

Specifications

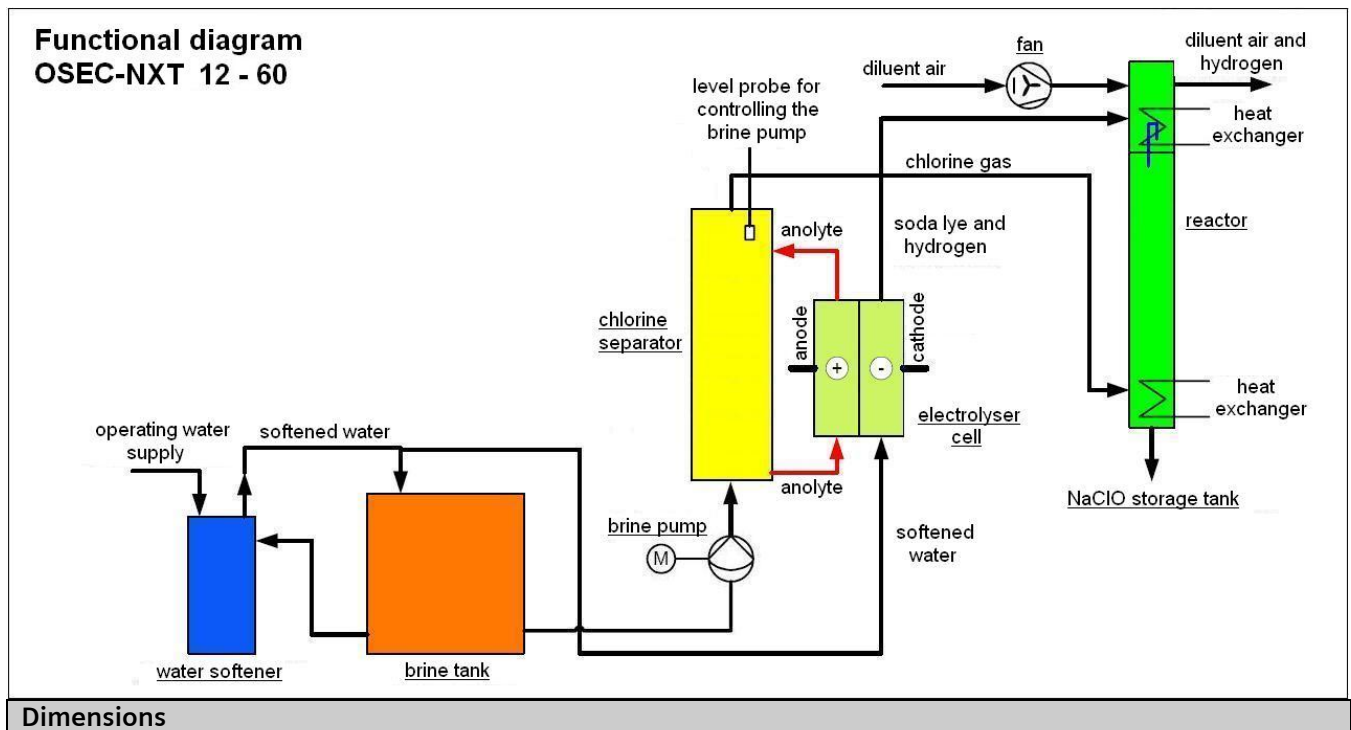
OSEC®-NXT 60 kg	
Capacity	60 kg (132.3 lbs) Cl ₂ /day
Number of cells	5
Weight	550 kg (1212 lbs)
Need of	
▪ Operating water* ¹	400 l/h (106 US gal/h)
▪ Electrolysis water	100 l/h (3.2 US gal/h)
▪ Cooling water	300 l/h (79 US gal/h), just warmed up (35 °C, 95 °F), can be used for other processes
▪ Salt (OSEC-Salin* ²)	approx. 1.7 kg/kg Cl ₂ (lb/lb Cl ₂)
▪ Diluent air	285 m ³ /h (1255 US gpm)
Product concentration* ³	approx. 25 g/l (- 10 %)
Cell voltage, max.	100 V DC
Cell current	approx. 160 A
Electrical supply	3/N/PE AC 400/230 V, 50/60 Hz
Power consumption	approx. 4.5 kWh/kg Cl ₂ (2.0 kWh/lb Cl ₂)
Power consumption in stand-by	approx. 80 W
Total power consumption	23.3 kVA
Power supply fusing, max.	3 x 50 A
Enclosure rating control cabinet	IP 43
Ambient temperature during operation, max.	10 – 30 °C (50 – 86 °F)
Storage and transport temperature	5 – 40 °C (41 – 104 °F)
Connections	
Operating water	PVC DN 15
Brine	PVC DN 15
Sodium hypochlorite	PVDF DN 20
Exhaust pipe	hose DN 110
Installation recommendations	
ChemWeb-Server (included into the scope of supply)	Remote access; connection to an analog phone (phone line with own number) required Connection to the local network via network cable possible
Exhaust pipe	Material PVC, PE or PP; length of pipe max. 60 m (19,7 ft) with max. 20 bends (no elbows), reductions or valves are not allowed. Diameter before air flow switch: DN 100; allowed to be bigger after it. The airflow switch has to be installed at the end of the exhaust pipe, inside the building. Mounting position vertical. Each OSEC-NXT system requires a separate exhaust pipe (gas-proof, continuous upward gradient). Vent opening positioned above roof level or at least 3 m above ground level. The minimum distance to other openings in buildings is 3 m, to other vent openings 10 m. Keep vent opening unobstructed and prevent entry of foreign objects. Once a year the exhaust pipe has to be checked for cloggings. The actual air flow has to be tested for that reason, the results have to be documented.

