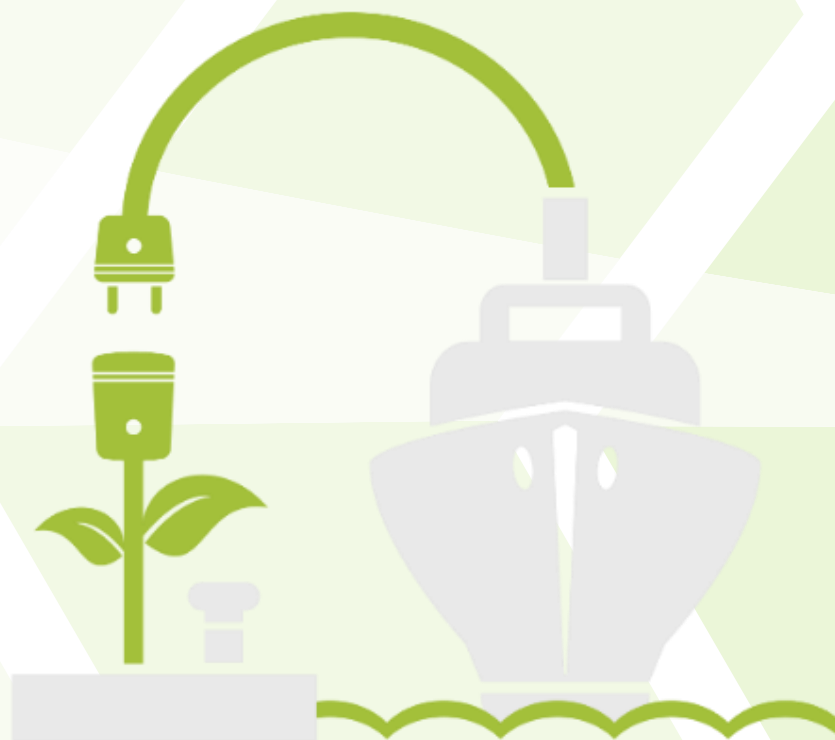


Operator manual



POWERCON A/S

PROJECT CLIENT: PLUG

PROJECT NAME: MONTROSE

PROJECT NUMBER: 1115

February 12, 2024

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Audit history

Date	Author	Changes

Abbreviations

Abbreviation	Meaning
OPS	On shore Power Supply
LV	Low Voltage
SW	Software
HMI	Human-Machine Interface
UPS	Uninterruptible Power System
IMO	International Maritime Organization

1 Preface

EN	This document is a guide in how to operate the LV OPS system. The guide will cover subjects such as: practical use of the HMI-system and the load connecting points. The guide will be presented in both English (EN) and Danish (DK).
NO/DK	Dette dokument vil give vejledning i hvordan LV OPS systemet skal betjenes. Vejledningen vil dække over emner såsom: Praktisk brug HMI-systemet og udtagspunkterne. Vejledningen vil både stå på engelsk (EN) og på dansk (DK).



EN	May only be operated by trained and skilled people! Before operating the shore power system, please consult the manual!
NO/DK	Må kun betjenes af fagfolk der har modtaget undervisning i systemet

EN	The connection between the onshore power system and the vessels are conducted according to IEC 80005-3. Please refer to this standard for further details about synchronizing etc. between vessels and shore
NO/DK	Forbindelsen imellem landstrømsanlægget og fartøjerne sker i henhold til IEC 80005-3. Der henvises til denne standard for yderligere detaljer omkring synkronisering etc. mellem fartøjer og landsiden

2 Operating the load connection points

EN	Connecting a ship to the OPS system contains of two steps. Step 1 is connecting the ship to the load connection point and the second step is configuring the OPS system on the HMI. This chapter will provide instructions for operating the connection point. For more technical information about the connection point, see the system description.
NO/DK	At forbinde et skib til Landstrømsanlægget består af to dele. Første del er at koble skibet til udtagspunkter og anden del er at konfigurere Landstrømsanlægget via HMI-skærmen. Dette kapitel vil beskrive hvordan udtagspunkterne skal anvendes. For mere teknisk information omkring udtagspunkterne, se systembeskrivelsen.

EN	The two types of connection points can be seen in Figure 2.1. The connection point on the left is built for being mounted under the quay level and the one on the right is for being mounted above quay level. The electrical structure is the same for both connection points and thus the number of outlets and how they work is the same on both types of connection points.
NO/DK	De to typer af udtagspunkter er vist på Figure 2.1. Udtagspunktet til venstre er bygget for at kunne blive monteret over kaj nivea, hvor udtagspunktet til højre er lavet til at blive anvendt som flytbart udtagspunkt

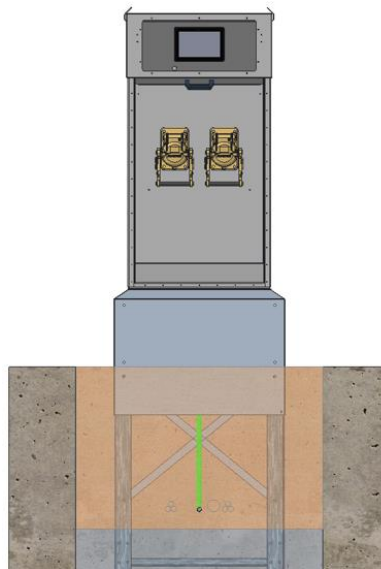


Figure 2.1: Drawing of the connection points/Tegninger af udtagspunkter

Only solutions with daisy chained connection points have locks on the lids of the plugs/Kun løsninger med serie koblede udtagspunkter har låse på stiklåg.

