

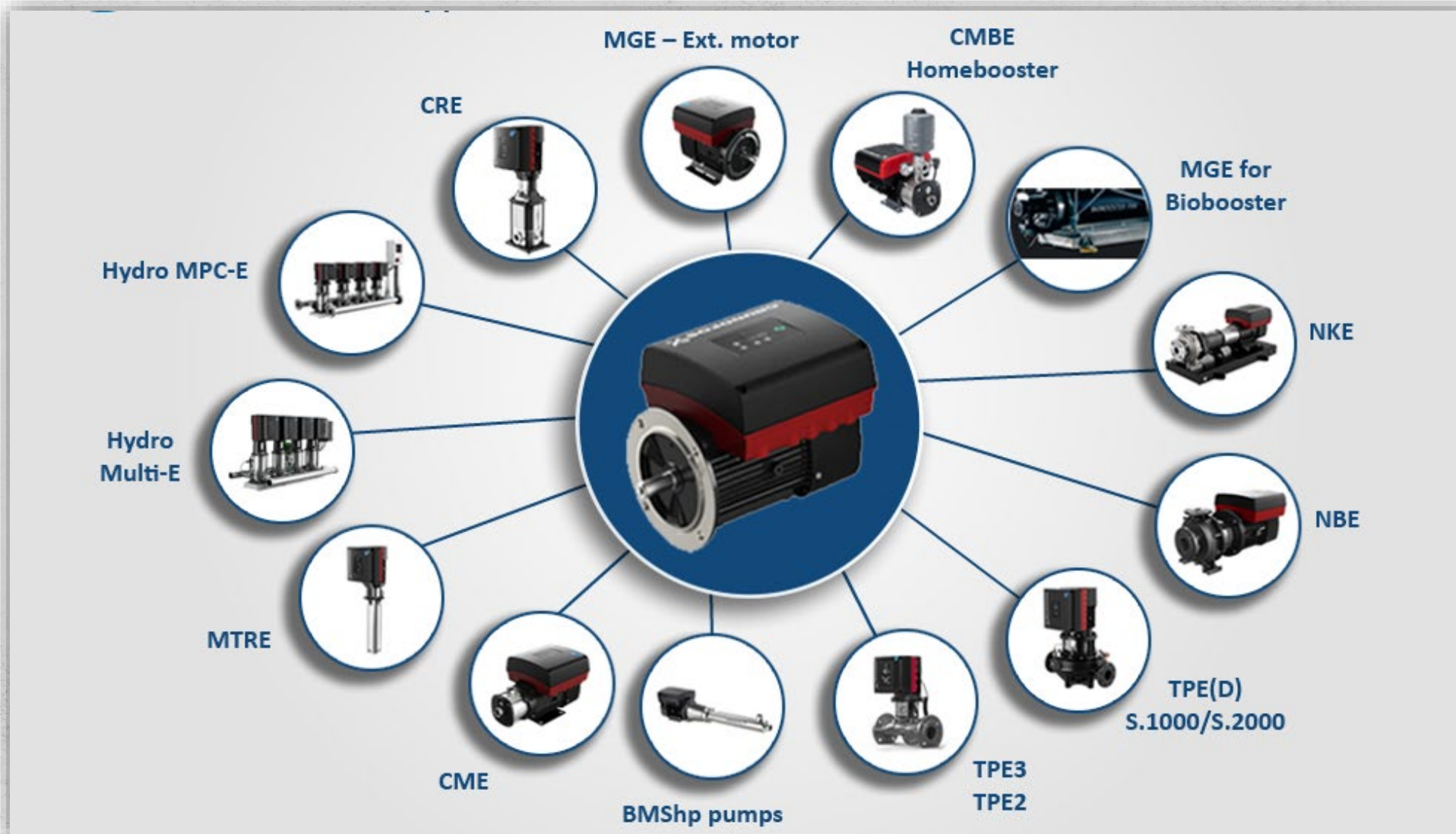
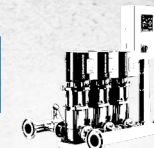
葛蘭富i-Solution產品介紹

