Leader in the construction of mechanical overspeed detectors.

+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

Technical sheet
R7 RC1

SERVAT TECHNOLOGIES

Leader in the construction of mechanical overspeed detectors.

+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

Valid for all overspeed detector configurations

R7 (R7 Air 7 Bar and 40 Bar; HY R7; R7 EL)

OVERSPEED DETECTOR: R7 RC1

+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

1- APPLICATIONS:

The rearmament overspeed detector automatically detects dangerous enrotation organ regimes (overspeeds, runaways).

It is a highly reliable security device, used in particular to detect:

Overspeeds of all thermal engines, diesel, generators, overspeedses of rail-wheel drive engines, marine engines,

Overspeedses turbines of all types, pumping groups, compressors...

2- OPERATING PRINCIPLE:

The detector uses a centrifugal mechanism that intervenes when approaching the pre-determined critical regime with an accuracy of the order of + or - 2% at room temperature (possible setting at another temperature on request). Whenthis regime is reached, a previously armed system is suddenly released and activates un electrical or hydraulic device that allows to give information stopping the machine in rotation.

At the same time, a mini-switch placed in a lateral compartment to the device intervenes and doubles the safety by electrical information. The digital module receives signals from a sensor bearing implanted in the overspeed detector.

In normal operation, the screen displays the speed of rotation and the direction of rotation.

In case of overspeed, the detector triggers and activates a second mini-breaker that will freeze the display at the trigger threshold. After activation, the device will have to be rearmed manually to return the entire installation to service. The module automatically resumes the scheduled speed instructions before triggering.

+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

3- MOUNTING:

Prepare the binding cable for feeding 220V - 50 - 60 Hz and plug 3 pins (female socket provided by SERVAT TECHNOLOGIES).

The device is fastened by a 60 diameter and bridle centering comprising 6 holes ofiameter 6.5 on 114 mm drilling diameter. Training is planned either via an AP tree with a specific elastic mating. (Be careful to leave about 1.5 to 2 mm between the 2 half mating), or by a smooth tree on which the customer puts his own mating.

The device can be mounted horizontally or vertically (see to control) and occupy all positions around its axis. (For the R7 HYC3, tell us, the pressure of use).

The digital module is an integral part of the detector. The speaker will only have to position the dial in the position allowing easy control of the rotational speed. To make theevent, the case is mounted on an articulated arm, the module can be activated on 360 degrees.

It is possible to de-join the module and incorporate it into a board or other supports by demounting the module of the articulated arm and making the appropriate connections (to be specified at the control).

Because the connections are operational, the module is started and we wait about 10 seconds for it to set itself up until the zero is displayed.

The detector-module set is then functional.

The detector is set to the required trigger speed in the factory.

On the digital module, no intervention on the menu is required.

No risk of deregulation in operation, the keys are locked in the factory.

+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

4- MAIN CHARACTERISTICS:

Poster case:

Clutter off everything: 130 x 180 mm

Matter: PVC

Mini-switch inverter:(AGE case)

Electrical features:

Calibre nominal / 250V AC = 5 A

Thermal caliber / 250V AC - 17.5 A

Mechanical features:

Mechanical durability: (cycles) - 10^7

Room temperature of use: - 40 degrees; 85 C

Digital indicator:

Food: 80 to 250 V AC ±10%; max.13.5 VA. The power supply is protected by a fuse.

Material: Noryl black, non-flammable

Electrical safety: EN 61010-1, A2

Dielectric feature: 4KVAC after 1 minutes between power and input

Isolated resistance: for the level of pollution II, cat.de measure III,

alimentation > 670 V (BI) ; 300 V (DI)

Temperature of use: - 20 degrees; 60 degrees C and storage: - 20 degrees; '85' C

Waterproofing: IP 20 except front façade IP 65.

Note: In the event of a sector outage, all settings are backed up in the memory.

+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

5-OPTIONS:

It is possible to install an indicator allowing the use of an audible or visual alarm.

Bring this precision as soon as you definition your need.

