scales are limited to the Class of the instrument i.e.

n <= 10,000 maximum for Class III instrument;
n <= 1000 maximum for Class IIII instrument.

The metrological relevant software has an identification number in the format 1.xx, where “xx” stands for numbers between 00 and 99. The identification number will be displayed at the start-up.

ZERO SETTING DEVICES

Initial zero setting:- not more than 20% of maximum capacity.
Semi-automatic zero setting:- not more than 4% of maximum capacity.
Zero tracking device:- not more than 4% with corrections <= 0.5d/second
Accuracy +/- 0.25e.

METROLOGICAL MARKINGS

A plate, which carries the metrological markings, is affixed to the side of the instrument.

Manufacturer’s name	.....
Serial number	
Accuracy class	....
Pattern approval No	TMU/TSS 1813
Max cap*	.....
Temperature Range	-10˚ C to 40˚ C
Min cap*	.....
Verification scale interval*	.....
Tare capacity	….

*These markings shall also be shown near the display.

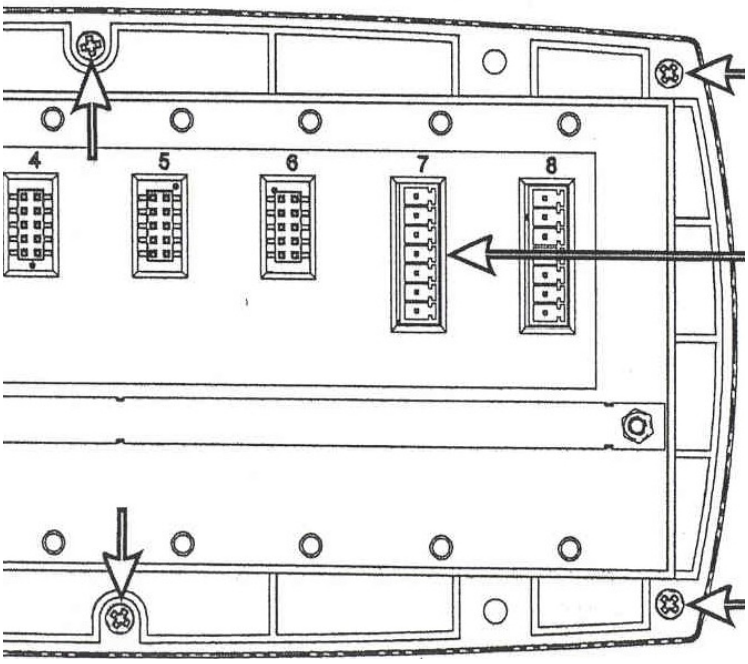
Components: Any Compatible Approved Load Cell

Sealing: Access to the calibration switch is restricted by using an approved, adhesive destructible lable placed on any of the screws at the back of the indicator housing. The seal shall take the Mark of Verification. Removal of the seal deems the instrument not verified.

Mark of Verification: An approved, adhesive, destructible label, placed in a prominent position may take a mark of verification

Temperature: -10˚ C to 40˚ C

Rinstrum Sealing Diagram



SCHEDULE

Variant: 1813.1

Current Date of Issue: 03 July 2009

Pattern:	Indicating Device
Make:	Rinstrum / PT Ltd
Model:	R420 / PT600R, R423 / PT603P
Submitter:	Rinstrum Pty Ltd, Queensland, Australia.
Conditions of Approval:	1. The number of verification scale intervals applicable to a complete weighing instrument which includes this pattern, shall not exceed the smaller of: i) The number of verification scale intervals approved for this indicator ii) The number of verification scale intervals approved for the basework 2. The temperature range applicable to a complete weighing instrument which includes this pattern, shall not exceed the smaller of: i) The temperature range approved for this indicator ii) The temperature range approved for the basework

Description:

VARIANT 1

The following variants are allowed on the pattern (model R420 digital indicator):

1. The model R423 digital indicator is similar to the original pattern (model R420), but build in stainless steel panel mount housing, see photo 1.
2. The pattern and its variants may also be know as PT Ltd indicators of certain models as listed below:
• Model R420 (the pattern) may be known as a model PT600R indicator;
• Model R423 may be known as a model PT603P
3. With software version (version 2.xx): The pattern or its variants are allowed to use a later version circuit board (version 2) with a later software version (version 2.xx). The models may also be provided with an integral data storage device, thus enabling to store the weighing results along with identification including date and time (*).

