

## **Cooler Monitor**

**Instrument Specification** 

# PFM Watchdog

# Power Transformer Cooler Pump & Fan Monitoring unit.



- Monitors pumps & fans during normal operation and in exercise mode.
- Indicates individual pump and fan failure.
- Can be configured to monitor individual supply phases.
- 18 monitored inputs in 3 configurations for fan only, single stage or dual stage cooling systems. (see ordering requirements)
  - 18 Fan inputs
  - 2 Pump & 16 Fan inputs
- Can be used alongside both Mechanical & Electronic WTIs.
- Universal input power supply.
- Power loss alarm output for power failure.
- LED indication of channel status & alarm output and unit ON/OFF.
- Surface mount case.
- Optional programmable cooler exercising unit available .
- Can be retrofitted to existing installations.
- On site fitting service available
- 5 year warranty available when supplied & installed by Accurate Controls.



Issued: Jan 2016

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### PFM – Watchdog Technical Specification

#### **Configuration:**

Inputs: 1– 18 current sensing inputs from monitoring

transducers of Pumps, Fans and/or Supply

phases.

2 control inputs for operation in single or dual cooling

modes.

Pumps & Fans: Pumps Ch 17 & 18 Fans Ch 1 to 16

Fans only: Ch 1 to 18

Inhibits: Inhibit switches to disable channels not being

used, with LED indication.

Outputs: A voltage free alarm contact for any input failure

or power loss alarm with LED indication.

LED indication of status of each channel

#### LED Configuration:

Channel LED Colours:

Green = OK

Red = Frror / Fault

Blue = Inhibited / unused Channel

Pink = False Inhibit

Master LED Colours:

Green = OK

Red = Alarm Output

(Refer to Instruction Manual for more information ).

Function: Electric current status motoring

Alarm: Volt Free single pole relay

Rated: 250Vac, 6A,

30/110/220Vdc 3A/0.35A/0.2A

#### **Typical Applications:**

Pump & Fan Cooler monitoring

Fan only monitoring

#### Case:

Mounting: Surface mounted

Dimensions: 220mm x 120mm x 90mm

IP rating: IP55

Case Entry: 3 x M25 Stuffing glands

#### Power:

Supply Voltage: 85 – 264 VAC (47 – 63Hz)

110-370 VDC

Power supply should be protected with external

fuse & link.

#### **Electrical Connections:**

2.5mm<sup>2</sup> terminal block in easily accessed compartment.

#### Temperature range:

Operating: -25°C to +50°C Storage: -40°C to +85°C

#### **EMC** compliance:

Instrument complies with applicable EMC directives for radiated emissions and susceptibility, conducted emissions, electrical fast transients and electrostatic discharge.

#### **Additional Items:**

Transducers: Miniature CT 's fitted as standard with 5 metres of cable. (longer lengths available to order)

#### Options:

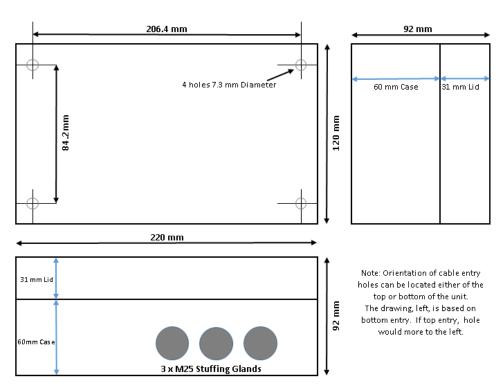
Programmable Exerciser for regular pre-set exercising of pumps & fans, internally installed (See PFE –1 datasheet )

#### Warranty:

- 1) 12 months return to factory, for supply only.
- 2) 5 years return to factory for instruments supplied and fitted by Accurate Controls Ltd

### Ordering:

See page 3 for Part No / Order codes



Full on site installation, calibration and maintenance service available.

Please contact Accurate Controls for technical assistance.

## **INSTRUMENT SPECIFICATION SHEET**

**Quotation Request** 

# PFM - Watchdog

Part No:		Quantity Required:	:	
Delivery Required:				
Part No.	Configurations without Timer Module		No. of Pumps	No. of Fans
PFM-1-Watchdog	Single Stage cooler	Fans only (max 18) or 2 Pumps & up to 16 Fans		
PFM-2-Watchdog	Dual Stage cooler			
	Configurations	with PFE-1 Timer Module		
PFM-1T-Watchdog	Single Stage cooler with PFE-1 Exerciser Timer	Fans only (max 18) or 2 Pumps & up to 16 Fans		
PFM-2T-Watchdog	Dual Stage cooler with PFE-1 Exerciser timer			
			-	
No. of CT's required			Cable Length	Qty
with standard cable			5.0 metres	
with custom length	cable (please specify ler	ngth required)		
Pre- Programmed (PFE-1 will be programmed prior to delivery)			YES / NO	
Day of Week			1207110	
Hour of Day				
Duration of Exercis	se			
An example progra	am would be : MONDAY	11.00am 20 mins		
INSTALLATION E	BY ACCURATE CONTRO	LS LTD with a 5 year warranty		
Supply & Installation Quotation			YES / NO	