

UPS TECHNICAL DATA

GRIFEN 400VAC UPS

30 / 40 / 55 / 75

BS9251 2021 COMPLIANT



Our UPS systems are designed to remove the complexity of this dark art and enable peace of mind with plug and pump. The powder coated rain cabinet and design provide security and give a sharp look.

The UPS is designed to back up a single Grifen three phase pump in a brown out for category 2, 3 and 4 systems for BS9251 2021 regulations

We not only provide the fusing and isolators, we provide a rain cabinet, palletised system to allow easy site fitting. The whole system is programmed/ prewired/ plug and pump.

Simply chose your Grifen pump, the motor size determines the UPS you need;

400Vac 3.0kW = 400VAC UPS 30 approximately 3 hours and 30 minutes autonomy

400Vac 4.0kW = 400VAC UPS 40 approximately 3 hours autonomy

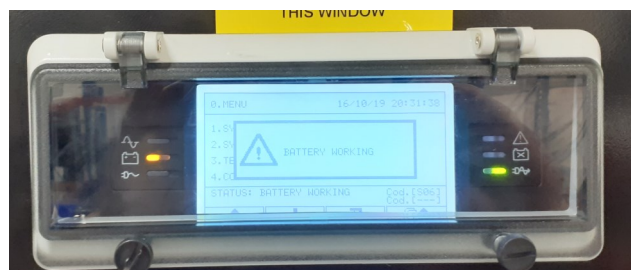
400Vac 5.5kW = 400VAC UPS 55 approximately 1hour and 35 minutes autonomy

400Vac 7.5kW = 400VAC UPS 55 approximately 1hour autonomy

A UPS sat in a sprinklered room with no additional water protection would potentially be of no use in a local activation, and could become a danger itself.

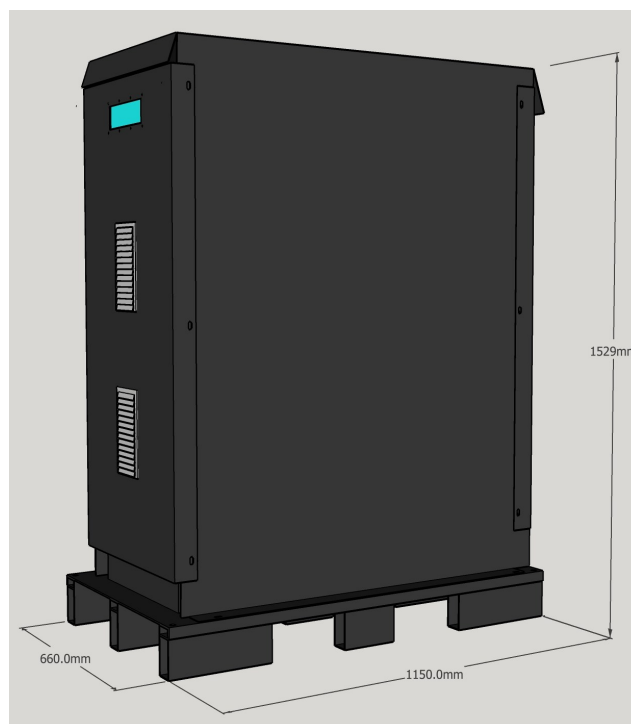
Grifen mitigate this risk. (a UPS on its own is IP20)

An integral IP65 viewing window allows viewing of the LCD screen to determine current status



KEY FEATURES

- Soft started Fire pump
- FP LPCB approved cabling in Flexi conduit for ease of site install
- Software pre-programmed specifically for the fire sprinkler application
- Viewing window to see UPS status and prevent unauthorised access
- Incoming rotary isolator– prewired
- UPS fuse protection –prewired
- Pump rotary isolator—prewired
- Pump fuse protection– simply hook up the pump and you are done
- Alarm contact open on fault for—power to UPS failed/ UPS fault
- 5” above flood risk
- Rain cabinet for protection from active sprinklers
- Palletised base– liftable with a pump truck in all 4 directions
- Cooling louvres front and rear
- Cooling space at front and rear where there is no risk
- Cooling space in the cabinet
- Front access panel to UPS door and UPS internal fusing



sales@grifen.co.uk **www.grifen.co.uk**
Tel 01625 575514

COMMON QUESTIONS;