(*) Note: the use of these features for trade use requires a prior endorsement from Type Approvals Officer (MAPSS).

METROLOGICAL MARKINGS:

Instruments carry the following markings:
Manufacture's mark or Name:
Accuracy Class: III
Pattern Approval No: MCA 1813.1
Maximum Capacity: ….. g or kg*
Minimum Capacity: …… g or kg *
Verification Scale Interval (e): …… g or kg*
Maximum subtractive tare T: -…..g or kg
Serial number:……

*These markings are also shown near the display of the result if they are not already located there.

Sealing:

• As detailed in Certificate 1813
• Sealing provision: The calibration and set-up modes of the indicator can be secured with a passcode. To ensure that a passcode has been set, press the POWER and FUNCTION keys together until the word SETUP appears (about 2 seconds); following display of the software version and the calibration event value, the words ENTER and CODE will appear. This indicates that a passcode has been set (the display will then show 000000 and pressing the tare key will exit this sequence).
In addition, a non-resettable calibration event counter increments each time when any parameter effecting calibration or calibration is changed and saved. The value of the calibration event counter is shown (as C followed by a number) in the display as part of the power-up display sequence, and the value at the time of verification/certification shall be recorded on a destructible adhesive label attached to the instrument.

Mark of Verification: An adhesive destructible label or a lead and wire type seal used for sealing may take the Mark of Verification.

Photo 1

Rinstrum Model R423 Digital Indicator

SCHEDULE

Variant: 1813.2

Current Date of Issue: 19 June 2017

Pattern:	Indicating Device
Make:	CAS
Model:	R420 / R430
Submitter:	Rinstrum Pty Ltd, Queensland, Australia.
Class:	III
Conditions of Approval:	As detailed in approval certificate 1813.

Description:

VARIANT 2

The variant allows the following:
- Rinstrum Model R420 may be known as CAS Model R420;
- Rinstrum Model R423 may be known as a CAS Model R423

Sealing:	As detailed in approval certificate 1813.
Mark of Verification:	As detailed in approval certificate 1813.

SCHEDULE

Variant: 1813.3

Current Date of Issue: 15 October 2017

Overseas Certificate No: NMI S463 Rev8

Pattern:	Indicating Device
Make:	Rinstrum
Model:	R420-K491
Submitter:	Rinstrum Pty Ltd, Queensland, Australia.
Class:	III or IIII
Maximum number of verification scale intervals:	n ≤ 2000 max
Conditions of Approval:	The Rinstrum Model R420-K491 indicator that is equipped with an automatic tilt sensor is restricted to use with a weighing instrument (basework) that is approved by Trading Standards for use with an automatic tilt sensor/compensation device.

Description:

VARIANT 3

The following variants are approved:
(1) The Rinstrum model 420-K491 digital indicator which is similar to the pattern but has K491 firmware.

The instrument may be provided with an automatic tilt sensor/compensation device that automatically compensates for out of level conditions up to ±10° in longitudinal or transverse directions. The weight indications are inhibited when the instrument exceeds this value.

Note: The instrument may also be configured such that the weight indications are inhibited at a lower angle than 10°.

The tilt sensor/compensation device consists of a Rinstrum model M4904 tilt sensor and model M4211 tilt compensation module. The model M4904 tilt sensor uses a HL Planar model NS-10/PL2-S dual axis compensation level sensor.

