INSTALLATION MANUAL

SAILOR®

SAILOR 5080 AC Power Supply

Thrane & Thrane

Contents

Introduction

General description

The 5080 AC Power Supply is designed as a stand alone AC Power Supply, with provision for automatic switch over to backup DC supply/battery.

The AC Power Supply is designed with three fused and fully separated output lines to ensure independent supply for connected equipment.

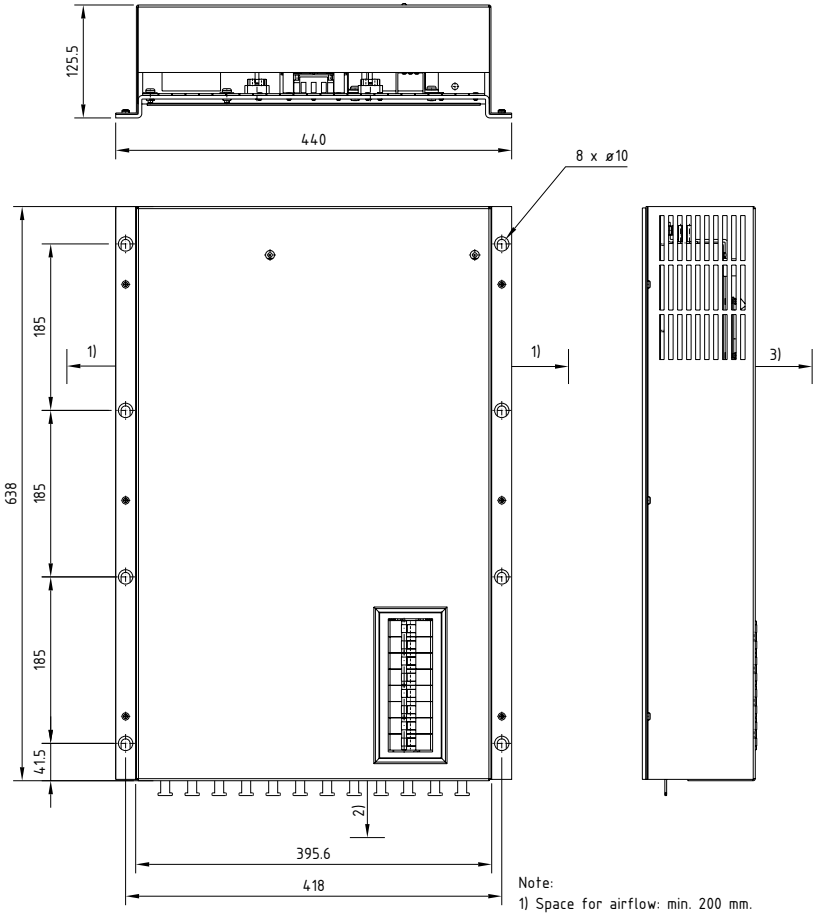
Additionally a galvanically isolated AC alarm output is provided.

Technical data

AC input voltages:	110, 120, 220/230, 240V AC +/- 10%
AC input frequency:	50/60 Hz +/- 6%
DC output voltage:	28V
DC output current:	58 A max.
AC Mains Alarm output:	Make/break relay contacts 0.5 A 32V.
Alarm in case of AC supply failure. Protection:	The AC Power Supply is current limited and protected against polarity reversal, short circuit, overvoltage and overtemperature.
Operating temperature:	- 20° to + 55° C.
Dimensions:	H: 638 mm, D: 126 mm, W: 440 mm.
Weight:	Approx. 15.5 kg.
Compass safe distance:	Standard: 4.0 m. Steering: 2.5 m.

Installation

Outline and dimension



Note:
1) Space for airflow: min. 200 mm.
2) Space for cable and airflow: min. 25 mm.
3) Space for service access: min 1000 mm.

All dimensions are in mm.