26-11-2013

be
think
innovate

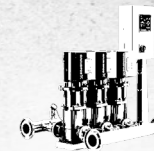
GRUNDFOS 

葛蘭富E-Motor與產品結合



E-pumps with M-Motor 在不增加成本的情況下，帶來 完整的泵浦系統的好處

BUILDING SERVICE
- SYSTEMS



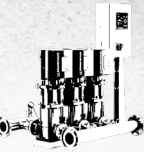
BENEFITS



- ✓ 低安裝成本Lowest installation cost:
- ✓ 無需額外空間No additional space required:
- ✓ 無需屏蔽動力線或輸出側濾波器No shielded motors cables or output filters:
- ✓ 降低二氧化碳排放量Lower CO2 emissions:

E-Motor 產品範圍

BUILDING SERVICE
- SYSTEMS

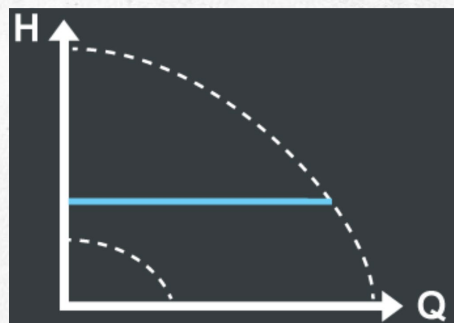


Mains supply	Speed	Power															
		0,25	0,37	0,55	0,75	1,1	1,5	2,2	3	4	5,5	7,5	11	15	18,5	22	
1x200-240V	1450-2000																
	2900-4000																
	4000-5900																
3 x 200-240 V	3400-4000																
3 x 380-500V	1450-2000																
	2900-4000																
	4000-5900																