EN	As default the outlet lid is locked and needs to be release by activating the shutter button placed above and between the two belonging outlets. The shutter button has a built-in lamp that will light up when the plug is accessible. Next to the shutter button is a yellow stop button that will stop the power to the two outlets when activated. A picture of the buttons can be seen in Figure 2.2, where the red marking shows the relation between the buttons and outlets.
NO/DK	Som udgangspunkt er stik-hætterne låst og skal udløses ved at aktivere en udløserknop placeret ovenover og mellem de to tilhørende stik. Udløserknappen har indbygget et lys, som vil lyse op når stikkene er tilgængelige. Ved siden af udløserknappen er placeret en gul stopknop, som ved aktivering vil afbryde strømmen i de to pågældende udtag. Et billede af knapperne kan se på Figure 2.2, hvor den røde markering viser hvilke stik knapperne tilhører.



Figure 2.2: Outlets on the connection point/Stik på udtagspunkt

EN	When the shutter button is activated the two belonging outlets will be unlocked. The outlets will be unlocked for about 30s. before they automatically will lock again. The time interval gives the user a timeslot to open both outlets if needed.
NO/DK	Når udløserknappen aktiveres, vil der blive låst op for de to tilhørende stik. Stikkene vil derefter være ulåste i 30s, hvorefter de automatisk ville låses igen. Tidsintervallet giver brugeren mulighed for at åbne begge stik, hvis dette er nødvendigt.

EN	Each plug can deliver 350A and a voltage of 230-690V. This gives an option of the following current levels shown in Table 2-1.
NO/DK	Hvert stik kan levere op til 350A og en spænding på 230-690V. Det er derfor muligt at få leveret de strømstyrker som vises i Table 2-1.

Table 2-1: Current levels/Strøm niveauer

NO plugs/Antal stik	Max. current/Maks. strømstyrke [A]
1	350
2	700
3	1050
4	1400

EN	When the ship has been connected to the desired number of outlets part 1 is completed and the OPS now needs to be configured using the HMI.
NO/DK	Når skibet er blevet koblet til det ønskede antal stik, er del 1 udført og landstrømsanlægget skal nu konfigureres ved hjælp af HMI-skærmen.



EN	When disconnecting the ship from the OPS system, it is <u>very</u> important that the operator make sure that the plug lid is properly closed! So always check if it is possible to open the plug lid without activating the shutter button. If it is possible to open the plug lid, please try to close the plug lid again and check again. It can be dangerous if the plug lid is not properly closed!
NO/DK	Når skibet skal frakobles landstrømsanlægget, er det <u>meget</u> vigtigt at kontrollere om låget til stikket er ordentlig lukket! Kontroller derfor altid om det er muligt at åbne låget uden at have aktiveret udløserknappen. Hvis det er muligt at åbne låget, så luk det venligst igen og kontrollere det en gang til. Der kan opstå farlige situationer, hvis låget ikke er lukket korrekt!

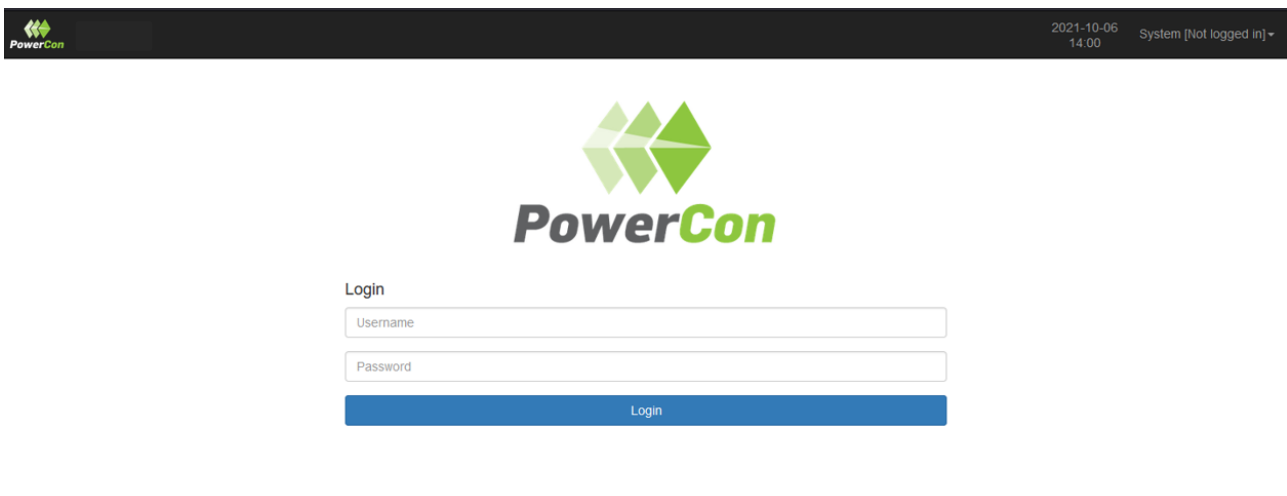
3 Guide for operating the HMI system

EN	In this chapter a guide for operating the HMI is given.
NO/DK	I dette Kapitel vil der blive gennemgået hvordan man konfigurerer Landstrømsanlægget.

EN: The HMI system offers a manual configuration of the OPS system when connecting a ship. A practical guide of both methods will be given in this chapter, but first after some general information about some functions that are applicable for both methods.
DK/NO: HMI-systemet giver mulighed for en manuel opsætning af landstrømsanlægget når et skib skal kobles til. En praktisk gennemgang af begge opsætningsmetoder vil blive gennemgået i dette kapitel, men som det første vil der blive gennemgået nogle generelle funktioner som gør sig gældende for begge opsætningsmetoder.

3.1 Login screen

EN: The system is operated from the touch screen. On the login screen please type in the information you have received in advance.
NO/DK: Landstrømsystemet styres fra touch displayet. På login siden skal du anvende de login-informationer du har modtaget.