Weight: 15.5 kg

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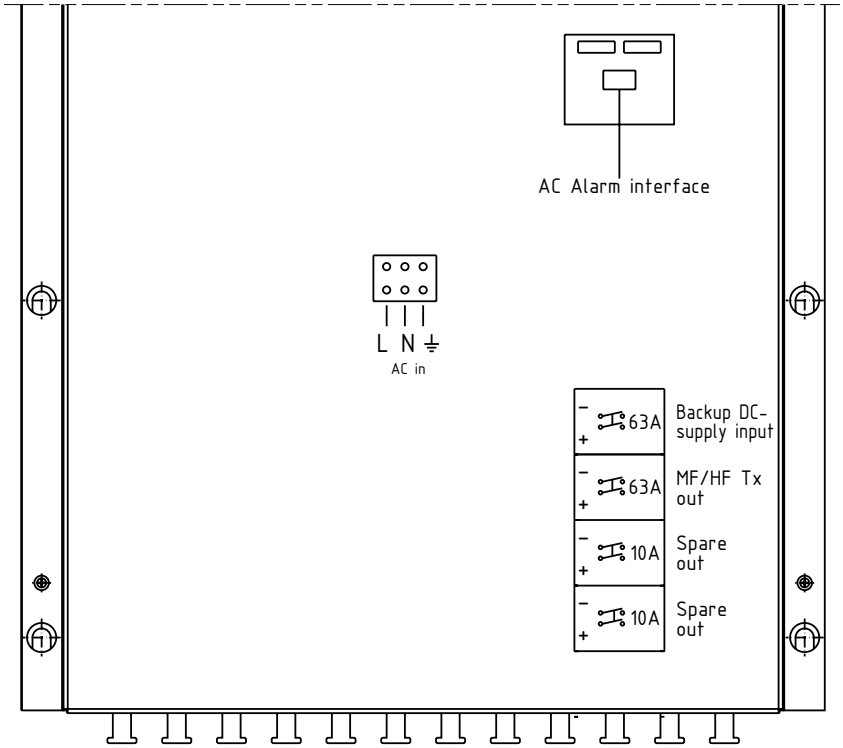
Installation wiring



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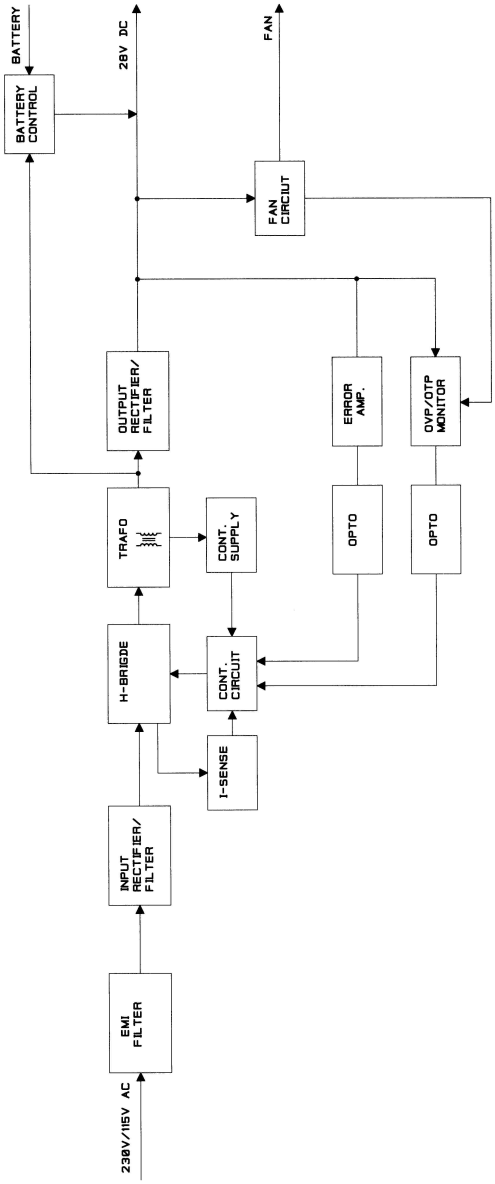
Block diagram switch mode Power Supply Unit



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AC supply voltage setting

Before connecting the AC Power Supply to the AC mains, be sure that the voltage selector switch is set to the correct voltage and that the fuse rating corresponds to the setting used.

The voltage selector switch is located on the AC Power Supply assembly under the front cover. The selected voltage is indicated by an arrow in the outer ring (refer to next page). The equipment is normally dispatched with the selector set to 220V. To select a different voltage insert a screwdriver in the slot and turn the switch to the correct setting.
Note: As two SMPS units are operated in parallel input voltage selection must be done on both units.