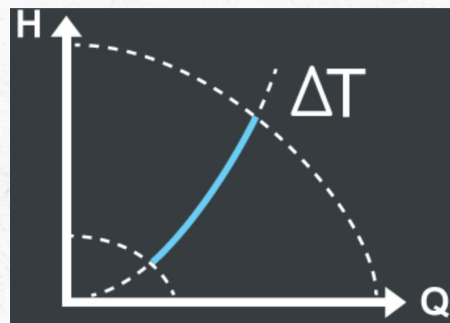
IE5

IE3

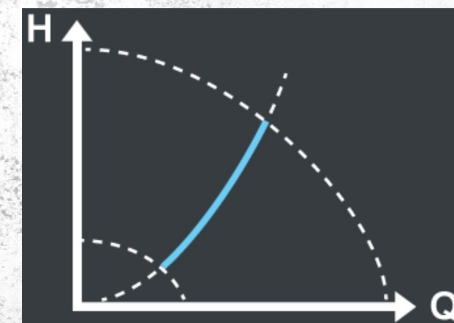
內建8種控制模式



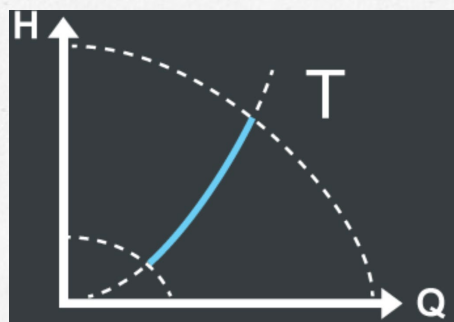
恆定壓力



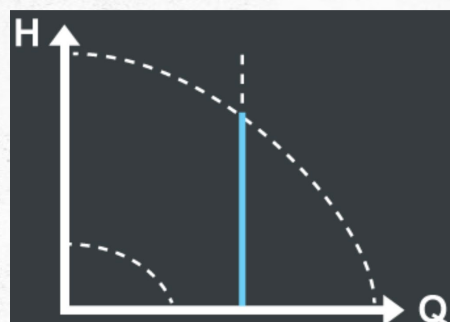
恆定溫差



其他恆定值

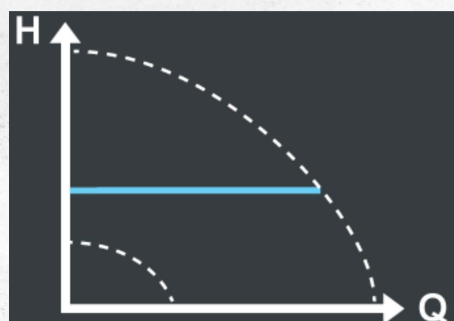


恆定溫度

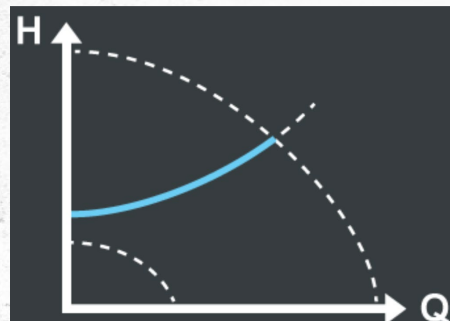


恆定流量

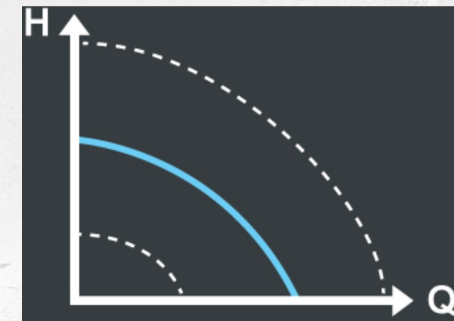
恆定曲線



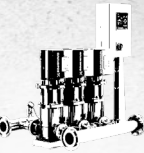
恆定壓差



恆定液位



E-pumps with M-Motor 具有內建狀態監控功能， 可實現長期可靠的運行和正常運行時間



保護泵浦免受故障影響的主要功能:



乾轉保護Dry-running



馬達溫度監視Motor temperature



馬達軸承監視Motor bearings

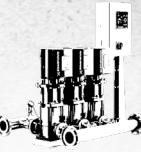


流量估測與工作點監視Flow estimation and Duty point monitoring



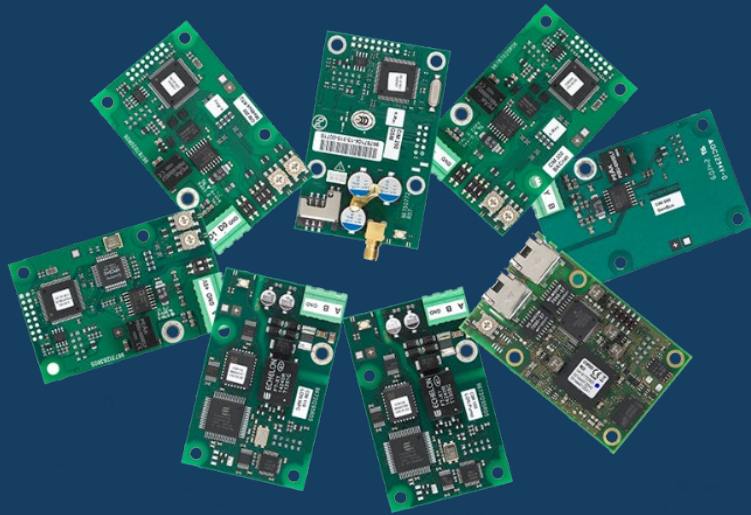
參數狀態Status parameters

BENEFITS



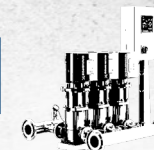
Grundfos Communication Interface Modules (CIM) can be installed in the drive without the need of any additional equipment or external supply.

