

	Phase failure relay	
Pumping System Control	Hydrostatic level meter	Pump operation, Dry run protection, Flooding protection, Stand-by pump operation
	Level switch	As back-up for Hydro static
	Pressure sensor with transmitter	Monitoring
	Flow meter with transmitter	
	Conductivity meter	
Wetwell	Level/Float switch meter	Volume control, Pump control,
	Pressure sensor	Pressure control, Volume control

1.3.25 Alarms

Only one type of alarm system shall be used in the stations. It shall be operated from 24 Volt D.C. The alarm panel shall be fully equipped with all relays, alarm lights, reset facilities, push buttons etc. and an annunciator with timer and audible alarm connected to the PLC / RTU . Resetting a push button shall interrupt the alarm. The timer shall have an adjustable range of 0 to 20 minutes plus continuous alarm override switch to enable automatic cancelling the audible alarm after a predetermined interval. The alarm system shall be provided with disconnect switches to prevent activation of the system whilst a unit is being serviced.

1.3.26 Infra – Red Thermograph

The MCC after installation at site shall be subjected to temperature rise test in accordance with IEC 60439-1 :1999 Sub Clause 8.2.1 and temperature rise values recorded at different points of MCC shall not exceed the limit set for temperature rise in table 2 of IEC 60439-1. the temperature shall be recorded at horizontal , vertical busbars, connection points between vertical as well as horizontal busbars and connection points for MCCB and cables. The temperature recording shall be done with thermal imaging camera, thermocouple and monitoring reporter soft ware.