Setting	Voltage range
110	99 - 132 V
220	198 - 264 V

Caution: Incorrect setting of the mains voltage selector may damage the AC Power Supply Assemblies

The AC mains fuse holder is an integral part of the AC terminal block which is located to the left under the front cover. The fuse is accessed by pulling out the black handle. The correct rating for each voltage setting is as follows

Setting	Fuse rating
110	10 A Slow
220	6.3 A Slow

Fuses are cartridge type measuring 5 x 20 mm.

The AC supply leads are connected as indicated to the terminal block. Screened power

L	Live
N	Neutral
⏚	Protective earth

supply cable may be used as required by some administrations. The cable is fastened and the screen connected by a cable clamp on the main chassis below the terminal block.

Recommended cable type: 3 x 1.5 mm2

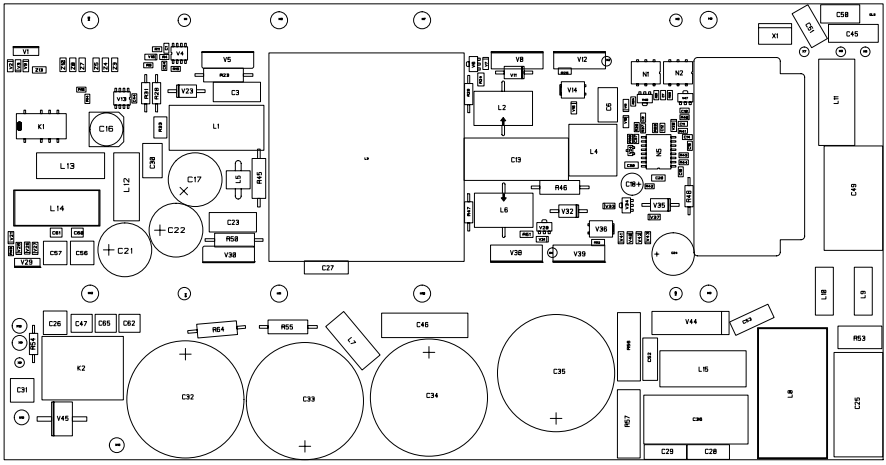
AC Alarm interface

The AC Alarm Interface is located to the right under the front cover. It contains an terminal strip marked ‘AC ALR 0’ and ‘AC ALR 1’. A cable for a alarm device is to be connected as indicated in the table below.

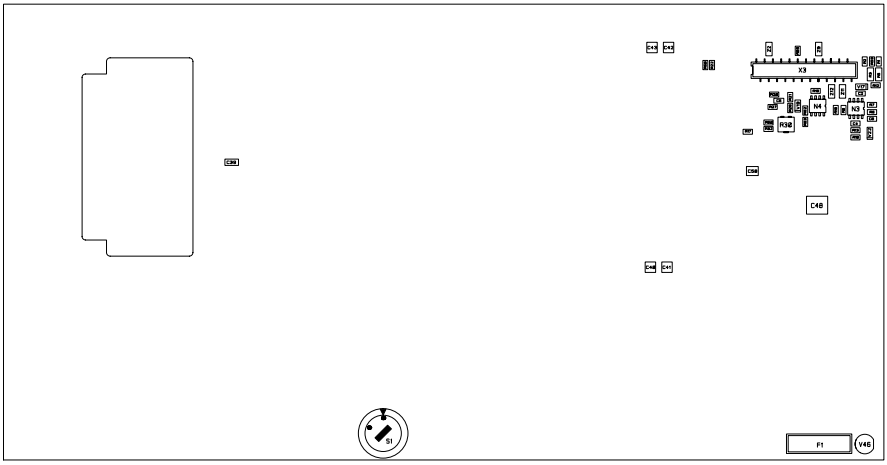
Terminal	Designation	Description
1		Not connected
2	AC ALR 0	Galvanically isolated AC alarm output. Relay contacts, max. 0.5 A 32V. Alarm condition: AC supply missing (terminals 2 and 3 are closed).
3	AC ALR 1	
4		Not connected

