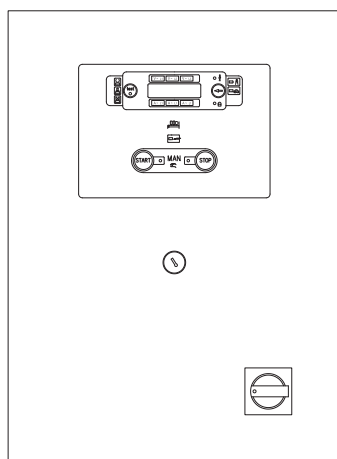


## FFBP RANGE (FFB UNITS MAIN PUMP)



Control panels for fire-fighting units in compliance with EN 12845.

Every control panel is set-up to control an electric pump. The control panels are equipped with a circuit board that can monitor and control the contactors for automatic (start-up with pressure switch opening) and manual start-up of the electric pump. The board has a graphical display in order to read the electric parameters and menu settings. Check the functioning status of the electric pumps via three mains voltmeters, three ammeters, a frequency meter, a watt meter (active power), a varmeter (reactive power), a voltammeter (apparent power) and a power factor meter. It signals the electric pump anomalies with the network sub-frequency, network over-frequency, network sub-voltage, network voltage present, network over-voltage, no start-up, pump over-current, incorrect phase sequence, no phase or network sub-voltage, running pump pressure switch anomaly alarms.

The alarms do not cause the pump to stop, they are indicated by the relative signalling from the cumulative LED, the message on the display and switch-over the contact to allow long distance monitoring. The control panels are set-up to enable the weekly automatic test and, in the case of pressure switch start-up, for the automatic stop after 20 minutes of continuous functioning at maximum pressure (hydrant systems in compliance with UNI10779).

The control panels have a removable terminal box on which it is possible to make all of the electric connections, i.e. where to connect the pressure switches, external floats and the signals to take back to the DFFRP control unit, which is installed in the manned area.

The control panels are set-up for the direct start-up of the pumps up to a power of 7.5 beyond this start-up is performed with delta/triangle. The front of the control panel encloses the indicators for signalling the alarms as envisioned by the EN 12845 Standard and the button for the LED test; inside, find protection fuses for the motor and auxiliary line and the missing phase control, the power contactors and the power supply transformer of the auxiliary circuit.

### FUNCTIONS

- Automatic or manual control of the supply pump
- Alarms signal with possibility of remote replication

### TECHNICAL DATA

- Power supply: 400V  $\pm 10\%$  50/60 Hz
- Temperature limits:  $-10^{\circ}\text{C} \div +40^{\circ}\text{C}$
- Protection rating IP55
- Reference Standards: EN 60204-1; EN 60439-1; EN 61000-6-1; EN 61000-6-2 ;EN 61000-6-3;EN 61000-6-4; EN 60529; EN 12845