6- STATE FOR DELIVERY:

New equipment:

The supply includes the overspeed detector, the case equipped with its display, forming a compact set.

This set is developed and set in our workshop. Upon receipt, the user will have to make the connection between the cabinet and the current source 220V Ca. A female 3-pin plug comes with the detector set, allowing the connection to the connector ofthe box.

Existing equipment to evolve:

The detector in your possession can evolve with this additional security device.

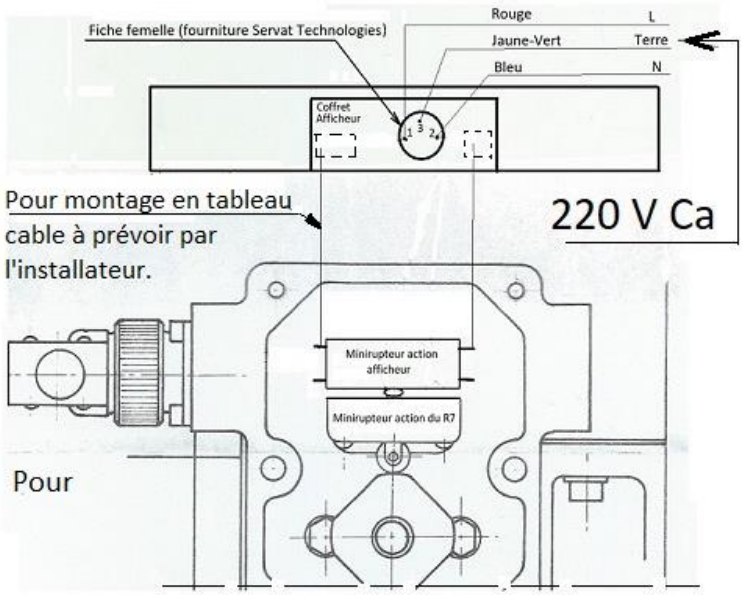
This procedure requires the dismantling of the detector. Machining operations are necessary, especially for the installation of the sensor bearing.

It is a good idea that this development should take place at the time of a general revision (zero-hour potential), and benefit from a one-year guarantee.

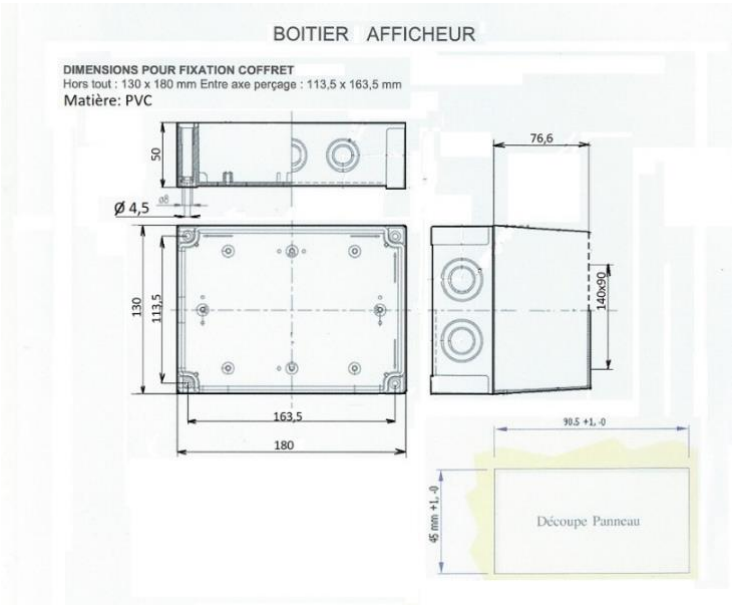
The supply is identical to the new equipment and the user will only have to proceed with the power.

+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

7- CONNECTION:



8-CLUTTER DISPLAY CASE:



+0033.(0) 1 61 10 06 84
contact@servat-technologies.com
https://servat-technologies.com

9-CLUTTERING THE DETECTOR/MODULE SET:

NOTE: The digital module is mobile to adapt to each use. The ribs are indicated as an indication with a module in the right position.