



## **FIRE FIGHTING CONTROL PANEL**

### **Standard Features:**

- User selectable working and standby pump quantity.
- Automatic Start & Stop of Jockey pumps for maintaining constant pressure in line.
- Automatic Start of Main Pumps in case of higher pressure drop.
- Automatic Start of Diesel Engine Drive Pump in case of power failures.
- Alarm system in case emergency.
- Auto take-over of standby pump in case of failure of working pump
- Display of pump parameters like ON / OFF Status, Current etc.
- BAS/BMS connectivity via potential free contacts.(If required)



## **Sequence of operation:**

Here, FF pump panel will work all time to maintain constant pressure in line. Since, this whole fire fighting system works as pressurised systems & predetermine fall in pressure will start & stop the pump/pumps.

System works in Automatic mode where Jockey, Main pumps & Booster are connected in system along with Diesel Engine pump. When the pressure in line decrease, pressure switch sense the pressure drop & gives signal to control panel to start the jockey pump. Pump starts & little pressure drop is restore again in system by Jockey pump. Also, once required pressure reaches, Jockey pump is switched off. Hence, whenever there is little pressure drop in system, Panel will start the jockey pump and will stop it automatically once required pressure acquired.

Further, jockey pumps are not capable of restoring higher pressure drops, so at that time Jockey pump will stop & Main pump will start. Also, when main pumps will start at that time Alarm system also goes ON. Main pump will work until it is manually switched OFF. Hence, in fire situations Main pumps starts automatically but it has to be stop manually. Also, FF system also has standby pumps which will start automatically in case of main pump failure.

In case, main pumps are working and suddenly trips due to electric fault or mechanical fault or any other issue, Pressure in system will drop rapidly & when it falls beyond Set limit, Diesel engine driven pump starts. Diesel engine driven pump would be



started by Auto engine starter in FF panel for which power is given by batteries. Also the batteries are continuously Charged by Battery charger in FF control panel. Hence, the batteries will always be charged & ready for emergency.

In FF systems Booster pumps are also incorporated for boosting the flow. Booster pumps are either manually operated or controlled by pressure switches. Booster pumps will increase flow when required in emergency.

Therefore, it is a complete automatic solution for fire situations .Where there will be no need of Human interference for working of pumps, except main pump has to be stopped manually.





## Control panel specification:

- **Incomer** - Main common incomer MCCB/SFU
- **Switchgears** - Contactors are from L&T /Schneider.
- **Drive Isolation** - Individual isolator MCCB/SFU/MCBetc.
- **Panel Mounting** - Floor/ Wall as per panel size
- **Panel Material** - MS CRCA sheet steel
- **Painting** - Epoxy powder coated paint
- **Colour Shade** - Fire RED
- **Protection class** - IP42/IP52/IP54/IP55/IP64/IP65
- **Cable Entry** - Bottom/Top Cable Entry
- **Electrical Protection-** Single phase, Reverse Phase,  
Under/Over Voltage
- **Indication Lamps** - Incoming Supply R, Y, B Drive Run,  
Drive Trip
- **Alarm** - In case of emergency Visual/Hooter  
Alarm goes ON.
- **Selector switches** - Auto/ Manual mode, Local/Remote



- **DG Panel** - Incorporated with Auto Diesel Engine Starter +Battery Charger
- **Busbars** - Aluminium/Copper Busbars.

