maselli PROCESS ANALYZERS

TECHNICAL DATASHEET n. 90034H3712

MULTIPARAMETRIC PANEL mod. MP-02

OPERATING SPECIFICATIONS	
Application:	Display and control of qualitative parameters on process lines producing sugar-sweetened or diet carbonated soft drinks, alcoholic beverages, non-carbonated soft drinks, beer and mineral waters
Management, by means of the relative Analysis Units of:	Continuous refractometric measurement of the Refractive Index and display in the selected scale (REGULAR BRIX, DIET BRIX or % STANDARD) of the relative concentration, with temperature compensation already applied. Continuous refractometric measurement of the Zeiss degree. Measurement of the dissolved CO_2 value, in the selected scale [g/l or v/v (Gas/Vol)], based on the absorption of IR rays or the Saturation Pressure measurement, depending on the appliance connected (UC09/08). Sonic density measurement. Measurement of the pH, µS, OX parameters.
Data processing:	Calculation, for sugar-sweetened soft drinks, of the % of sugar inverted at the time of bottling. Prediction of the Brix in totally inverted soft drinks (Brix with totally inverted sugar). Automatic update of the production target based on the sugar inversion %. For sugar-sweetened beverages containing alcohol, calculation of the alcohol content expressed in ALC/V. Calculation of the alcohol content expressed in w/w, of the value of the real extracts and original extracts.
Type of function:	Interfacing with IB07, IB08 or UR29, UR27, UC09, UC08, US01 single Analysis Units. Options for the display, calibration, diagnostics and setup of operating parameters. Acquisition, via Analog inputs, of mV, mA, Pressure and temperature signals. Activation of two programmable alarm contacts. Acquisition of two programmable input contacts. Management of 3 serial outputs one of which is personalizable via HMS module.

GENERAL SPECIFICATIONS	
Power supplies	***Electric:*** DC 24V ±10% 7A Max Variable absorption depending on the appliances connected. Connection box without Transformer (optional): Power supply according to MP02 specifications. Terminal board connection. Connection box with Transformer (optional): AC 100...240V ±10% 50...60Hz 170VA Terminal board connection.
Interfaces	***Analog:*** 2 active output channels 0...20mA or 4...20mA (470Ω max.) configurable in the "Max. and Min. full scale" values. 4 auxiliary input channels. ***Digital:*** RS485 for connection to Maselli analyzers PROFIBUS DP or ETHERNET/IP (optional) ***Inputs:*** 2 configurable inputs ***Outputs:*** 2 relay outputs for alarm signals with contacts of a maximum capacity of 1A/24V DC/AC ***Usb:*** For any software updates or recipe downloads required ***Ethernet:*** RJ-45 for external connection (laboratory installed M8)
Notes:	All interfaces are optically isolated from the power supply (VDEO160) and are completely configurable. All connections must be made via connections to connectors.

CONSTRUCTION FEATURES	
Execution:	Chassis in AISI 304 stainless steel with removable front panel, wall or post mounting system, 10" touch screen monitor
Electronic section:	"CPU" with PENTIUM® INTEL® microprocessor (or similar, depending on technological evolution), 4 GB RAM memory, Video Card, Modem, 3-button mouse. 10" monitor with analog resistive touch screen, resolution: 2048x2048 ***USB*** V 2.0 ***Ethernet:*** IEEE 802.1p and 802.1q supported 10/100/1000 IEEE 802.3 compliant
Software:	Operative software created in the Microsoft® Windows® environment with numerical and/or synoptic and/or graphic display panels and button and/or tool bar commands. Possibility to choose one of several languages for display menus and messages. Real time display, complete control and modification of all functions, variables and operating parameters in use in the Soft Drinks Analysis Unit. Possibility to create, modify and import recipes holding all the operating parameters of the instruments connected to the system. Creation and saving of up to 1999 (maximum) combinations of operating parameters, each for a specific product. Storage of data in a Microsoft® Access format databases with the possibility to export data in Excel format for graphic, statistical and qualitative analysis. Tele-assistance or remote control of all functions. Possibility to see, in real time, the instrument's operating parameters, in a numerical or graph format, for complete remote control and for calculation of the qualitative parameters Ca, Cp and Cpk. Possibility to save, display and print in a database, all the operations performed on the various instruments. Possibility to manage four security levels for user access to operations. Possibility to carry out automatic corrections of the targets and zero values, depending on sugar inversion. Possibility to export and import recipes in text format ASCII (Excel). Possibility of other software programs, by means of LABTECH protocol, to receive data from the MP01. Possibility to be connected via Ethernet to the laboratory-installed M8, from which complete remote control is possible. Possibility to automatically save, on launching a new recipe, a qualitative report of the previous recipe in pdf format. This report can be sent automatically by email to a recipient (the Quality Manager, for example). Possibility for the archive to provide reports which show the data simultaneously in a numerical, graphic and statistical format, as well as quality reports for each day of production. Said reports can be exported in Excel. Possibility, by pressing a single icon, to save all the files containing software configurations and the operations performed by the user in a single zipped file, as well as the archive for the last 5 days. Possibility to check correct operation of the instrument by saving in a database the differences compared to the laboratory values and perform calibration at a later date using this data.
Dimensions and weight:	340 (w) x 300 (h) x 160 (d), 5.5 kg
Accessories:	Different fasteners for installation on the wall or piping (diameter 40 - 100 mm).

TECHNICAL-NORMATIVE SPECIFICATIONS	
Environmental features	***Temperature limits:*** Environment: 0…+50°C (32…122 °F) Storage: -20…+70 °C (-4…+158 °F) ***Humidity limits:*** Environment: 10%...95% (R.H without condensate) Storage: 10%...95% (R.H without condensate) ***Altitude limits:*** <2000 m a.s.l. ***Degree of Protection:*** IP65 in accordance with EN60529
Conformity to Directives	EMC: 2014/30/EU EC marking of conformity to EU Directives