



TECHNICAL SPECIFICATION

TECHNICAL DATASHEET

DIA CLASS 120 - Reverse osmosis deionizer

Product code Q-1020-05

Product tipology:	Reverse osmosis deionizer
Manufacturer:	Quality Invents Srl
Country of production:	Italy
Marketing starting date in Italy:	Year 2020
Product warranty:	12 months from production

Water supply (within the potability limits set by the 98/83 CE Directive)	
TDS (verified the chemical composition)	800 ppm (max)
SDI (Silt Density Index)	< 12
LSI (Langelier Saturation Index)	< 0,3
Water hardness CaCO ₃	300 ppm
Chlorine	< 0,5 ppm
pH	4—10
Dynamic/Static pressure	2—5 bar
Incoming flow	450 l/h @2bar (7,5 l/min @2bar)
Water temperature	8-25 °C
Pretreatment	type μQ (x2)
Duration μQ	200 working hours

Water produced by section of reverse osmosis (@15 °C, 800 ppmNaCl, pH 8,3 e SDI 5)	
Hourly production	120 l/h
Salt rejection by osmosis reverse	95%
Working pressure	12 bar (max)

Specifications subject to change without notice.

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Water at service (according to CLSI-CLRW)	
Resistivity	10 MΩ.cm
Conductibility	0, 1 μS/cm
TOC (Total Organic Carbon)	<500 ppb
Nominal flow-rate	2-2,8 l/min (120-170 l/h)
Pressure at the service	0,9 – 3,0 bar (adjustable)
Change IONtank when	1,5 MΩ.cm (0,8 μS/cm)
IONtank exchange capacity	500 g. of CaCO ₃

FITTINGS

Inlet	type ¾" F GAS
Outlet	According to AU specification
Exhaust	12 mm

OPERATING AND ENVIRONMENTAL CONDITION

Supply voltage	230 VAC ± 10%
Electrical frequency	50 Hz
Adsorbed Power	0,8 KVA
Fuses	5x20 10 AT
Operating temperature	10-35 °C
Environmental relative humidity	< 80 %
Need for uninterrupted power supply	no
Operational space	30 cm each side
Distance of electrical power outlet	200 cm
Type of electrical socket	230 VAC 10 A CEI 23-50
Type of electrical socket protection	Short circuit (magnetic) Overload (thermic) Leakage (differential)
Protection specifications	Idn=0,03A tipo AC -230V - In=10A
Network interface	Ethernet TCP/IP – RJ45 Router 4G 4 ports switch
Service communication port	USB – Ethernet

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CONSUMABLE, EQUIPMENT AND OPTIONAL (C/D/O)

Recommended hydraulic connection distance	200 cm (max 300 cm)
Recommended drain receiver distance	200 cm
Maximum drain receiver height	40 cm (nocounterslope)
Minimum drain receiver diameter	40 mm

Height	1055 mm
Width	540 mm
Depth	600 mm
Dry weight	98 Kg
Noise measured at 1 mt.	< 60 dBA

Prefilter cartridge (C)	type: μ Q Code: Q-1000-25
Mixed bed resin cylinder (C)	type: IONtank Code: Q-1000-10
Final filter 0,22 μ m (C)	type: PES for water Code: Q-1000-28
Vent filter 0,02 μ m (C)	type: PTFE for gas Code: Q-1000-48
UV lamp (D)	type:185 nm + 254 nm Code: Q-1342-27
Remote connection DIAnet (D)	type: Ethernet TCP/IP Code: Q-1110-98
Remote connection DIALink (O)	type: RS485 Code: Q-1110-60
Kit DIAnetwork (O) (multiple connection of DIA)	Code: Q-1000-98
Kit DIApressure (O) (pressurization pump)	Code: Q-1110-21
Degasser kit (O) (for high level of CO2)	Code: Q-1111-11

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SAFETY INFORMATION

- The equipment complies with the requirements of the Machinery Directive: 2006/42/CE.
- The equipment complies with the requirements of the Electrical Safety Directive Low Voltage: 2014/35/UE.
- The equipment complies with the requirements of ElectroMagnetic Compatibility Directive EMC: 2014/30/UE.
- The equipment complies with the requirements of RoHS Directive (Restriction of Hazardous Substances Directive): 2011/65/CE - Legislative Decree n. 151 of 25 July 2005.
- The equipment complies to the directive on the scrapping of electrical and electronic equipment (called RAEE) 2012/19/UE.
- The equipment is equipped with a Declaration of Conformity.
- The equipment is equipped with Electrical Validation for the Test Standard IEC61010-1 protection class: Class I.
- The equipment is equipped with overcurrent protection consist of two fuses on the power circuit.
- The equipment is equipped with the installation Manual in English language.
- The equipment is equipped with Manual Operator in English language.
- The "commissioning" of the Equipment is guaranteed, as well as the instruction

MAINTENANCE INFORMATION

We guarantee the repair for a minimum of 5 years from the date of end of production.
We guarantee the supply of spare parts for a minimum of 5 years from the date of end of production.
We provide components and spare parts , wirings diagrams, hydraulic and functional.

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The manufacturer's liability is raised in all cases of improper use or tampering or modifications to the system installed by the end user or third parties not authorized by Quality Invents Srl.

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