

***National Type Evaluation Program
 Certificate of Conformance
 for Weighing and Measuring Devices***

For:
 Retail Motor Fuel Dispenser
 Electronic Computing
 Model: HXXX-X Series*
 Generic Name: Premier Series
 Max. Total Money Display: \$9999.99
 Max. Volume Display: 999.999 Units
 Max. Unit Price Display: \$9.999/Unit

Submitted by:
 Dresser Wayne-Dresser Inc.
 (formerly Tokheim Corp.)
 3814 Jarrett Way
 Austin, TX 78728
 Tel: (512) 388-8311
 Fax: (512) 388-8456
 Contact: Randal Kretzler

Standard Features and Options

* The specific models of devices covered by this Certificate are listed on Page 2.

Dispenser Model	Meter/Flow	Flow	Meter Type
Premier B	Model 898	(1 to 12 GPM)	Positive Displacement
Premier C	Model 898	(1 to 12 GPM)	Positive Displacement
Premier C (High Volume)	LC Model P9561	(12 to 60 GPM)	Positive Displacement
Premier D	Model 898	(1 to 12 GPM)	Positive Displacement

Stand-alone or console controlled
 Backlighted liquid crystal displays (LCD)
 Category I device

Battery back-up
 H Series frame

Options:

Two-tier pricing	DPT card reader in dispensers	Full vapor recovery (balance or assist)
Mechanical totalizers	Preset money and or volume	Intercom speakers
Push to start	Lift lever activated nozzle boot	Cash acceptor (attended locations)

Options (Premier D):

10.4 Touch screen display	Downloadable software
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This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.



Dennis E. Ehrhart
 Chairman, NCWM, Inc.



Ross J. Andersen
 Chairman, National Type Evaluation Program Committee

Issued Date: September 9, 2003

Note: The National Conference on Weights and Measures does not "approve", "recommend", or "endorse" any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.

Dresser Wayne-Dresser Inc.
Electronic Computing Retail Motor Fuel Dispenser
Model: HXXX-X Series (Premier Series)

Application: For use in retail service stations to dispense gasoline. May be used in either a stand-alone mode or interfaced and controlled by an approved and compatible ECR/console.

Model Designation: The serial number of this series is preceded by the prefix "PMR" to designate the generic series name "Premier". The specific models of devices covered by this certificate are identified by the model designation listed below. Code numbers, following the prefix "H", include 311, 312, 322, 324, 411, 412, 413, 414, 422, 424, 426, 428, 711, 712, 722 and 724.

Example: HXXXX-X-X-X – Options (non-metrologically significant alphanumeric designators).

Position 1	Position 2, 3, 4	Position 5	Position 6	Position 7
Dispenser Configuration		Generation	Fuel Flow Method	Features
	Position 2 = Dispenser Length	B=UDC Electronics	R=Remote (Submerged Pump)	C#=Cash Acceptor
H=High Hose Outlet	3=30 in. Base	C=UDC Electronics with New Frame	S=Suction	K#=Cash/Credit Pricing
	4=45 in. Base	D=iQ Electronics	EB=Electronic Blender	P1=Preset Pricing
	7=45in. Base		TR=Transverse Right	R#=Card Reader
			TL=Transverse Left	H#=Printer
	Position 3 = # of Sides with Hose Outlets		B#=Programmable Blender	T#= Cash Acceptor Options
	1=Hose Outlets One Side		FD=Future Diesel	G#=Card Reader and Display Options
	2=Hose Outlets Two Sides		DD=Double Display	
			MV=MaxVac Vapor	
	Position 4 = Hose Outlets Per Dispenser		V=Vapor Ready	
	1, 2, 3, 4, 6, 8		IV=Interim Vapor	
			HV=High Volume	
			M=Master	
			MM=Master Master	
			S=Satellite	
			SS=Satellite Satellite	

Note: Undefined characters indicate alternate constructions of the graphics, trim packages, and electronic configurations. Positions 6 and 7 may contain more than one suffix to fully describe the particular dispenser model.

Dresser Wayne-Dresser Inc.
Electronic Computing Retail Motor Fuel Dispenser
Model: HXXX-X Series (Premier Series)

Identification: The metal identification badge is permanently bonded to the front base (A-side) of the dispenser.

