

HEATER SYSTEM BURNOUT DETECTOR

ICD offers heater system monitoring and burnout detection. This product is designed to monitor status of the heater system with 3 phase star or delta connected loads. This instrument measure and monitors voltage, current, power and energy through external CT's and voltage detection; it can operate with 3 CT's or 2 CT's with true RMS measurement, CT ratio is settable in the meter itself. Under current setting will be given to study heater status and it will announce the heater burnout detection. This unit also shows the thyristor short circuit failure or open circuit failure.

This instrument displays voltage, current, power and energy by digital measurement and finds the heater burnout status and provide alarm through an external relay output.

Main Functions

Heater burnout alarm
Heater layer short circuit alarm on crossing limit
Power device short circuit detect
Power device open circuit detect
Display of all electrical quantities
Heater useful run hour



- Ensure best quality product
- Avoid scrap and raw material wastage
- Automatic human intervention
- Monitoring unbalance heating
- Monitoring a group of heater together in an enclosure
- Contribute preventive maintenance



Technical Specification		
Туре	Heater burn out detector for 3 Phase individual loads	
Voltage input	220/ 415V AC, 3 phase 50Hz	
Current input	5amps	
Display parameters	Voltage at each phase, Total power, PF, Current, Energy	
Run hour	Available	

Applicable Control Method			
ON/OFF control	Temperature control with relay output		
SCR control	Temperature control with voltage output		
Cyclic control and Phase control	Temperature control with Current input		
Measurement Method			
ON/OFF control	Potential free NO contact		
SCR control	Voltage and current monitor continuous		
Cyclic & phase Angle control	4-20mA DC for 100% output		
Heater burnout detection	This works on above 1.5% load		
Output	One SPDT relay or transistor output 12V DC		
Display	2x16 character alphanumeric LCD display		
Status indications	Run healthy(Green), Alarm(orange)		
Main functions	Heater burnout alarm, Heater layer short circuit alarm on crossing limit, Power device short circuit detect, Power device open circuit detect, Display of all electrical quantities, Heater useful run hour		
Auxiliary supply	230V AC +/- 10%		
Enclosure	96 x 96 x 80 mm (LxBxH)		
Mounting type	Panel mounting		
Instrument cutout	90 x 90 mm		

Applications

- Multi zone heating system
- Heater plates/ mould consists of various section on top and bottom
- Heat treatment furnace monitoring several heating elements individually stresses relieving furnaces.
- Extruders, pressure injection moulding machine