*¹ potable water according WHO guidelines for drinking water quality, third edition. constant primary pressure required, min. 3.7 bar (53.7 PSI), max. 10 bar (145 PSI), adjustment of the reducing valve OSEC-NXT: 3.5 bar (50.7 PSI)

*² Only the salt OSEC® Salin may be used in Europe.

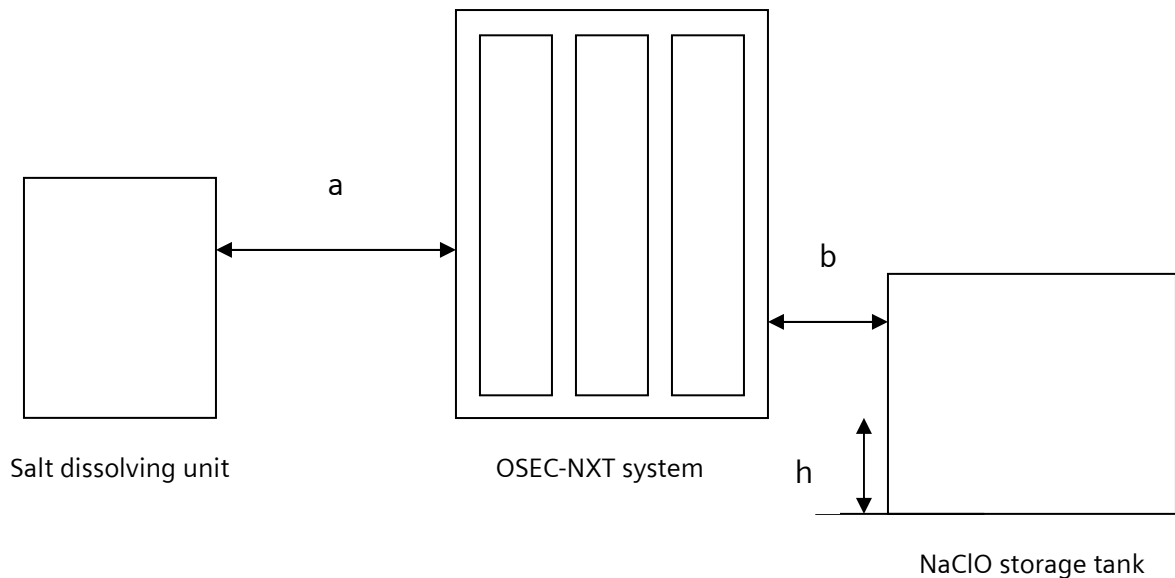
*³ Note: The stability of the sodium hypochlorite solution reduces depending on time (approx. 4% per day when ambient temperature is 20 °C / 68 °F).