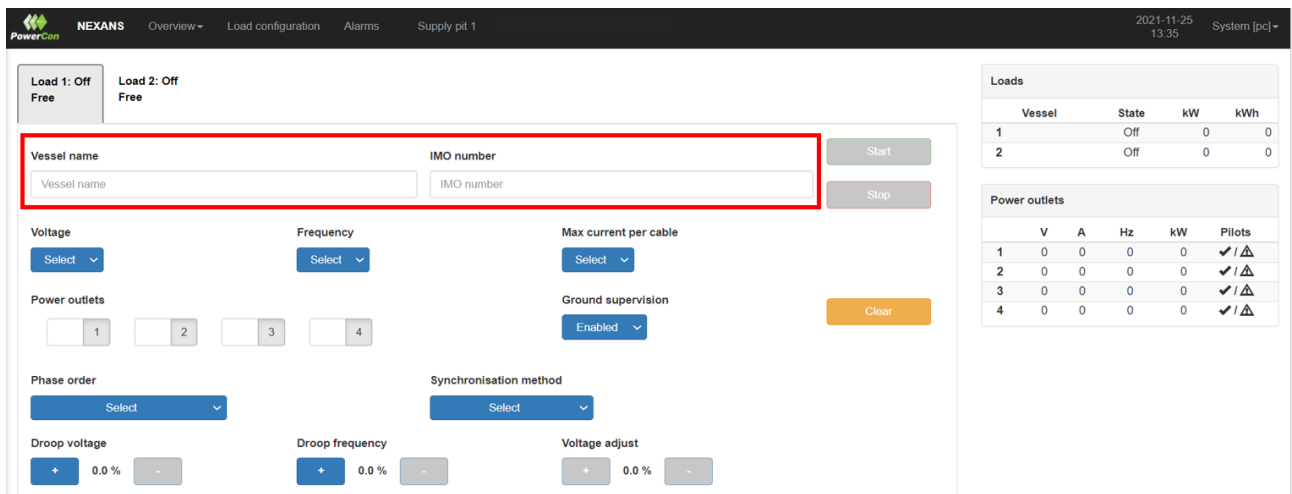


3.2 Manuel Load configuration

EN: The pictures used as examples in this section may look different from the actual HMI system
 NO/DK: De billeder som er brugt som eksempler i dette underafsnit, kan se anderledes ud end i det faktiske HMI system.

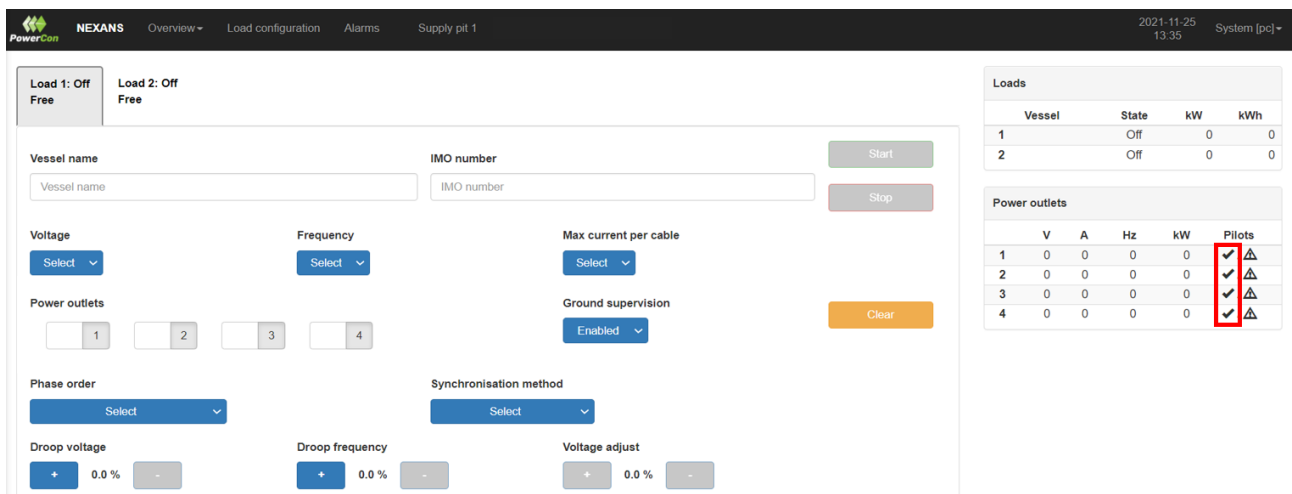
3.2.1 Vessel name and IMO

EN: Select the menu point "supply pit". If connector 1+2 are used select load 1 and if connectors 3+4 are used select load 2. Type in the ships name and IMO number in the designated field
 NO/DK: Vælg menupunktet "supply pit". Hvis stik 1 og/eller 2 anvendes vælg load 1 og hvis stik 3+4 anvendes vælg load 2. Skriv skibets navn og IMO nummer ind i feltet for dette.



3.2.2 Pilot feedback

EN: When the OPS system is ready, a "check mark" is shown on the left side under "Pilots"
 NO/DK: Når OPS systemets pilot kreds er klar, vises det via fluebenet på venstre side under "Pilots"



EN: When the ship is ready, a check mark will be shown on the right side under "Pilots"
 NO/DK: Når skibet er klar, vil der ligeledes komme et flueben i højre side under "pilots"

The screenshot shows the NEXANS control interface. On the left, there are controls for vessel configuration including Vessel name, IMO number, Voltage (dropdown), Frequency (dropdown), Max current per cable (dropdown), Power outlets (checkboxes 1-4), Phase order (dropdown), Synchronisation method (dropdown), Droop voltage, Droop frequency, and Voltage adjust. On the right, there are two tables: 'Loads' and 'Power outlets'. The 'Power outlets' table has a red box around the 'Pilots' column, which contains checkmarks for all four outlets.

