

**AIRCOSAVER TEST ON AIR CONDITIONER**

**Date:** 27<sup>th</sup> January 2011 - 28<sup>th</sup> January 2011 **Test No.:** 1  
**Client:** LARSEN & TOUBRO LIMITED (L&T)  
**Address:** Gate No. 1, Powai Works (W), Saki Vihar Road, Mumbai - 400 072.  
**Contact:** Mr. Rajan U. Kharangate **Desig:** Manager  
**Tel:** 6705 3045 **Mob:** 98199 48271

**Make:** Carrier **Sr. No.:** 1000067 **Cap:** 1 Ton

**Type:** Window / Split / Tower / Cassette / Ductable / Package **Compressor:** Reciprocating / Rotary / Scroll

Without Aircosaver					
	Date	Time in Hrs	Units	Run Hrs.	Temp
Stop	27.01.11	16:30	2.48	7:00	22'
Start	27.01.11	09:30	0.00	0.0	22'
<b>Total</b>			2.48	7:00	

With Aircosaver					
	Date	Time in Hrs	Units	Run Hrs.	Temp
Stop	28.01.11	16:30	2.00	7:00	22'
Start	28.01.11	09:30	0.00	0.0	22'
<b>Total</b>			2.00	7:00	

Units Consumed without Aircosaver per hr.: 0.354

Units Consumed with Aircosaver per hr.: 0.285

$$\text{Savings in \%} = \frac{\text{Units Saved} \times 100}{\text{Consumption without Aircosaver}} = \frac{0.48 \times 100}{2.48} = 19.35 \%$$

**Payback Calculation:**

Price of Power - Rs. \_\_\_\_\_ / KWh

Run time of air conditioner: \_\_\_\_\_ Hrs./Day

Payback Period =  $\frac{\text{Cost of Aircosaver}}{\text{Rs. saved per day}}$  = \_\_\_\_\_ Days

For Ecopower Pvt. Ltd.

**PEL - Dept.**  
 Sign.: \_\_\_\_\_  
 Date: \_\_\_\_\_  
**Larsen & Toubro Ltd.**

Client's Signature

Mr. Shyam M. Patel.

# AIR CONDITIONER POWER SAVING TEST AT L&T ON JAN 27, 2011 WITHOUT AIRCO SAVER

## Temprecord for Windows v5.14

### Summary

```

Data Source       : file C:\DOCEME-1\ivrs\Desktop\PH1000-1.LTR
Logger Type      : multi-trip
Serial Number    : M0053801

Logger Status    : logging
Logging         : Temperature only

Sample Period    : 00:05:00 (10.0 / hour)
Date Printed     : Saturday, January 29, 2011 11:17:34 AM
Samples in Logger : 82

First Sample     : Thursday, January 27, 2011 9:46:55 AM
Last Sample      : Thursday, January 27, 2011 4:31:55 PM

Start with Button : ON           Allow Markers : OFF
Stop with Button  : OFF          Loop Overwrite : OFF
Start with Switcher : OFF        Safe Range Entry : OK (not yet entered)
Stop with Switcher : OFF          Limit Delay : 255

Upper Limit      : 25.00°C (not exceeded)
Lower Limit      : 20.00°C (not exceeded)

Total Samples    : 205,188      Logger Version : 2.13
Total Uses       : 204          Memory : 8k
Sensor           : standard
    
```

```

User Data 1 : pel CONF ROOM
User Data 2 :
User Data 3 :
User Data 4 :
User Data 5 :
User Data 6 :
    
```

```

Field 1 :
Field 2 :
Field 3 :
Field 4 :
Field 5 :
Field 6 :
Field 7 :
Field 8 :
Field 9 :
Field 10 :
    
```

```

First Sample was at : Thursday, January 27, 2011 9:46:55 AM
Last Sample was at  : Thursday, January 27, 2011 4:31:55 PM
Total Duration       : 6:50:00 (92 samples)
    
```

### Statistics for All Temperature Samples

```

Mean           : 22.09°C
Maximum        : 25.23°C (Thursday, January 27, 2011 9:46:55 AM)
Minimum        : 21.50°C (Thursday, January 27, 2011 3:51:55 PM)
    
```

#### Upper Limit (25.00°C)

```

Time Above     : 0:05:00
Samples Above  : 1
Percentage Above : 1.2
    
```

#### Lower Limit (20.00°C)

```

Time Below     : 0:00:00
Samples Below  : 0
Percentage Below : 0.0
    
```

#### Either Limit (above 25.00°C or below 20.00°C)

```

Time Outside   : 0:05:00
Samples Outside : 1
Percentage Outside : 1.2
    
```

### Values in Window

(Samples 1 to 82, units =°C)

```

Thursday, January 27, 2011
09:46:55  25.23  23.54  23.69  23.69  23.59  23.56  23.42  23.19
10:26:55  23.13  22.87  22.82  22.56  22.51  22.36  22.38  22.17
    
```