The model R420-K491 indicator and model M4904 tilt sensor may be configured to form part of:
• A class III weighing instrument with a single weighing range of up to 2000 verification scale intervals; or
• A class IIII weighing instrument with a single weighing range of up to 1000 verification scale intervals.

(2) The model 420 may also be provided with additional interfaces:
• Serial data storage device. For each weighing request, weighing results together with identification including date and time are stored into the storage device
• Ethernet data interface
• LUA Ethernet with USB data interface

Note: It shall not be possible to alter weighing results through an interface.

Components:	• Rinstrum model M4904 tilt sensor • Rinstrum Model 4211 tilt compensation module • HL Planar model NS 10/PL2-S dual axis compensation level sensor
Sealing:	As detailed in Certificate 1813
Mark of Verification:	As detailed in Certificate 1813

SCHEDULE

Variant: 1813.3

Current Date of Issue: 18 December 2020

Overseas Certificate No: NMI S463 Rev9

Pattern:	Indicating Device
Make & Model:	Rinstrum/CAS Model R427, R457 PT Model PT603P
Submitter:	Rinstrum Pty Ltd, Queensland, Australia.
Class:	III or IIII
Maximum number of verification scale intervals:	n ≤ 10 000 max (Class III) n ≤ 1000 max (Class IIII)
Conditions of Approval:	1. The approval does not include the use of the indicator as an automatic weighing instrument. 2. This Certificate only covers compliance with respects to the relevant sections of the Weights and Measures Act and Regulations and should not be construed as guarantee of compliance with any safety requirements. 3. Trading Standards reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Description:

VARIANT 4

The following variants are approved:
(1) The Rinstrum model R427 digital indicator which is similar to R420 digital indicator but built in a full stainless steel housing (Figure 1 – Variant 4).

(2) The Rinstrum model R457 digital indicator which is similar to R420 digital indicator but built in a full stainless steel housing and fitted with a model M4223 LUA Ethernet with USB data interface module (Figure 2 – Variant 4).

(3) The indicators may also be known as:
- Rinstrum R427 indicator may also be known as CAS R427 or PT model PT603P; and
- Rinstrum R457 indicator may also be known as CAS R457 or PT model PT603P.

TABLE 1 – Specifications
Minimum sensitivity: 0.7 µV/scale interval
Excitation voltage: 7.4 V DC
Max excitation current: 336 mA

The Zero setting devices, Tare setting device and Metrological markings remain same as the original pattern.

METROLOGICAL MARKINGS:

Instruments carry the following markings:
Manufacturer's mark, or name:
Accuracy class: III
Pattern approval number:
Maximum capacity Max .....kg #
Minimum capacity Min .....kg #
Verification scale interval e = ...kg #
Maximum subtractive tare T = - ……kg
Serial number of the instrument ……..

Sealing: As detailed in Certificate 1813

Mark of Verification: As detailed in Certificate 1813

Figure 1 (Variant 4) - Rinstrum Model R427 Digital Indicator

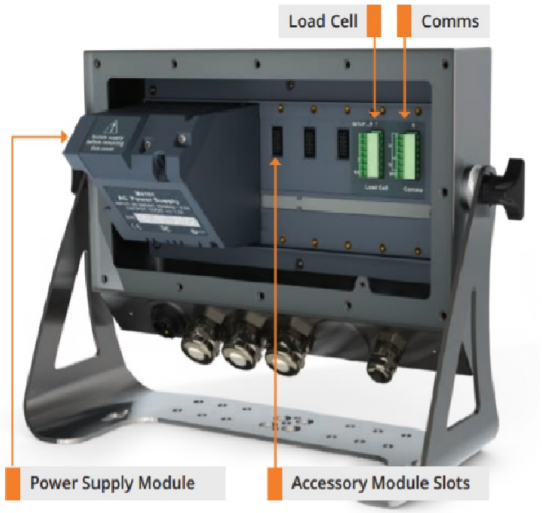


Figure 2 (Variant 4) - Rinstrum Model R457 Digital Indicator