Q: Can I use 1 UPS to power duty/ back pumps

A: No, in the commercial world BSEN12845 we liken it to jockey, electric, diesel. IE the standby pump has its own autonomous supply and is independent. If you attempt to connect two pumps autonomy time would reduce and you could have one pump in near trip current and one starting– this would trip the UPS and you would have nothing. BS9251 2021 dictates if you use a UPS, it is 1/ pump.

Q: Does the UPS work with FLOWST8N and DUPLIC8

A; Yes, it works with both. The duty cycle is 5 starts/ week (auto test every weekday). The intelligent communication and switch setting mean Pump No1 takes priority and prevents Pump No2 acting as a jockey pump unless pump No1 is off or has already entered fire mode.

Q: Can I use the smaller Grifen 230 22 single phase UPS?

A: If you can design your system to use a 2.2kW motor, then you can use the much smaller and less expensive 230volt system. Do not design your sprinkler system with tiny pipe sizes and then move into 3kW motors, the costs simply transfer from cost effective fire sprinkler pipe to a more expensive UPS.

Q: Does the Grifen UPS work with Grifen Cat 2 and Cat 3 pumps

A: Yes, the motor size is the determining factor. For CAT 2 a motor of 2.2kW can reach 200l/min at 3.7 bars and still use our single phase UPS with 30 minute autonomy. For Cat 3 the maximum flow is 240l/min at 2.6 bars where you can still use our single phase UPS with 30 minute autonomy. After these duty points you require a 3 phase UPS system.

Q: What do we need to do?

A: You design your sprinkler system and chose the pump, we match the pump to the UPS. Grifen are passionate about our work and know what you need to make this work.

Q; What do we have to do?

A: Provide power to the UPS isolator, and alarm connect pump to pump fuse.

Q: We want to supply our own UPS, what do we do?

A: the risks without correct programming, start current calculation, autonomy time calculation and water risk are all enormous. Grifen do this all for you and you simply chose your pump.

Q: Can I monitor the UPS

A: Yes, you must, we provide a volt free open on fault contact which monitors UPS incoming power failed and UPS fault. The Grifen pump itself monitors the pump controller for power failure itself on its own common fault output.

Q: How long are the cables?

A: The power to the UPS is via FP cable from the UPS/isolator fuses provided, it can be located upto about 1meter away depending on height. The power lead to the pump isolator is via prewired FP cable and is 2 metres long, giving some freedom of location.

Q: Why is the UPS so big?

A: The UPS needs to be sized for the inrush current, Grifen soft start all our BS9251 2021 three phase pumps as standard. The UPS sits inside the protective cabinet with cooling space. The frame size of the UPS is the same for our 3, 4, 5.5 and 7.5kW motors

Q: Can I have more autonomy time?

A: Yes, you will need another cabinet, it will double the autonomy time

Q: How long will the UPS stay on in a brown out?

The autonomy time is designed as pump run time with 2 starts. If the pump is not on demand and power drops out the autonomy time will reduce as the cooling fans run. If the brown out occurs in a fire you will get full autonomy

Q: Can I buy a diesel pump instead?

A: Yes you can if you can find one, we've not managed it. Diesel itself carries risks and these pump rooms are located in the buildings themselves, so bunds, exhausts, refilling, testing all needs to be considered.

Q: Can I buy a Grifen UPS for another manufacturers pump

A: No, we only supply the UPS with our pumps as we soft start them and understand the control logic.

