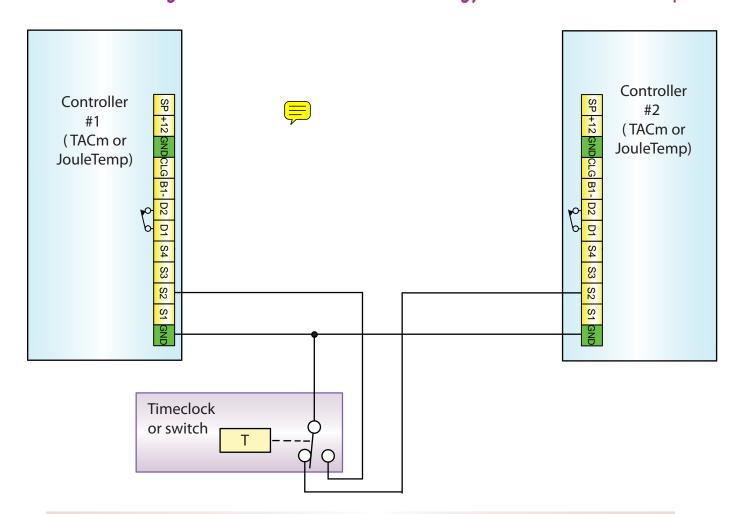
Lead-Lag 100% redundant Control Strategy of TACm or JouleTemp

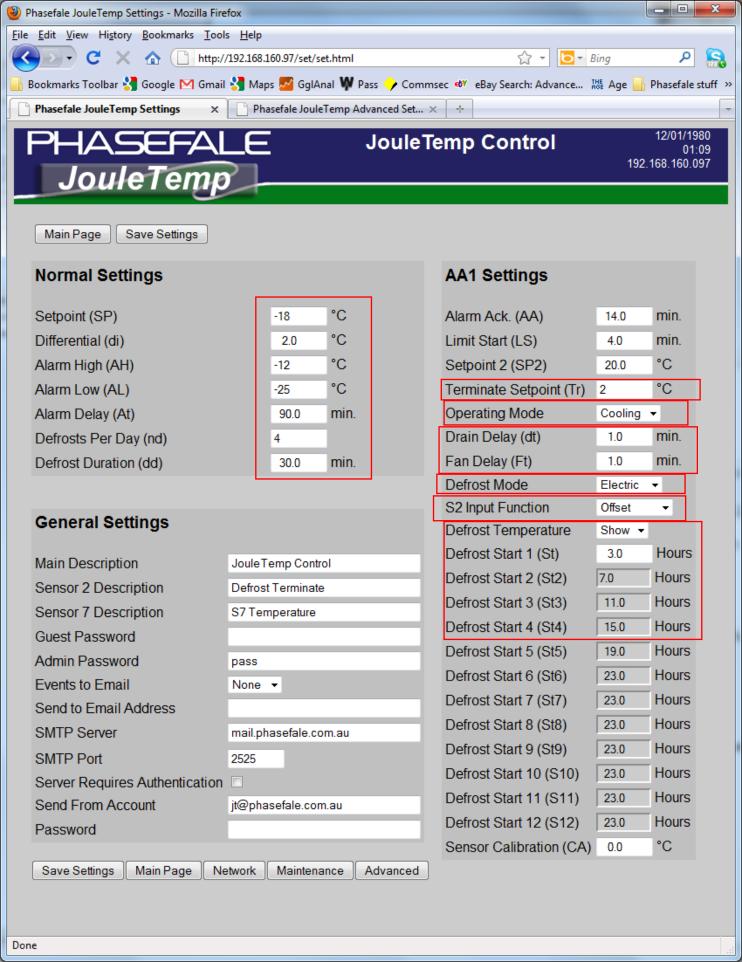


Operation for Cooling:

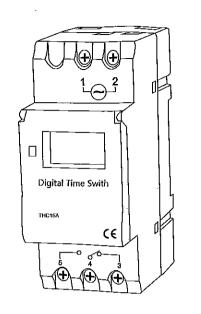
- 1. At any time both controllers may bring on cooling to maintain conditions.
- 2. At all times one of the controllers will be "lead" controller and operate to the setpoint minus offset (programmed as rA for Jouletemp or tr for TACm)
- 3. At all times the alternate controller will be "lag" controller and operate to the setpoint.
- 4. In above example, controller 2 is offset (S2 input shorted) and will be lead unit.
- 5. For optimum control, program defrost times of controller 1 and 2 at different time so alernate control can operate to maintain conditions.
- 6. The time clock (or manual switch) needs a volt free changeover contacts wired as above.
- 7. The time clock should be programmed to changeover 50% of the time to allow both refrigeration systems equal ruinning time. (a 7 day programmable unit is recommended) 8. All other wiiring omitted for clarity.
- © Phasefale 2010

Programming Notes: TACm
In AA advanced programming, set tr/rA option to rA, set tr value at twice required offset (eg tr=10°, offset will be 5°C. Lead controller will be at tr lower than common setpoint.

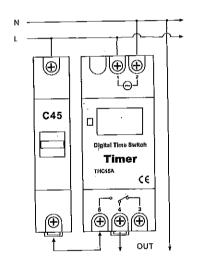
Programming Notes: JouleTemp
On programming page, set S2 function to Offset.
Offset value = Terminate Setpoint. Lead
controller will be at offset value lower than
common setpoint. e.g. Terminate value = 10°,
offset will be 10°C.



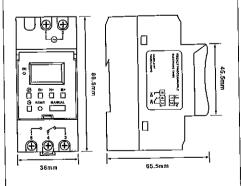
THC15A WEEKLY PROGRAMMABLE TIMER



■ CONNECTION DIAGRAM



■ DIMENSIONS



DIN Rail Installation

Advanced pre-setting one week before Digital electronic time switch with daily programs Repeatprograms with 16 on/offsetting; and manualover-ride Lithium battery power reserve

Auto time error correction ±60sec, weekly

■ TECHNICAL DATA

Voltage rating: AC 220V 50/60Hz 12V, 24V, 36V, 48V, 110V: Voltage limit: AC 180V~250V Hysteresis: ≤2 sec/day (25°C) ON/OFF operation:17 ON & 170FF Power consumption: 7.5VA(max) Display: LCD Service life: Mechancally 107

Electrically 105 Minimum interval:1 minute

Weight: approx 150g

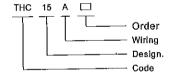
■ DISPLAY

Count down:1 sec-99 min 56 sec Pulse:1 sec-59 min 59 sec Load capacity: resistive loād:16A/250V AC Lagging load:10A/250Vac lamp load:2000W

Switching contact: 1 changeover switch Power reserve:3 years (Lithium battery) Ambient temperature: -10~+40°C Ambient humidity: 35~85%RH



■ MEANING.



Operating Instruction:

- 1. To start switch: press reset Key, At the first time, If you want to the present time, please press "On board, then press D+, H+,M+ to adjust the number to the present time.
- 2. Enter into programming as belows:

Key	Programming
Press P	Seting 1 ON time(display 1on)
Press H+/M+	Seting hours and minutes
Press D+	To select same every day,or different time each day
Press P	Setting 1 off time (display 1 off)
Press H+/M+	Setting hours and minutes turn off time
Press D+	If you want the same every day, you need not press this key
Repeat step2-6	Set 217 on/off time
Press (9	End
	Press P Press D+ Press P Press H+/M+ Press P Press H+/M+ Press D+ Repeat step2-6

If you lo not require 17 settings, press " (1)" to the end.

Time setting should according to he time sequence, couldn't be set crossly System with quit automatically if here's no operating within 10 seconds and no data is saved.

Function 3,4,5 can not be used simultaneously.

والمتدانث بسياري والأراد