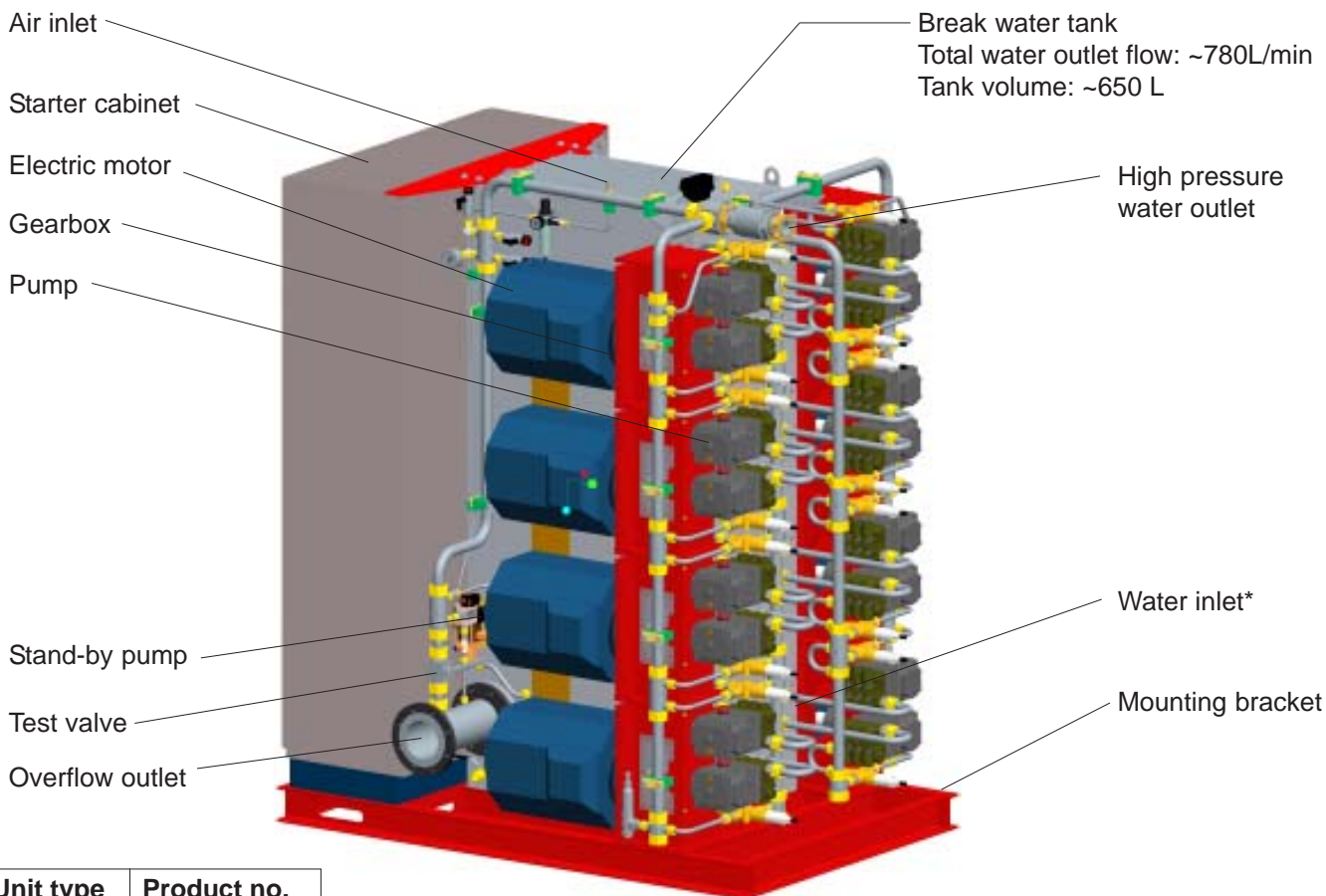




# Sprinkler Pump Units SPU 7+1 and 8

Products E01059.1 and E01058.1

30 Aug 2006



Unit type	Product no.
SPU 7+1	E01059.1
SPU 8	E01058.1

\* Use Marioff feed water filter when required. Consult your Marioff dealer for further details.