Sealing: The Premier Series device has no remote configuration capability and is classified as a Category 1 device. The meter is adjusted by removing a pin from the calibration wheel and rotating the calibration wheel to increase or decrease the amount of product delivered. A wire security seal is threaded through a hole in the pin and through holes in the calibration wheel on either side of the pin to prevent access to the meter adjustment.

Blend Ratio Setting (Premier B and C): The blend ratio setting can only be changed in the Service Mode. Access to the Service Mode is by use of a special key and protected by two programmable passwords. Blend ratio information with event counter can be viewed without entering the Service Mode. To view blend ratio information, place the magnetic managers key in the upper left corner of the money/volume display. The dispenser will automatically enter into Managers Mode F01. The last three digits in the "Total Sale" represent the blend change counter. The current blend settings will show in the price per gallon windows. If the dispenser is equipped for dual price displays, the top number in the PPU window will be for product 1 and the bottom number for product 2. For single price displays the number shown will be for product 1 and that number subtracted from 100 is the setting for product 2. In this mode the counter and blend setting is a VIEW ONLY parameter seen only on blenders.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 92-216A3 and is issued to add the Premier C High Volume (HV) Series dispenser. The HV dispenser is identical to the approved Premier Series C dispenser with the exception that the standard Tokheim Model 898 measuring element is replaced with an approved Liquid Controls Model M5 (Certificate of Conformance Number 92-075A2). Approval of the Premier C High Volume Series dispenser is based upon information submitted by Tokheim and field testing in reference to using a previously evaluated meter. Previous test conditions are listed below for reference.

Certificate of Conformance Number 92-216A3: This Certificate superseded Certificate of Conformance Number 92-216A2 and was issued to add the Premier Series "D" dispenser which is identical to the approved Premier Series "C and B" dispensers except for a new electronics package. Approval of the Premier Series "D" dispenser is based upon information submitted by Tokheim and field testing in reference to the new electronics.

Certificate of Conformance Number 92-216A2: This Certificate superseded Certificate of Conformance Number 92-216A1 and was issued to add the Premier Series "C" dispenser which is identical to the approved Premier Series "B" dispenser except for a new mechanical dispenser frame. Approval of the Premier Series "C" dispenser is based upon information submitted by Tokheim. No new testing was performed.

Certificate of Conformance Number 92-216A1: This Certificate superseded Certificate of Conformance Number 92-216 and was issued to add Models H412B, H424B, H711B, H712B, H722B, and H724B. The additional models are the result of rearranging components used in the models covered by Certificate of Conformance Number 92-216. Information provided by the manufacturer indicates that rearranging these components does not affect the performance of the device. The new models are added based on this information without additional testing.

Dresser Wayne-Dresser Inc.
Electronic Computing Retail Motor Fuel Dispenser
Model: HXXX-X Series (Premier Series)

Test Conditions: (Cont.):

Certificate of Conformance Number 92-216: The emphasis of the evaluation was on the basic device operation and the operation of the cash acceptor option. A device equipped with the cash acceptor option was evaluated initially at the manufacturer's facility using a product flow simulator. Devices with and without the cash acceptor option were installed in a field installation and evaluated initially and again after a period of 30 days. The meter and hydraulics used in this device are identical to the Model TCS Series dispenser evaluated in conjunction with Certificate of Conformance Number 90-014A1 (dated June 20, 1991).

Vapor Recovery: The IV and IVH suffix designations include the piping, nozzle hangers and boots, etc., to make the dispensers "vapor recovery ready" for use with approved vapor recovery equipment. The "V", "VH", and "V1" suffixes indicate vapor recovery equipment that was tested in conjunction with the Tokheim Model TCS dispenser (Certificate of Conformance Number 87-018A3).

The results of these evaluations and a review of technical information supplied by the manufacturer indicate the device conforms to the applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 2003 Edition

Tested By: J. Raspino (CA); J. Roach (CA); R. Green (Tehama County, CA); T. G. Butcher (NIST); R. T. Pearson (Ft. Wayne, IN); C. V. Cotsoradis and M. R. Shockley (MD) (92-216); R. Murdock (NC) 92-216A3; J. Raspino (CA) 92-216 A4

Information Reviewed By: S. Patoray (NCWM), L. Bernetich (NCWM) 92-216A4