The CIM modules enables communication to SCADA, PLC and BMS systems.

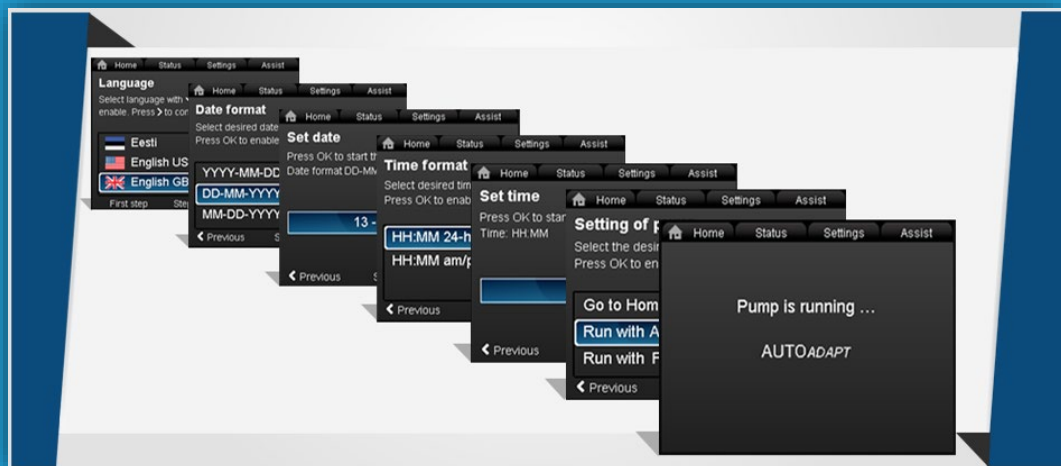


對外部通訊支援的模組

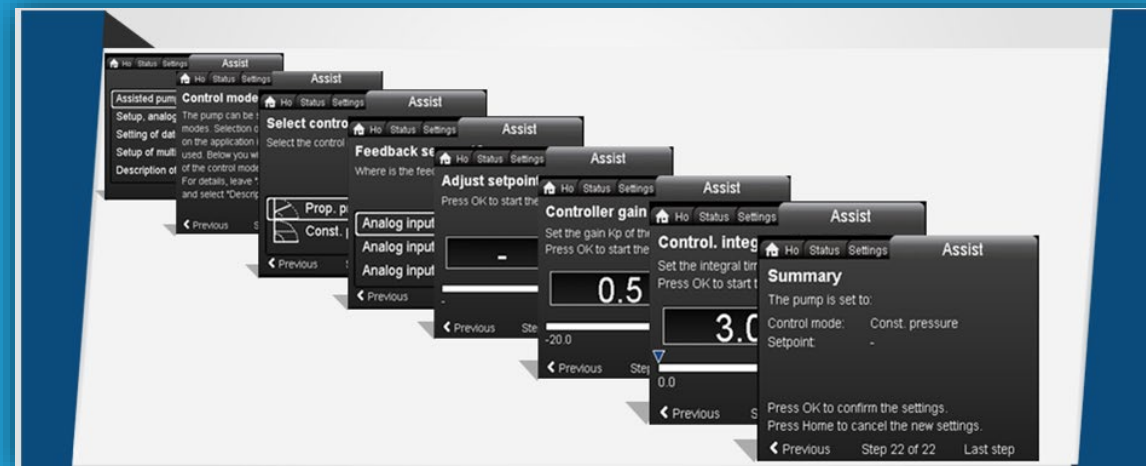
- CIM050 - External GENIbus
- CIM100 - LON
- CIM150 - PROFIBUS DP
- CIM200 - Modbus RTU
- CIM260 - Cellular
- CIM300 - BACnet MS/TP
- CIM280 - Grundfos Remote Man.
- CIM500 - PROFINET IO
- CIM500 - Modbus TCP
- CIM500 - GRM IP
- CIM500 - BACnet IP
- CIM500 - EtherNet/IP