### SPU 7+1 and SPU 8 differencies

SPU 8 is designed for Land applications and it will run up to 8 pump modules.

SPU 7+1 is designed for Marine applications and it will run up to 7 pump modules, one module being a redundancy module.

Mechanically both units are identical and the unit functionality is defined by the Control Panel design.

### Description

The SPU 7+1 and 8 models consist of eight pump modules. Each module consists of an electric motor running via gearbox two high pressure pumps to produce the high pressure water flow needed in the sprinkler system in the case of a fire accident.

The pressure produced by pumps can be adjusted from 80 bar to 140 bar respectively, according to the application. The pump modules are started sequentially, thus reducing the electric power peak loads. In stand-by position, the system pressure is maintained at 25 bar by means of the pneumatic stand-by pump.

The pump unit can be started automatically or manually. Automatic start is activated by either the flow signal or the pressure signal. Manual start can be launched either from the external release panel or from the Starter Cabinet, switching on the pump modules one by one. External release and indication panel is normally included in the Marioff supply. The system start signal can also be given by the fire detection system (FDS) via the external panel.

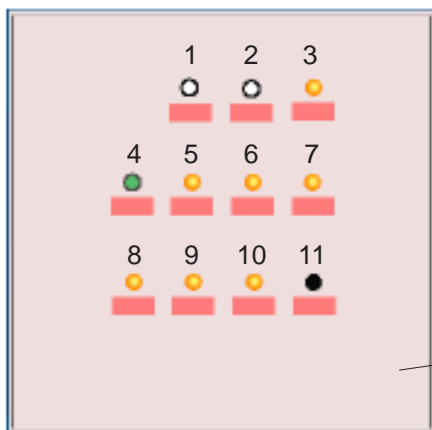
For further information, see related documents: Dimensional Drawing no. DHAUSP000364



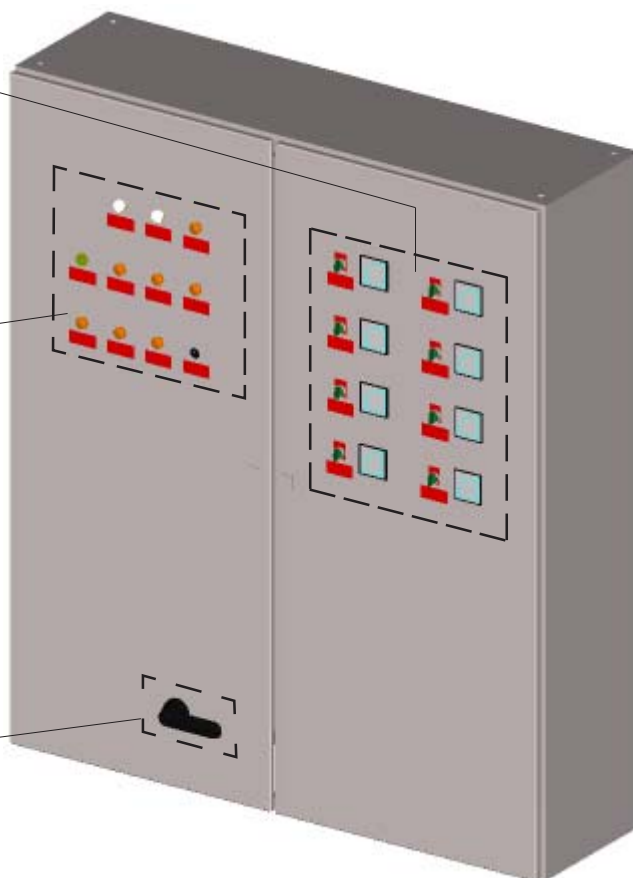
# Sprinkler Pump Unit SPU 7+1 and 8 Starter Cabinet

Starter Cabinet for products E01059.1 and E01058.1

30 Aug 2006



Manual start switch, lamp and motor ampere meter (x 8)



Main power switch

1. Main Switchboard Power supply indication lamp
2. Emergency Switchboard Power supply indication lamp
3. Control voltage fault lamp
4. Control system on lamp
5. Battery charger fault lamp
6. Earth fault lamp
7. Reset push button and lamp
8. Nitrogen pressure low lamp (if applied)
9. Pump unit fault lamp
10. Out of water lamp
11. Lamp test push button

The electric power to the starter cabinet is normally supplied from the Main Switchboard (MSB). In the case of the power failure, the Emergency Switchboard (ESB) is automatically switched on. The enclosure class is IP54.