**AIR CONDITIONER POWER SAVING TEST AT L&T ON JAN 27, 2011  
WITHOUT AIRCO SAVER**

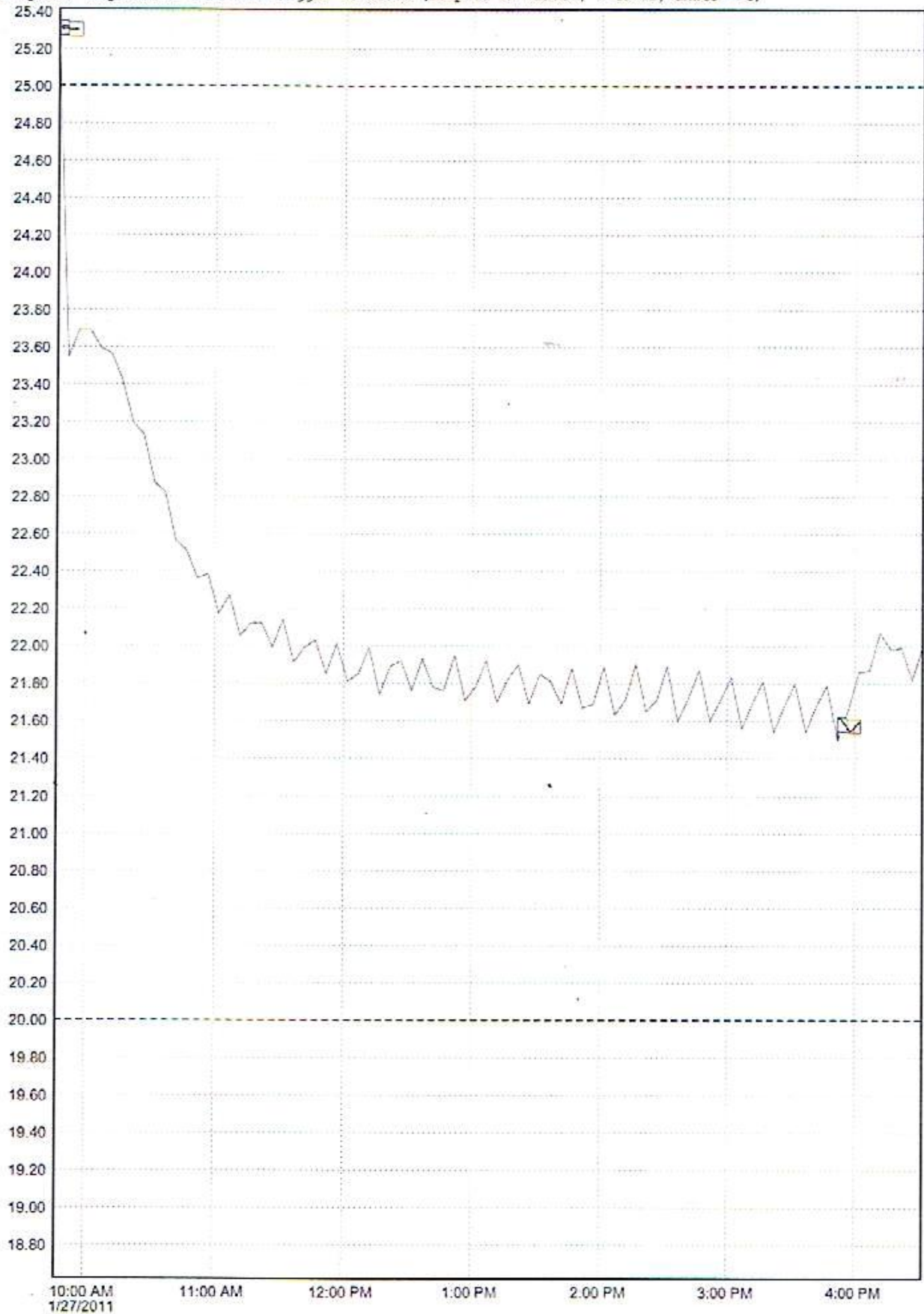
11:06:55	22.27	22.05	22.12	22.12	21.99	22.14	21.91	21.99
11:46:55	22.03	21.85	22.01	21.81	21.85	21.99	21.74	21.89
12:26:55	21.92	21.76	21.93	21.78	21.76	21.95	21.71	21.78
13:06:55	21.92	21.70	21.82	21.90	21.69	21.85	21.81	21.69
13:46:55	21.88	21.67	21.69	21.69	21.63	21.71	21.90	21.65
14:26:55	21.71	21.89	21.60	21.72	21.67	21.60	21.71	21.83
15:06:55	21.56	21.70	21.81	21.54	21.69	21.60	21.54	21.68
15:46:55	21.79	21.50	21.66	21.86	21.67	22.07	21.98	21.99
16:26:55	21.82	21.99						