Prewired IP65 isolator, IP65 Fuse box, fuses, and alarm contact with labelling. The set up for the pump control is the same (without alarm contact box)





Left;
Integral rain cover
IP65 inspection window
UPS indicator lamps
UPS detailed LCD screen info

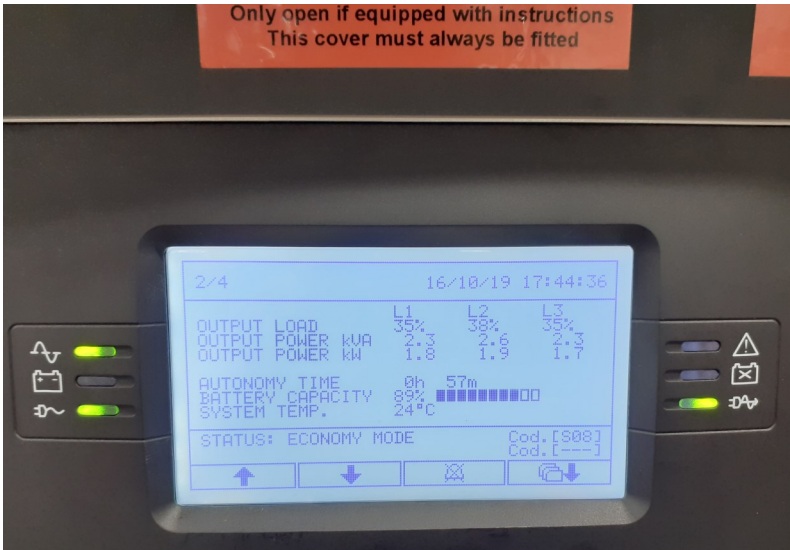


Above;
Rear rain cover
Cooling fan louvres with
250mm internal clearance
keeping your UPS cool and dry



Left;
Complete system;
Gloss Black Powder coated
frame
Palletised base
Front cooling louvres and vents

Below;
The UPS indicates autonomy time, temperature and other Parameters. The IP65 window prevents access to fiddlers. The software is uploaded with dumbed down access, meaning key parameters can not be changed and will remain as Grifen programmed it, specific for sprinkler application.



The UPS is securely bolted with custom guides and bolts, ensuring transportation is secure.
The UPS is independent of the rain cover.
Access to main ups trip devices are behind the UPS lockable cabinet door.
All power connections are done outside of the UPS to the isolator/ fuses that are prewired

UPS TECHNICAL DATA

GRIFEN 400VAC UPS 30 / 40 / 55

Maximum ambient temperature Best life	40°c 15 - 20°c +/-5	Noise	≤52dBA
Environment	Low dust/ dust free		
Relative Humidity	≤96% non condensing	Weights	UPS 400 30 310kg
Input voltage	380-415VAC		UPS 400 40 320kg
Voltage limits	400vac +/- 15% at full load		UPS 400 55 325kg
Nominal frequency	50Hz		UPS 400 75 325kg
Minimum supply cable 4 Core, three phase + N	FP400 6mm		Base Plate 62kg Rain cover 28 kg
Frequency limit	45-60Hz		Total UPS 400 30 400kg Total UPS 400 40 410kg Total UPS 400 55 405kg
Batteries	Sealed lead free		
Recharge time to full capacity	approx. 6 hours		
Protections; overcurrent, short circuit, overvoltage, under voltage, temperature, excessive low battery			
Fuses (motor rated) UPS Pump	3x25 amps 3x25 amps	Dimensions	H 1529mm W 660mm D 1150mm
Fuses	IP65 housing 14x51mm	Load bearing	3 spars left, centre & right with combined contact patch of 2700mm x 50mm
Isolators	IP65 30amps		
UPS alarm contact (incoming power fail or UPS fault)	Volt free Open on fault Max 2 amps		
UPS SELECTION	3kW = UPS400 30 4kW = UPS 400 40 5.5kW= UPS 400 55 7.5kW UPS400-75		

sales@grifen.co.uk www.grifen.co.uk
Tel 01625 575514