ARCTON Elite ULP 300
industrial reverse osmosis system

type: AE-ULP-300

GENERAL FEATURES:

- EuroClear controller, type: ROC-8100
  - LCD display
  - Low feed water protection
  - Low pressure protection
  - High pressure protection
  - Conductivity over limit alarm
  - Pure water level control
  - Timed membrane flushing
- High pressure pump, type: Grundfos CM 3-12
- Membranes, type: Vontron ULP-21-4040
- 0,5 micron sediment filter, type: FCPPS-10005
- Fiberglass pressure vessels
- Carbon steel frame

FEED WATER REQUIREMENTS:

- Raw water temperature: +5...+40 °C
- Residual chlorine: max. 0,1 mg/L
- Water hardness: max. 8,4 °dH (3 meq/L ; 150 mg/L $CaCO_3$)
- Iron: max. 0,1 mg/L
- Manganese: max. 0,05 mg/L
- Silicate: max. 20 mg/L
- Chemical oxygen demand: max. 4,0 mg O_2/L
- Hydrogen sulfide: none
- SDI: max. 3
- Raw water pressure: 2-4 bar
- TDS: max. 1500 mg/l

The limitations may be exceeded if using antiscalant, oxygen scavenger, or other RO pretreatment (e.g. water softener).

PHYSICAL PARAMETERS:

- Inlet water connection: G ½ ”
- Outlet water connection: G ½ ”
- Drain connection: G ½ ”
- Dimensions (H x W x D): 1510mm x 580 mm x 590 mm

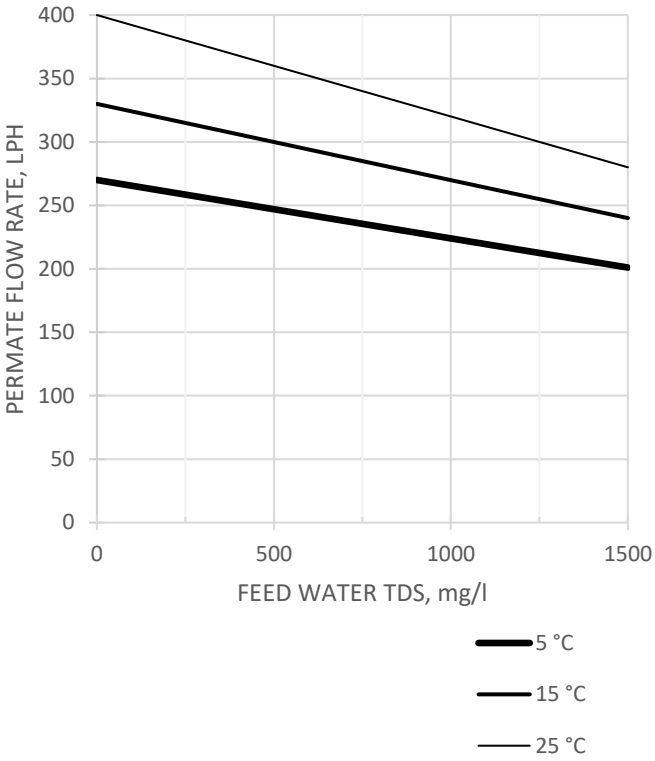
TECHNICAL SPECIFICATION:

Permeate capacity: [1]	300 l/h
Permeate recovery: [2]	75 %
Electrical requirements:	400V,50Hz
Electrical power:	1,58 kW
Operating pressure:	10 – 14 bar
Max. pressure:	15 bar
Prefilter rate:	0,5 µm

[1] depend on raw water TDS, SDI, temp., pressure, permeate recovery, low scaling water

[2] depend on raw water TDS, SDI, temp., pressure, permeate capacity, low scaling water

AE-ULP-300 FLOW RATE CHART



PIPES AND INSTRUMENTS DIAGRAM:

BC-RO-300		
1	d15	Flexible pipe
2	d20	PVC pipe
3	d25	PVC pipe
4	d32	PVC pipe
5	BC-FH-12	Filter housing
6	MV-12-240V	Raw water magnetic valve
7	ES-18O	Pressure switch
8	MM-63/H	Pressure gauge
9	CM-3-12	High pressure pump
10	SG-12	Acid resistant ball valve
11	BNSS4040/ABS	Membrane housing
12/1	RM-PM5	Rotameter
12/2	RM-PM2	Rotameter
13/1	RM-PMV5	Rotameter - Adjustable
13/2	RM-PMV2	Rotameter - Adjustable
14	MV-1/2-240V	Flushing magnetic valve
15	RX-CV-12	Check valve
16	CM-230A(CCT-3320T)	Conductivity meter