Salt dissolving tank (suitable for salt tabs)	The softened water used for refill has to be supplied by the softener of the OSEC-NXT system. All tank connections are designed for hoses with transition to pipes.
Brine surge tank (60 L) Used instead of salt dissolving tank	External water softener with a softness sensor and a potential-free output for failure messages switching of the OSEC-NXT system required. Filling brine pump for single units: Chem-Ad® Serie B, for double units Chem-Ad Serie C, separate mains connection required, separate control.
NaClO storage tank	Material: PE-HD with PVC base plate Installation area according DIN 18202 Connection pipe to the NaClO outlet of the unit has to be installed in a downward gradient. Pipe material: PVDF. The air inlet / vent is connected to an activated carbon filter or is discharged to atmosphere. For double units a separate mains connection is required. An annual inspection of the storage tank by a certified agency has to be initiated by the user.
Double units	Two units of identical size can be run parallel. They are able to share one salt dissolving tank or brine surge tank and one NaClO storage tank. The air flow for the fresh air supply has to be above 570m³/h.
Recommended security accessory	Chlorine gas leak detector with flash / horn detector; double units: each unit requires a separate flash / horn combination.
Installation recommendations	
Collecting basin	The whole unit and scope of supply are placed in one collecting basin. An additional leakage indicator is not required, as the OSEC-NXT system comes with a leakage indicator by default. The capacity of the collecting basin has to be chosen according to the state specific regulations.



Dimensions

OSEC-NXT W x H x D	1200 x 1895 x 750 mm (47.2 x 74.6 x 29.5")
Collecting basin W x H x D	1500 x 110 x 1050 mm (59.0 x 4.3 x 41.3")
Space for maintenance and service <ul style="list-style-type: none"> ▪ Wall distance ▪ Empty space on the front panel ▪ Empty space on the operating panel 	min. 500 mm (19.7") min. 500 mm (19.7") 800 mm (31.5")
NaClO storage tank Recommended size	1900 l (for double units 2800 l)
Salt dissolving tank Recommended size	750 l (for double units 1500 l)
Allowed distances	a: 1 – 5 m; b: 1 – 4 m, h: 0 – 1 m below unit level



The following drawing shows the Basic version of an OSEC-NXT installation.
If requested, please ask for the following drawings:

- Installation with brine intermediate tank
- Installation of double units

Siemens
Water Technologies

Germany
+49 8221 9040
wtger.water@siemens.com

United Kingdom
+44 1732 771777
wtuk.water@siemens.com

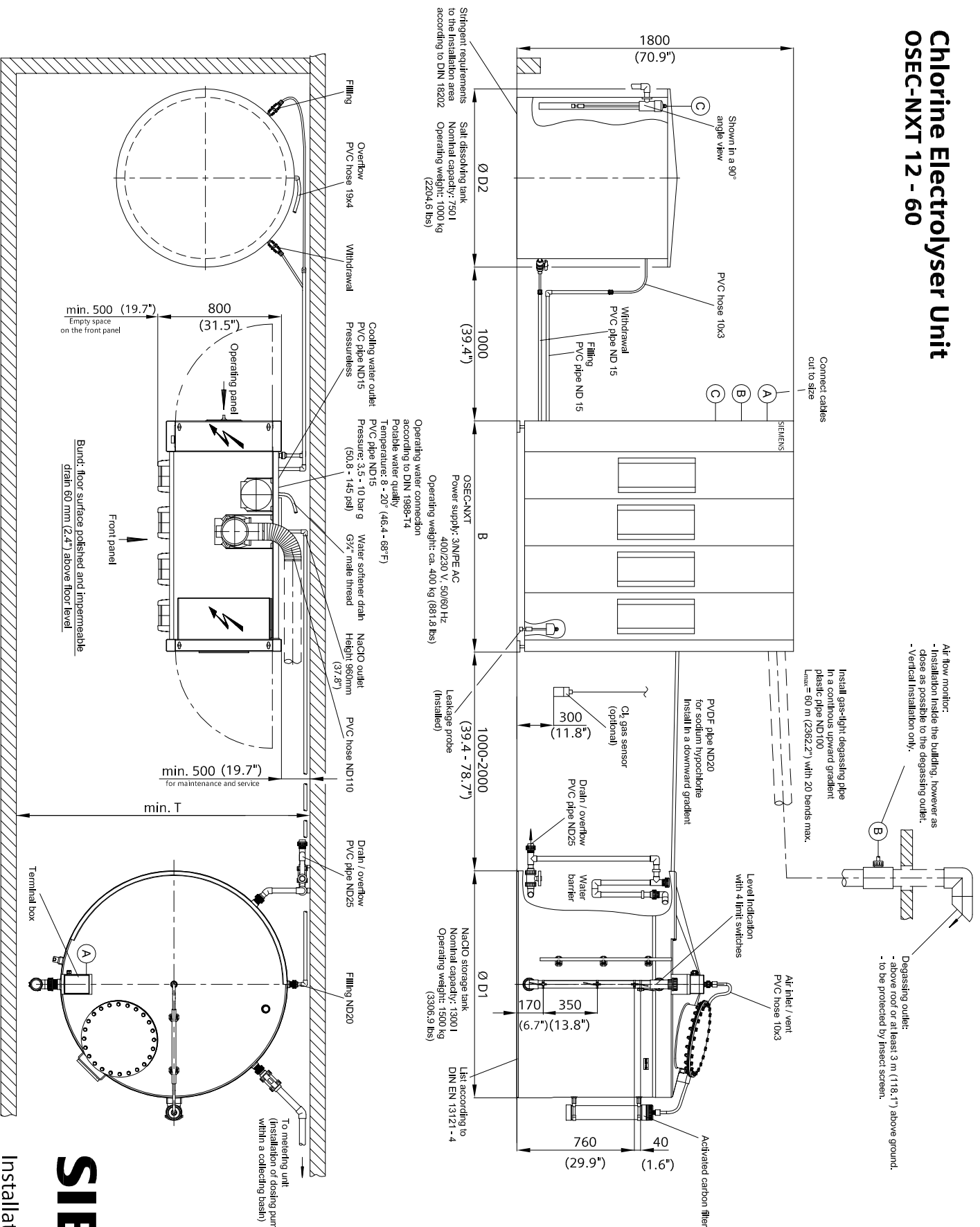
USA
+1 856 507 9000
wtus.water@siemens.com

© 2010 Siemens Water Technologies Corp.
WT.085.140.050.D.DS.1010
Subject to change without prior notice.

Wallace & Tiernan, Chem-Ad and OSEC are trademarks of Siemens, its subsidiaries and affiliates.

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

Chlorine Electrolyser Unit OSEC-NXT 12 - 60



Dimensions [mm] (inches)

SIEMENS

Installation
Basic Version
WT.085.140.040.IE.CN.0910

Germany:
+49 8221 9040
wtger.water@siemens.com

United Kingdom:
+44 1732 771777
wtuk.water@siemens.com

USA:
+1 856 507 9000
wtus.water@siemens.com