Schematic diagram

Power Supply Unit



AC SMPS
TT38-125502-B56



AC SMPS
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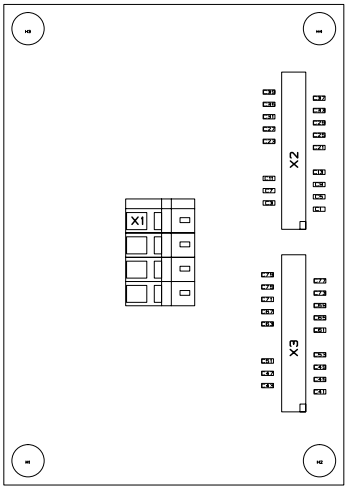
AC Alarm Interface



AC Alarm Interface 5080
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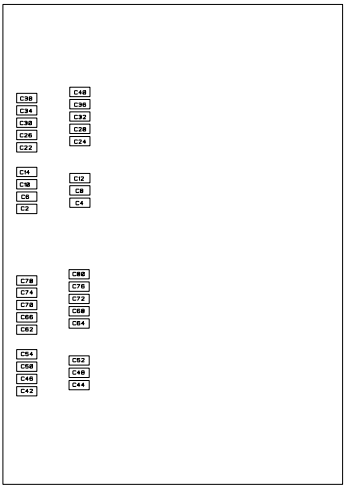

AC Alarm Interface 5080
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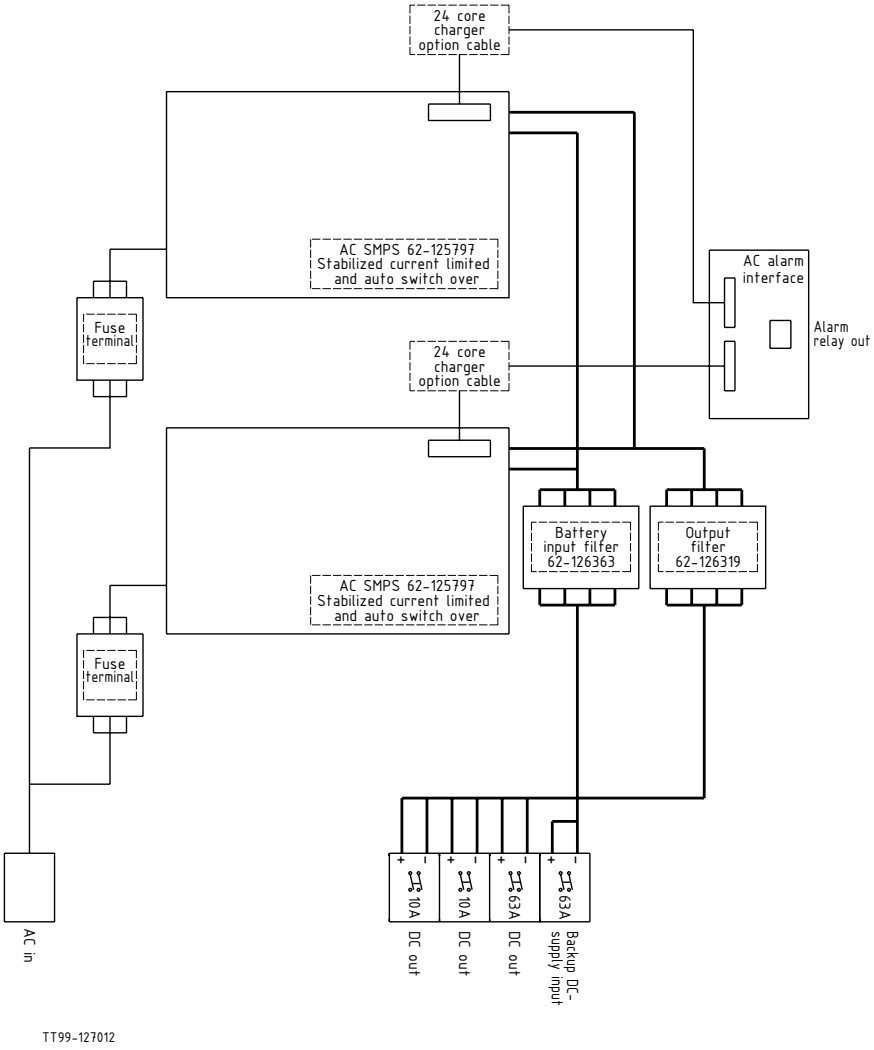
Internal connection



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