Vessel	State	kW	kWh
1	Off	0	0
2	Off	0	0

	V	A	Hz	kW	Pilots
1	0	0	0	0	✓
2	0	0	0	0	✓
3	0	0	0	0	✓
4	0	0	0	0	✓

3.2.3 Manuel Voltage selection

EN: Under the menu "Voltage" select the ship voltage. Please verify the ships voltage against the selection, a wrong selection of voltage may damage the vessel!
 NO/DK: Under menupunktet "Voltage" vælg den spænding som skibet kræver. Vær opmærksom på at hvis der vælges for høj eller for lav spænding kan dette skade skibet!

This screenshot is similar to the previous one but with the 'Voltage' dropdown menu open. The menu shows options: 400, 440, 480, and 690. A red box highlights the dropdown menu.

3.2.4 Manuel Frequency selection

EN: Under the menu “Frequency” select the ship frequency. Please verify the ships frequency against the selection, a wrong selection of frequency may damage the vessel!

NO/DK: Under menupunktet “Frequency” vælg den frekvens som skibet kræver. Vær opmærksom på at hvis der vælges en fejl frekvens kan dette skade skibet!

The screenshot shows the NEXANS control interface. The 'Frequency' dropdown menu is highlighted with a red box, showing options: Select, 50, and 60. The interface includes fields for Vessel name and IMO number, buttons for Start and Stop, and various configuration options like Voltage, Power outlets, Phase order, Synchronisation method, Droop voltage, and Droop frequency. On the right, there are 'Loads' and 'Power outlets' tables.

Vessel	State	kW	kWh
1	Off	0	0
2	Off	0	0

	V	A	Hz	kW	Pilots
1	0	0	0	0	✓ / ⚠
2	0	0	0	0	✓ / ⚠
3	0	0	0	0	✓ / ⚠
4	0	0	0	0	✓ / ⚠

3.2.5 Manuel Setting max current for cables.

EN: The maximum current for the cables can be defined in the menu “Max Current per cable”. It is important that the value is corresponding to the specifications for the cable

NO/DK: Den maksimale strøm for kabler til fartøjet kan sættes i menuen ” Max Current per cable”. Det er vigtigt at den valgte værdi er i overensstemmelse med specifikationerne for kablet

The screenshot shows the NEXANS control interface. The 'Max current per cable' dropdown menu is highlighted with a red box, showing options: Select, 16, 32, 64, 125, 250, 350, 400, and 420. The interface includes fields for Vessel name and IMO number, buttons for Start and Stop, and various configuration options like Voltage, Frequency, Power outlets, Phase order, Synchronisation method, Droop voltage, and Droop frequency. On the right, there are 'Loads' and 'Power outlets' tables.

Vessel	State	kW	kWh
1	Off	0	0
2	Off	0	0

	V	A	Hz	kW	Pilots
1	0	0	0	0	✓ / ⚠
2	0	0	0	0	✓ / ⚠
3	0	0	0	0	✓ / ⚠
4	0	0	0	0	✓ / ⚠

3.2.6 Manuel Selection of outlet

EN: Chose the number of outlets you wish to use for the connection. 1+2 are grouped and will run identical voltage and frequency.

NO/DK: Vælg det antal stik der ønskes til skibet. 1+2 er hver især grupperet og vil have samme spænding og frekvens.

The screenshot shows the NEXANS control interface for 'Supply pit 1'. The 'Power outlets' section is highlighted with a red box, showing four input fields labeled 1, 2, 3, and 4. The interface also includes fields for Vessel name, IMO number, Voltage, Frequency, Max current per cable, Ground supervision, Phase order, Synchronisation method, Droop voltage, Droop frequency, and Voltage adjust. On the right, there are two tables: 'Loads' and 'Power outlets'.

Vessel	State	kW	kWh
1	Off	0	0
2	Off	0	0

	V	A	Hz	kW	Pilots
1	0	0	0	0	✓ / ⚠
2	0	0	0	0	✓ / ⚠
3	0	0	0	0	✓ / ⚠
4	0	0	0	0	✓ / ⚠

3.2.7 Selection of phase order

EN: The phase rotational direction can be easily set under "phase order"

NO/DK: Fase rotation/fasefølge kan nemt ændres under punktet "Phase order"

The screenshot shows the NEXANS control interface for 'Supply pit 1'. The 'Phase order' dropdown menu is highlighted with a red box, showing three options: 'Counter-clockwise (CCW/neg.)' and 'Clockwise (CW/pos.)'. The interface also includes fields for Vessel name, IMO number, Voltage, Frequency, Max current per cable, Ground supervision, Synchronisation method, Droop frequency, and Voltage adjust. On the right, there are two tables: 'Loads' and 'Power outlets'.

Vessel	State	kW	kWh
1	Off	0	0
2	Off	0	0

	V	A	Hz	kW	Pilots
1	0	0	0	0	✓ / ⚠
2	0	0	0	0	✓ / ⚠
3	0	0	0	0	✓ / ⚠
4	0	0	0	0	✓ / ⚠

3.2.8 Selection of synchronization method

EN: Its possible to synchronize towards towards the ship (A3) if the vessel does not have the capability of synchronizing with shore.

NO/DK: Hvis skibet ikke kan synkronisere mod land kan A3 vælges og så vil landstrøms systemet synkronisere mod skibet.

The screenshot shows the NEXANS control interface. The 'Synchronisation method' dropdown menu is highlighted with a red box, showing two options: 'A1: Vessel sync. to OPS' and 'A3: OPS sync. to vessel'. Other interface elements include 'Vessel name', 'IMO number', 'Voltage', 'Frequency', 'Max current per cable', 'Power outlets', 'Phase order', 'Drop voltage', 'Drop frequency', and 'Voltage adjust'.

