FIRST RAIN DISPLAY AND CONTROLLER

- The display & regulator must be connected to a rain gauge
- Information about the rain status: no rain, first rain, further rain
- Configurable parameters to set thresholds of rain status (T1, T2, Qp)
- Relay outputs to indicate rain status

"First rain" is the first 5 mm of water rained in a given period od time. More than 5 mm of rain it is treated as "further rain" condition. DGP020 display unit, connected to a rain gauge, informs through its relay about the rain condition status, it shows the total rain, the rain intensity and the duration of the rain event. T1, T2 and Qp parameters shown below, are programmable. The status of rain indicated by the display are described below:

- No rain condition: is any period of at least T_1 min of no precipitation. The beginning of precipitation during the no rain period determines the transition to the status of "first rain"
- First rain condition: rainy condition, following a continuous period of no rain, or interrupted by any rain event intervals lower than T_2 min, until rain volume reaches Q_P mm. When reached Q_p mm of precipitation, the system moves to further rain condition. If during first rain condition rain stops for a period longer than T_2 min, the system goes back to the "no rain condition".
- Further rain condition: is the period following the first rain condition, during which there are no rain breaks longer than T_1 min. Break longer than T_1 minutes determines the transition to the "no rain condition".

T_1, T_2 and Q_P parameters are programmable. **Technical Specifications**

Code	DGP020	
Input	Input	Tipping bucket rain gauge (1 imp. = 0,2 mm)
Output	Relay	OFF during "further rain" condition ON during other conditions: No rain, First rain
	Exchange contact	1 Amp 250 Vac
Commands	Switch	On/Off
	Led	Condition status information when relay is ON
	Buttons	N.4 buttons for T_1, T_2, Q_p set-up and language
Power supply	Power supply	24 Vac ± 10% (opz. 220 Vca)
	Power consumption	2 VA
	Battery	Rechargeable Ni-Mh 9Vcc 150mAH
	Battery life	48 hrs if relay is OFF, 30 hrs if ON
General information	CE	Industrial environments
	Operative limits	0+50°C; UR 0-90%
	Language	Italian, English, French and German
	Display	LCD 20 chars, N.4 rows
	Dimension	144x72 mm
	Enclosure	DIN box (ELF020)

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Accessories

	**ELF020**	IP65 box for DGP020 First rain display and regulator. It includes the power supply system (220 -> 24 Vac) and the main switcher. Dimensions: 300x400x200 mm Material: polyester Power supply: 220 -> 24 Vac Mounting: to mast or to wall

First Rain System

The First Rain System consists of a rain gauge connected to the regulator / first rain interventor closed inside an IP65 box. The system can be mounted on a pole and is connected to the electric pumps that regulate the opening / closing of the First Rain tanks.

The system includes:

Ref. Fig.	PN	Description
		Regulator/ First Rain Interventor
1	**DGP020**	Display+regulator/First Rain/24Vac
		IP65 Box
2	**ELF020**	Box IP65/DGP020
		Pole H.2 m (see catalogue MW9007-ENG-01)
3	**DYA006.1**	Pole/H=2m/D=50mm
	DYA020	Tripod/concrete installation/pole D= 50 mm
	DYA020.1	Anchoring bolts for tripod/3 set
		Rain Gauge (see catalogue MW9000-ENG-18)
4	**DQA230.1**	Sensor/Rain gauge/324cmq/Siphone/Hz
5	**DYA040.2**	Arm/DQA230-231/to D=50mm.pole
	DWA505	Cable/L=5m/sensors

	Parameters	Range	Default
T1	Duration of the absence of precipitation that determines the transition from the condition of "further rain" to that of "absence rain"	1÷9999 min	2880 min
T2	Duration of first rain breaks that do not suspend the latter condition The occurrence of a longer pause immediately leads back to the "no rain" condition	1÷9999 min	2880 min
QP	Precipitation quantity, defined as first rain, the totalization of which determines the passage to the condition of "further rain"	1÷9 mm	5 mm

T1, T2 and QP parameters are programmable

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