---



# AIR CONDITIONER POWER SAVING TEST AT L&T ON JAN 27, 2011 WITHOUT AIRCO SAVER

File C:\DOCUME-1\ivrs\Desktop\PELCON-1.TR  
Graph of temperature data from logger M0053801 (samples in window, 1 to 82, units = °C)



# AIR CONDITIONER POWER SAVING TEST AT L&T ON JAN 28, 2011 WITH AIRCO SAVER

## Temprecord for Windows v5.14

### Summary

```

Data Source       : file C:\DOCKNE-1\Nivrs\desktop\FELCON-2.TP
Logger Type      : multi-trip
Serial Number    : M0053801

Logger Status    : stopped
Logging         : Temperature only

Sample Period    : 00:05:00 (12.0 / hour)
Date Printed    : Saturday, January 29, 2011 11:24:12 AM
Samples in Logger : 306

First Sample     : Friday, January 28, 2011 9:32:29 AM
Last Sample     : Saturday, January 29, 2011 10:57:29 AM

Start with Button : ON           Allow Markers : OFF
Stop with Button  : OFF          Loop Overwrite : OFF
Start with Switcher : OFF       Safe Range Entry : ON (not yet entered)
Stop with Switcher : OFF       Limit Delay : 255

Upper Limit      : 25.00°C (not exceeded)
Lower Limit      : 20.00°C (not exceeded)

Total Samples    : 205,495      Logger Version : 0.11
Total Uses      : 200          Memory : 8K
Sensor          : standard
    
```

```

User Data 1 : pel CONF ROOM
User Data 2 :
User Data 3 :
User Data 4 :
User Data 5 :
User Data 6 :
    
```

```

Field 1 :
Field 2 :
Field 3 :
Field 4 :
Field 5 :
Field 6 :
Field 7 :
Field 8 :
Field 9 :
Field 10 :
    
```

```

First Sample was at : Friday, January 28, 2011 9:32:29 AM
Last Sample was at  : Saturday, January 29, 2011 10:57:29 AM
Total Duration      : 25:30:00 (306 samples)
    
```

### Statistics for All Temperature Samples

```

Mean           : 22.86°C
Maximum        : 25.75°C (Saturday, January 29, 2011 10:57:29 AM)
Minimum        : 19.71°C (Friday, January 28, 2011 1:12:59 PM)
    
```

#### Upper Limit (25.00°C)

```

Time Above     : 1:35:00
Samples Above  : 19
Percentage Above : 6.2
    
```

#### Lower Limit (20.00°C)

```

Time Below     : 0:10:00
Samples Below  : 0
Percentage Below : 0.7
    
```

#### Either Limit (above 25.00°C or below 20.00°C)

```

Time Outside   : 1:45:00
Samples Outside : 21
Percentage Outside : 6.9
    
```

### Values in Window

(Samples 2 to 128, units =°C)

```

Friday, January 28, 2011
09:37:29  24.61  23.69  22.82  22.31  22.57  22.57  22.30  22.54
10:17:29  22.35  22.07  21.96  22.03  21.90  22.01  21.96  21.96
    
```

**AIR CONDITIONER POWER SAVING TEST AT L&T ON JAN 28, 2011  
WITH AIRCO SAVER**

10:57:29	21.83	21.42	21.75	21.30	21.39	21.84	21.72	21.89
11:37:29	21.74	21.83	21.71	21.89	21.74	21.09	21.38	21.79
12:17:29	21.67	21.85	21.67	21.80	21.68	21.00	21.22	21.72
12:57:29	21.56	21.91	21.65	22.02	21.60	21.94	21.71	21.85
13:37:29	21.71	21.71	21.69	21.74	21.75	21.69	21.77	21.65
14:17:29	21.85	21.69	21.85	21.63	21.95	21.69	21.90	21.60
14:57:29	21.97	21.65	21.90	21.67	21.80	21.73	21.76	21.77
15:37:29	21.63	21.27	20.52	20.25	20.07	20.05	19.94	19.71
16:17:29	20.32	20.90	21.54	21.07	21.83	22.53	22.80	23.15
16:57:29	23.40	23.39	23.30	23.20	23.13	23.09	23.05	23.03
17:37:29	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01
18:17:29	23.03	23.01	23.01	23.01	23.03	23.03	23.03	23.03
18:57:29	23.04	23.05	23.05	23.05	23.05	23.07	23.07	23.07
19:37:29	23.07	23.07	23.07	23.07	23.07	23.09	23.07	23.07

---

# AIR CONDITIONER POWER SAVING TEST AT L&T ON JAN 28, 2011 WITH AIRCO SAVER

File C:\DOCUME-1\ivrs\Desktop\PELCON-2.TR  
Graph of temperature data from logger M0053801 (samples in window, 2 to 128, units = °C)