3.2.9 Manuel Shore power ready for start

EN: When the setup is complete, and the pilots are checked ok the “Start” button will turn green and the system can be started. The OPS system needs to charge up before delivering power to the ship and this might take a short while.

NO/DK: Når systemet er sat op, bliver “Start” knappen grøn og landstrøms systemet kan startes. Landstrømsanlægget skal lade op før det kan begynde at levere strøm til skibet og der vil derfor gå et kort stykke tid før skibet modtager strøm fra anlægget.

The screenshot shows the NEXANS control interface. The 'Start' button is highlighted with a red box. The interface includes 'Vessel name', 'IMO number', 'Voltage', 'Frequency', 'Max current per cable', 'Power outlets', 'Phase order', 'Drop voltage', 'Drop frequency', 'Voltage adjust', and 'Synchronisation method'. The 'Start' button is located in the top right corner of the main configuration area.

3.2.10 Voltage adjustment

EN: It is possible to adjust the voltage after the OPS system has been started. It will adjust with steps of +/- 0,5% at a time.

NO/DK: Det er muligt, når landstrømsanlægget er startet, at justere på spændingen. Justeringen sker med +/- 0,5% ad gangen.

The screenshot shows the NEXANS control interface for 'Supply pit 1'. The 'Voltage adjust' control is highlighted with a red box. It consists of a '+' button, a '0.0%' display, and a '-' button. Other controls visible include Vessel name, IMO number, Voltage, Frequency, Max current per cable, Power outlets (1-4), Phase order, Synchronisation method, Droop voltage, Droop frequency, and Ground supervision. On the right, there are tables for 'Loads' and 'Power outlets'.

Vessel	State	kW	kWh
1	Off	0	0
2	Off	0	0

	V	A	Hz	kW	Pilots
1	0	0	0	0	✓ / ⚠
2	0	0	0	0	✓ / ⚠
3	0	0	0	0	✓ / ⚠
4	0	0	0	0	✓ / ⚠

3.2.11 Droop voltage and frequency adjustment

EN: It is also possible to adjust the droop voltage and the droop frequency.

NO/DK: Det er også muligt at justere på droop spændingen og frekvensen.

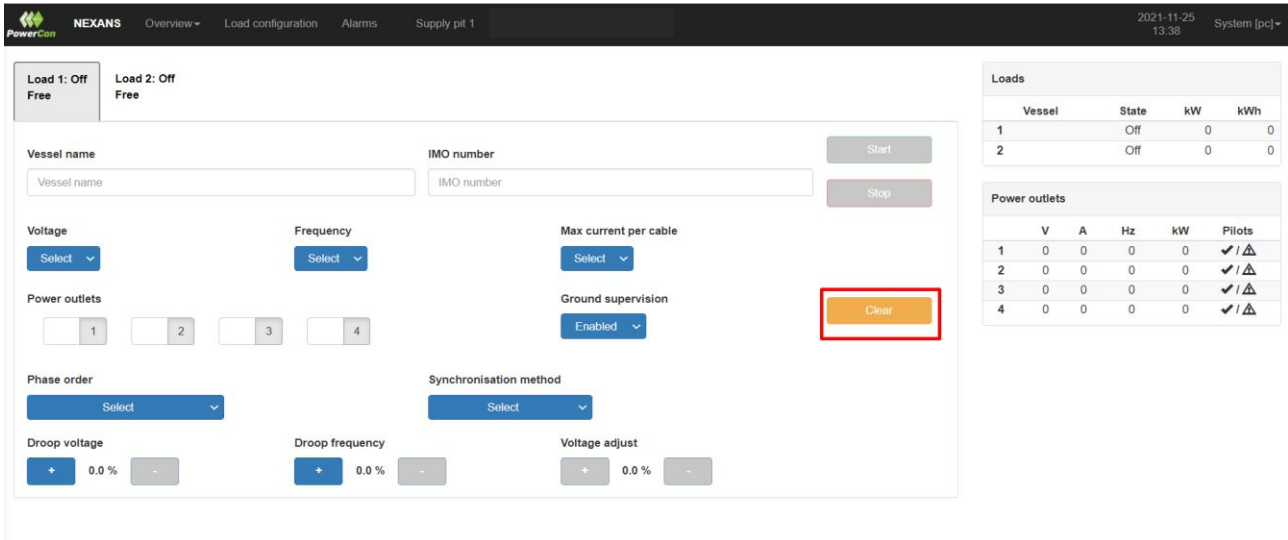
The screenshot shows the NEXANS control interface for 'Supply pit 1'. The 'Droop voltage' and 'Droop frequency' controls are highlighted with red boxes. Each consists of a '+' button, a '0.0%' display, and a '-' button. Other controls visible include Vessel name, IMO number, Voltage, Frequency, Max current per cable, Power outlets (1-4), Phase order, Synchronisation method, and Voltage adjust. On the right, there are tables for 'Loads' and 'Power outlets'.