The following signals will usually be led to the ships automation system: HI-FOG system activated, pump unit fault, out of water in break water tank. In addition, the start request to the external feed water pump is given if the starter of the feed water pump is not in the starter cabinet.

The starter cabinet is equipped with necessary devices to master the optional Water Accumulator Unit control.

When ordering the SPU, the Starter Cabinet must be defined separately (various voltage, frequency and other options available). Other hardware options and possible FDS connections must also be defined when ordering unit. Cable openings are optionally at certain points in the bottom, side or top of the Starter Cabinet - the cable opening location must be defined when ordering.

<b>Options for</b>	<b>SPU 8 140-140/779, SPU 8 140-80/779</b>
Soft starters for each high pressure pump motors to reduce the starting current of the motors. Stand-by heaters for the motors.	

<b>Voltage and Frequency options (to be defined when ordering)</b>	
<b>140-80 bar units, 8 x 15,5 kW, total 124 kW 140-140 bar units, 8 x 27 kW, total 216 kW</b>	
690 VAC 50 Hz	690 VAC 60 Hz
400 VAC 50 Hz	440 VAC 60 Hz
380 VAC 50 Hz	



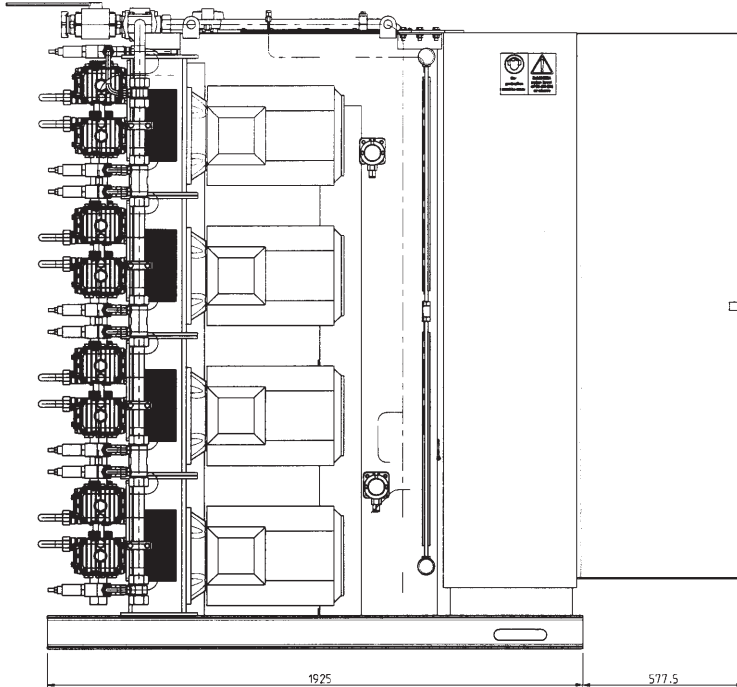
HI-FOG®

# Sprinkler Pump Unit SPU 7+1 and 8

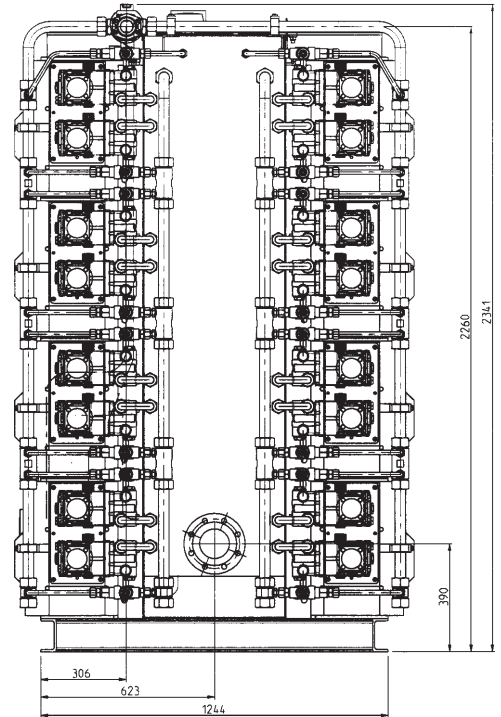
Products E01059.1 and E01058.1

30 Aug 2006

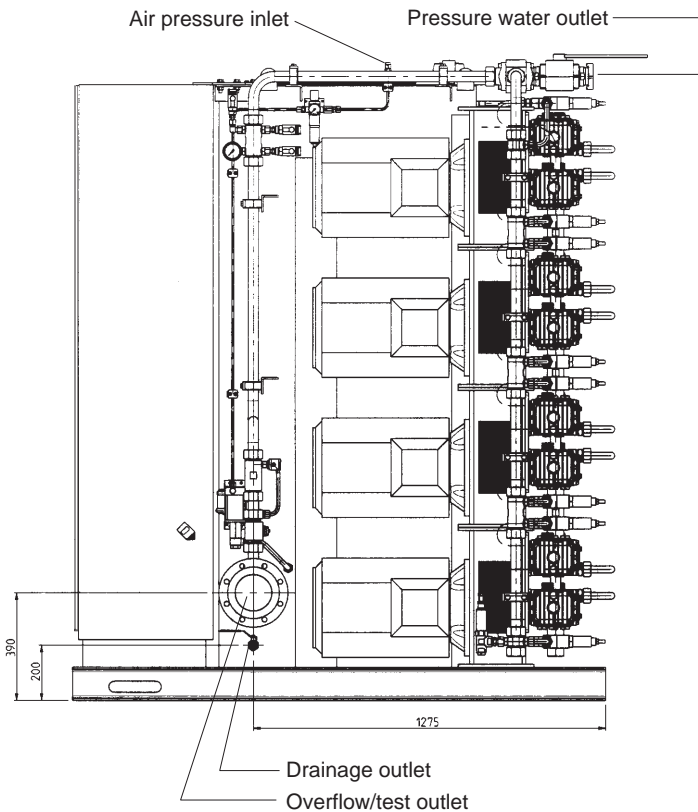
Left side view



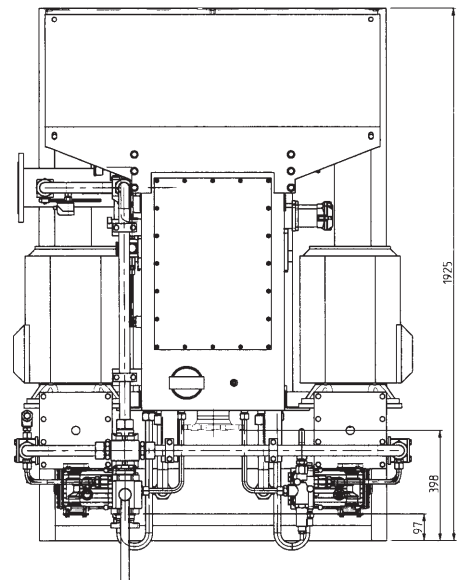
Rear view



Right side view



Top view



Mass (dry): ~3100 kg

**External connections:**

- Fresh water inlet                      DN100 DIN2642
- Pressure air inlet                      R1/4" (1/4" BSP.P) female
- Pressure water outlet                R2" (2" BSP.P) female
- Overflow/test outlet                DN125 DIN2642
- Drainage                                BSP R3/4" female



Marioff Corporation Oy, P.O. Box 86, Virtatie 3, FIN-01301 Vantaa, Finland,  
tel +358 9 870 851, fax +358 9 8708 5399, e-mail info@marioff.fi, www.hi-fog.com