啟動指南



泵浦應用設定指南



Grundfos GO



遠端通訊&控制方法

智慧型手機



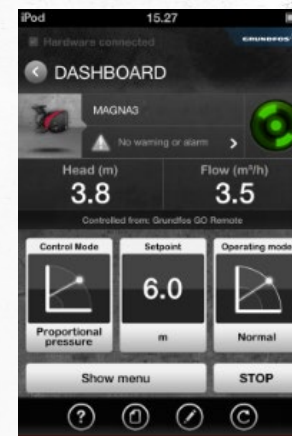
+

遙控接口



+

免費的應用軟體



=

Grundfos GO



Grundfos GO的主要功能

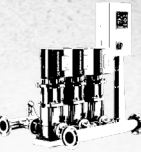
1. Grundfos GO Caps

- 產品訊息
- 替換產品
- 產品目錄
- 產品比較
- 瀏覽PDF文件
- 選型-增壓、供暖與汙水

2. Grundfos GO Remote

- 狀態數據
- 報警與警告
- 產品設置
- 安裝報告

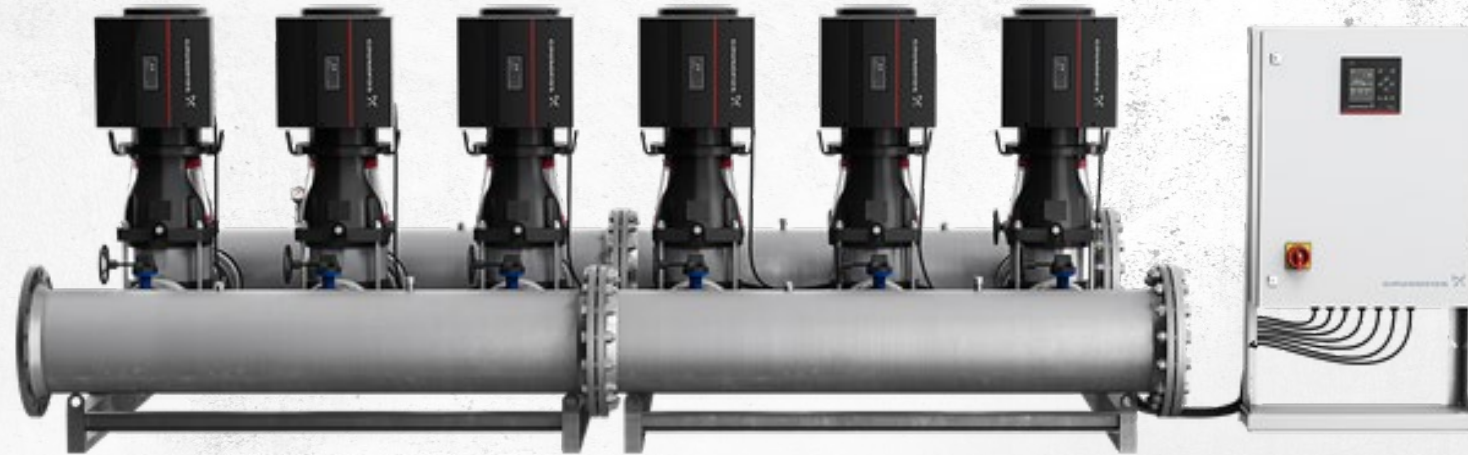
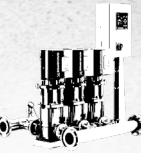