Vessel	State	kW	kWh
1	Off	0	0
2	Off	0	0

	V	A	Hz	kW	Pilots
1	0	0	0	0	✓ / ⚠
2	0	0	0	0	✓ / ⚠
3	0	0	0	0	✓ / ⚠
4	0	0	0	0	✓ / ⚠

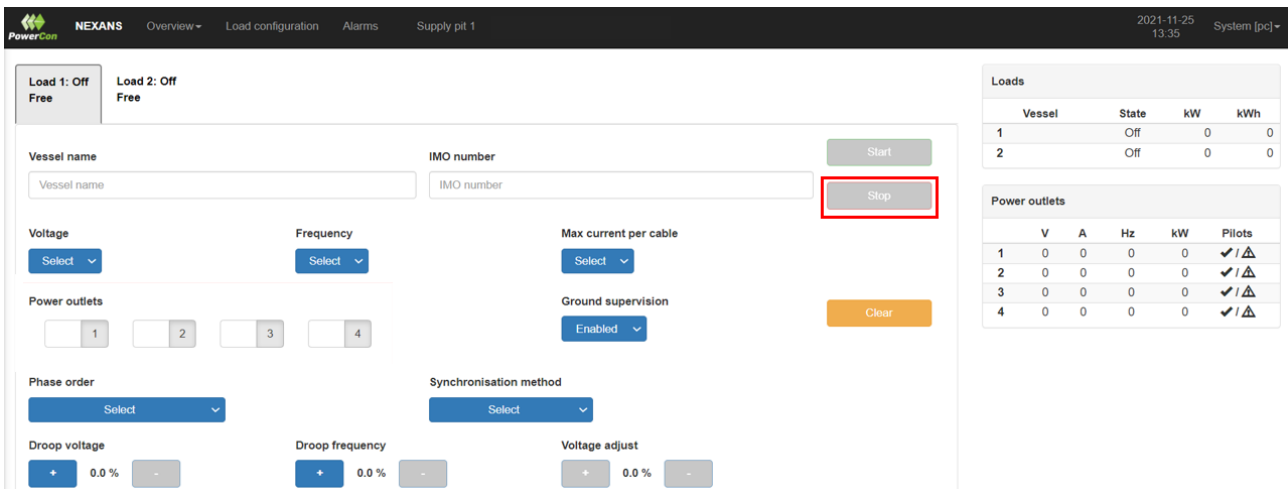
3.2.12 Clear configuration

EN: To clear the entered configuration, push the clear button
 NO/DK: For at rydde den indtastede konfiguration, tryk på clear knappen



3.2.13 Stop shore power

EN: To turn of the OPS system, push the button “Stop” and disconnect the cable/s
 NO/DK: For at slukke for landstrømsystemet trykkes på knappen “Stop” og derefter kan kablet/erne frakobles.



3.3 Detailed manual

In this section the operation of the shore power system is elaborated thoroughly

EN: In this section the operation of the shore power system is elaborated thoroughly
NO/DK: I dette afsnit er driften af landstrømsystemet grundigt uddybet

3.3.1 Profiles

3.3.1.1 User Profiles

A shore power system has the following user profiles:

EN: A shore power system has the following user profiles:
NO/DK: Et landstrømsystem har følgende brugerprofiler:

<p>EN:</p> <ul style="list-style-type: none"> • Admin <p>The Admin profile is intended for the person who is the administrator in the harbour, and/or the person within the harbour, which knows the system, including creating other users on the system. See the picture below bullet points.</p> <ul style="list-style-type: none"> • Post Employee <p>This user profile is used for port employees, who do not need or are not allowed to do everything in the system.</p> <ul style="list-style-type: none"> • Port User <p>The port user may not be anyone employed by the harbour, but is someone, who is able to connect a docked ship to the system.</p> <ul style="list-style-type: none"> • Guest <p>The guest profile is intended for users who should only be able to see if the system is running or not.</p>
<p>NO/DK:</p> <ul style="list-style-type: none"> • Admin <p>Admin profilen er beregnet til den person, der er administrator ved havnen, og/eller den person ved havnen, som kender systemet, herunder oprettelse af andre brugere på systemet. Se billedet nedenfor punktopstillingen</p> <ul style="list-style-type: none"> • Port Employee <p>Denne brugerprofil bruges til havneansatte, som ikke har behov for, eller ikke må gøre alt i systemet.</p> <ul style="list-style-type: none"> • Port User <p>Havnebrugeren er måske ikke nogen, der er ansat i havnen, men er en person, der er i stand til at forbinde et skib, der ligger i kaj, til systemet.</p> <ul style="list-style-type: none"> • Guest <p>Gæsteprofilen er beregnet til brugere, som kun skal kunne se, om systemet kører eller ej.</p>

PowerCon NEXANS Overview Load configuration Alarms Supply pit 1 Manual Control Internals 2021-11-25 13:41 System [pc]

Load 1: Off Free Load 2: Off Free

Vessel name: IMO number: Start Stop

Voltage: Frequency: Max current per cable:

Power outlets: Ground supervision: Clear

Phase order: Synchronisation method:

Droop voltage: 0.0% Droop frequency: 0.0% Voltage adjust: 0.0%

Loads	
Vessel	State
1	Off
2	Off

Power outlets				
	V	A	Hz	
1	0	0	0	
2	0	0	0	
3	0	0	0	0 ✓ ⚠
4	0	0	0	0 ✓ ⚠

- User account
- User management
- Log out
- English
- Deutsch
- Norsk
- Dansk
- About

3.3.1.2 Rights for the profiles

EN: Users on the system can have a number of the following rights. The rights for each of the profiles, described in section 3.3.1.1, can be seen in Figure 1.

NO/DK: Brugere på systemet kan have en række af følgende rettigheder. Rettighederne for hver af profilerne, beskrevet i afsnit 3.3.1.1, kan ses i Figure 1.

EN:

- **Set load configuration**

Gives the rights to setup a load (e.g. a ship) for voltage, current, etc.

- **See load configuration**

Grants the rights to see load configurations.

- **Set grid configuration**

Grants rights to setup the grid configuration, i.e. to select grid voltage.

- **See grid information**

Allows the user to see the grid measurements. Current voltage, current, phase order, etc. can be seen.

- **See condition monitoring**

Gives the user rights to see the condition monitoring page, where measurements from each load point can be seen.

- **See all alarms**

This gives the user to see all alarms in the system, even alarms which have not yet been set.

- **Alarm read**

Grants the user access to the alarm system.

- **Alarm write**

The user becomes able to acknowledge an alarm. Alarm read access is required for alarm write access.

- **Alarm mute read**

Makes the user able to see, which alarms PowerCon has muted in the system. It is only PowerCon who can mute alarms. It is for example done when the system has a faulty non-critical sensor, to make the system able to run until the sensor can be serviced.

- **User Management**

Allows the user to create new users on the system and edit those that already exist on the system.

- **Alert system**

Allows the user to set up phone numbers for SMS and email addresses, to which, the system can send information about certain events.

<ul style="list-style-type: none"> • Vessel configuration db read Grants the user access read access to the vessel configuration database, which among other things contains the load configuration for a vessel. • Vessel configuration db write Gives the user rights to write the to the vessel configuration database.
<p>NO/DK:</p> <ul style="list-style-type: none"> • Set Load configuration Giver rettigheder til at opsætte en last (f.eks. et skib) til spænding, strøm, osv. • See load configuration Giver rettigheder til at se indlæsningskonfigurationer • Set grid configuration Giver rettigheder til at opsætte netkonfigurationen, dvs. til at vælge netspænding. • See grid information Giver brugeren mulighed for at se gittermålingerne. Strømspænding, strøm, faserækkefølge osv. kan ses. • See condition monitoring Giver brugeren rettigheder til at se tilstandsovervågningssiden, hvor målinger fra hvert belastningspunkt kan ses. • See all alarms Dette giver brugeren mulighed for at se alle alarmer i systemet, også alarmer i systemet, også alarmer som endnu ikke er indstillet. • Alarm read Giver brugeren adgang til alarmsystemet • Alarm write Brugeren bliver i stand til at kvittere for en alarm. Adgang til 'Alarm read' er nødvendigt for adgang til 'Alarm write' • Alarm mute read Gør brugeren i stand til at se, hvilke alarmer PowerCon har slået fra i systemet. Det er kun PowerCon, der kan slå alarmer fra. Det gøres fx, når systemet har en defekt ikke-kritisk sensor, for at få systemet til at køre indtil sensoren kan serviceres. • User Management Giver brugeren mulighed for at oprette nye brugere på systemet og redigere dem, der allerede findes på systemet. • Alert system Giver brugeren mulighed for at oprette telefonnumre til SMS og e-mailadresser, hvortil systemet kan sende information om bestemte begivenheder • Vessel configuration db read

Giver brugeren adgang til læseadgang til fartøjskonfigurationsdatabasen, som blandt andet indeholder lastkonfigurationen for et fartøj

- **Vessel configuration db write**
Giver brugeren rettigheder til at skrive til fartøjets konfigurationsdatabasen.

	Set load configuration	See load configuration	set grid configuration	see grid information	see condition monitoring	see all alarms	alarm read	alarm write	alarm mute read	user management	alert system	vessel configuration db read	vessel configuration db write
Admin	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Port Employee	✓	✓		✓			✓	✓					
Port User	✓	✓					✓	✓					
Guest													

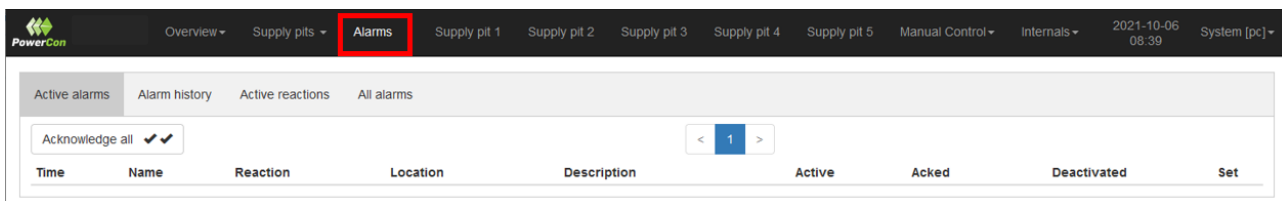
Figure 1: User rights for the various types of profiles.

3.4 Alarm Menus

3.4.1 Handling of warnings

EN: If there are errors or warnings on the system the “Alarms” will be flashing. Click the flashing menu to enter the alarm log.

NO/DK: Hvis der er fejl på systemet, vil ”Alarm” blinke. Tryk på denne for at se de alarmer og advarsler som er på systemet.



3.4.2 Type of alarms

EN: Under the menu “Alarm” Alarms and warnings are displayed. Alarms are points that trip the system where warnings provide the possibility of preventing further escalation to alarms.

NO/DK: Under menupunktet “Alarm” kan man se alarmer og advarsler. Alarmer tripper anlægget mens advarsler skal give en mulighed for at gribe ind før fejlen udvikler sig.

PowerCon Overview ▾ Supply pits ▾ Alarms Supply pit 1 Supply pit 2 Supply pit 3 Supply pit 4 Supply pit 5 Manual Control ▾ Internals ▾ 2021-10-06 08:39 System [pc] ▾

Active alarms Alarm history Active reactions All alarms

Acknowledge all ✓✓

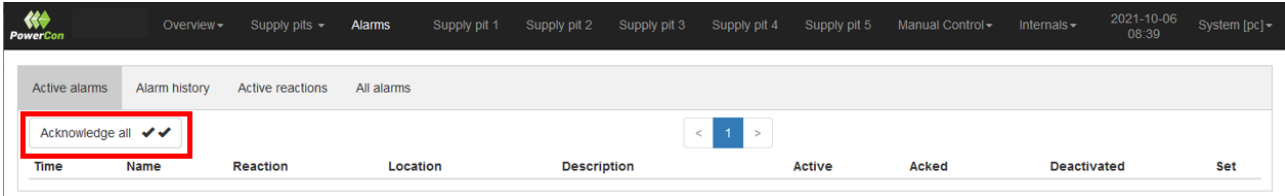
< 1 >

Time	Name	Reaction	Location	Description	Active	Acked	Deactivated	Set
------	------	----------	----------	-------------	--------	-------	-------------	-----