GRUNDFOS BOOSTER SYSTEMS

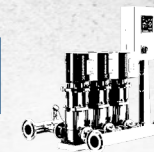
HYDRO MPC

BUILDING SERVICE
- SYSTEMS



- 高效率增壓系統
- 支援先導泵功能
- 最大流量: 1460 m³/h, 最大揚程: 155 m, PN16
- 液體溫度: 0 - 60°C

系統組成元件



CU 352



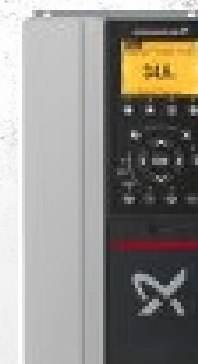
IO 351 B



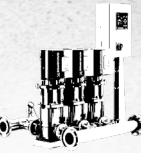
MGE



CUE



系統架構一覽



- 2 X AI
- 9 X DI
- 7 X DO
- 3 X AO



- 3 X AI →
- 3 X DI →
- 2 X DO ←



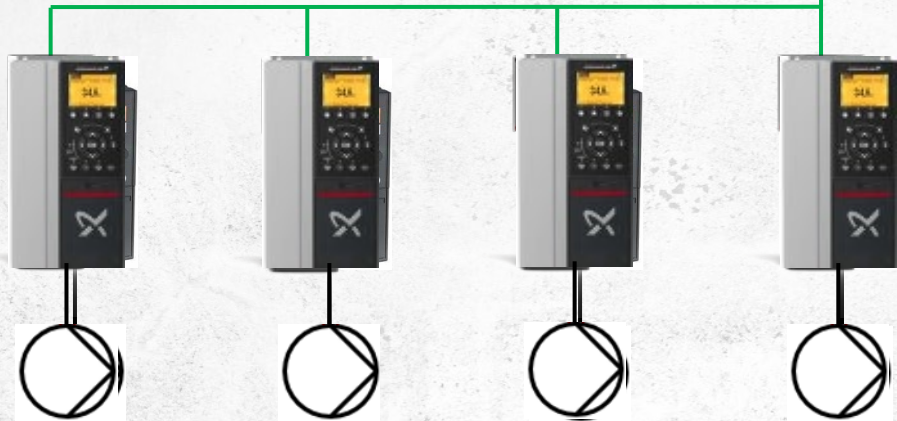
Ext. communication →

- CIM 050 GENIbus
- CIM 110 LON
- CIM 200 Modbus RTU
- CIM 300 BACnet MS/TP
- CIM 500 Modbus TCP
- CIM 500 BACnet IP
- CIM 260 3G/4G cellular
- CIM 280 Cloud/GRM 3G/4G cellular

MPC-EE

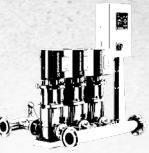


Genibus controlled



CU352

BUILDING SERVICE
- SYSTEMS



The Brain of the system

CU 352

Status Operation Alarm Settings

1-Status

PIU 3.00 bar
SP 3.00 bar

1 89%
2 89%
3 89% 15.5 m³/h

0.50 bar 3.0 bar

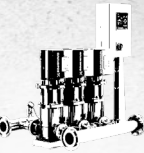
System	Normal	CU 352
Pump 1	Normal	Auto
Pump 2	Normal	Auto
Pump 3	Normal	Auto
Electrical overview		

Demo mode active 2018-06-11 14:01

GRUNDFOS

System run ●
Alarm ●

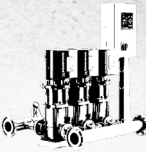
LOG - Function



- 每個記錄值 3600 個樣本 (2 小時)
- 通過以太網連接導出為 csv 文件
- 以圖形方式顯示流量、泵浦速度、入口壓力、出口壓力和功耗。

Ethernet – VNC server

BUILDING SERVICE
- SYSTEMS



GRUNDFOS

Navigation

- » Home
- » Network config
- » Admin config
- » Update firmware

Download

- » Log values

Status **Operation** **Alarm** **Settings**

1-Status

PU 7.95bar
SP 4.00bar

0.00bar 7.9bar 0% 0% 1.3m³/h

System	Stop	Digital input
Pump 1	Stop	Auto
Pilot pump	Stop	Auto
Electrical overview		

05-03-2019 12:54

GRUNDFOS

System run ●
Alarm