3.4.3 Acknowledge of alarm & warnings

EN: If there are active alarms, please reset them by pressing "Acknowledge"

NO/DK: Hvis der er aktive alarmer, kan disse kvitteres ved at trykke på "Acknowledge"



EN: If the alarms are not cleared and it is not obvious what the problem is please contact support

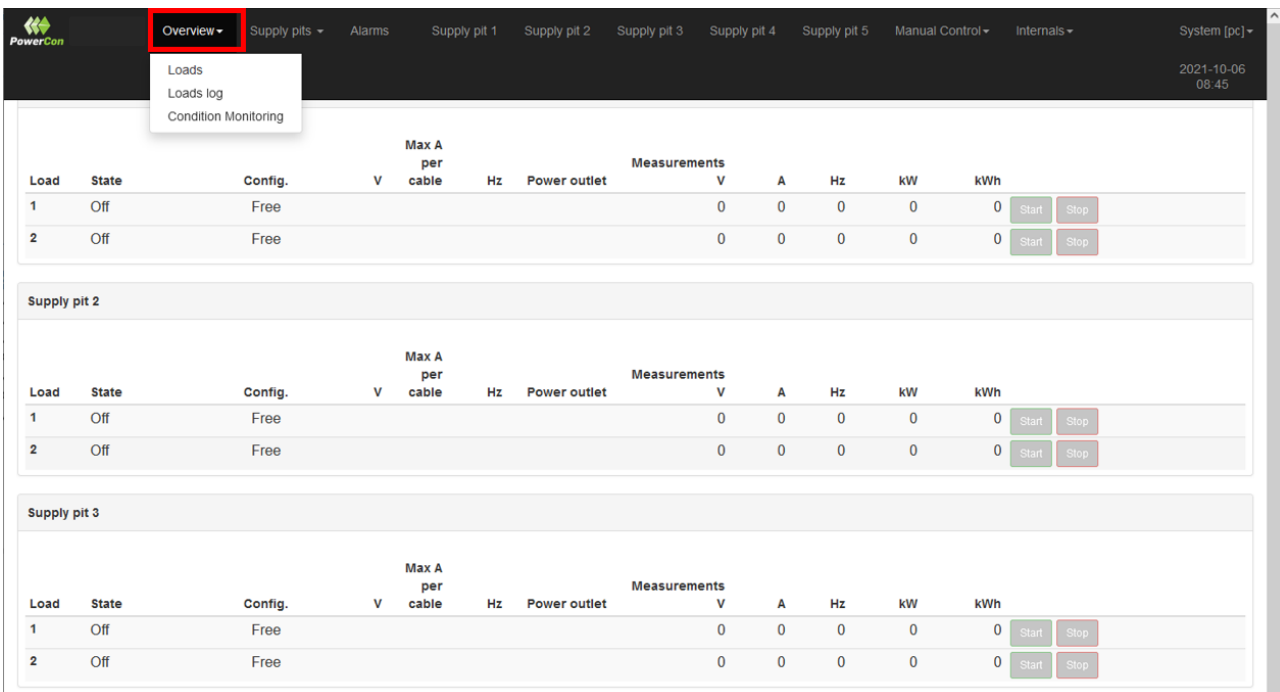
NO/DK: Hvis alarmerne ikke kan nulstilles og det er uklart hvad fejlen er, kontakt da support

3.5 Load logs

3.5.1 Overview

EN: Under the overview tab, select load log. Below is log information about connections on systems.

NO/DK: Under fanen overview vælges load log. Herunder findes log informationer, omkring tilkoblinger på anlæg.



The screenshot shows the 'Loads' menu highlighted in the top navigation bar. Below it, there are three tables representing different supply pits. Each table has the following columns: Load, State, Config., V, Max A per cable, Hz, Power outlet, and Measurements (V, A, Hz, kW, kWh). The data in the tables is as follows:

Load	State	Config.	V	Max A per cable	Hz	Power outlet	Measurements V	A	Hz	kW	kWh
1	Off	Free					0	0	0	0	0
2	Off	Free					0	0	0	0	0

Supply pit 2

Load	State	Config.	V	Max A per cable	Hz	Power outlet	Measurements V	A	Hz	kW	kWh
1	Off	Free					0	0	0	0	0
2	Off	Free					0	0	0	0	0

Supply pit 3

Load	State	Config.	V	Max A per cable	Hz	Power outlet	Measurements V	A	Hz	kW	kWh
1	Off	Free					0	0	0	0	0
2	Off	Free					0	0	0	0	0

Supply pit 4

Load	State	Config.	V	Max A per cable	Hz	Power outlet	Measurements V	A	Hz	kW	kWh
1	Off	Free					0	0	0	0	0
2	Off	Free					0	0	0	0	0

3.5.2 Search in load logs

EN: It is possible to search via 3 different search functions. Calendar, vessel name, or IMO number.

NO/DK: Det er muligt at søge via 3 forskellige søgefunktioner. Kalender, vessel name, eller IMO nummer.

The screenshot shows the 'Search in load log' interface. It features a calendar for October 2021, input fields for 'Vessel name' and 'IMO number', and a 'Get log data' button. Below the search area is a 'Search result' table with columns for Vessel name, IMO number, Start time, End time, and Energy.

Vessel name	IMO number	Start time	End time	Energy
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This screenshot is identical to the previous one, but with red boxes highlighting the calendar and the 'Get log data' button.