# **GREEN TEST**

**OBSERVATION, ANALYSIS and REPORT** 

EXCLUSIVELY

FOR



CONDUCTED

BY



# What is a **GREEN** TEST?

Green Test is a method adopted to **empirically demonstrate** the performance of **AIRCO ENERGY SAVER** in your air-conditioning environment. The test proves that AIRCO works to save energy and provides you an indicative saving potential specifically to your environment

The tests are conducted by trained professionals under the supervision of your authourised personnel. We have used gadgets and meters that are of quality brands.

# The **GREEN** TEST Process



# **GREEN TEST OBSERVATION & COMPARITIVE STUDY (TEST 1)**

WITHOUT AIRCO	• From 06:45 PM • To 07:45 PM	
WITH AIRCO	• From 09:06 PM • To 10:06 PM	

#### ANALYSIS ON ENERGY CONSUMPTION

TIME PEF	RIOD	WITHOUT AIRCO (Kwh)	WITH AIRCO (Kwh)	SAVINGS (Kwh)
1 Hour		3.2	2.4	0.8
1 day	(12 Hours)	38	29	10
1 Month	( 31 Days )	1168	876	292
1 Year	(365 Days)	14016	10512	3504

#### ANALYSIS ON COST (Cost of electricity / unit assumed at Rs.6.08)

TIME PERIOD		WITHOUT	WITH AIRCO	SAVINGS
		AIRCO (Rs)	(Rs)	(Rs)
1 Hour		19.46	14.59	4.86
1 day	(12 Hours)	233	175	58
1 Month	( 31 Days )	7100	5325	1775
1 Year	(365 Days)	85217	63913	21304

# **GREEN TEST SUMMARY**

Parameter	Details
TEST Date	07/10/2009
TEST Duration	2 Hours
Capacity of Air-conditioner	6.0 Ton
Type of Air-conditioner	Bluestar, Ductable Split
Measured Energy Savings	25.00%
Cost/Unit of AIRCO (Rs.)	9900* (Excluding VAT @ 4%)
Estimated Payback Period	5 Months 15 Days

# **GREEN TEST OBSERVATION & COMPARITIVE STUDY (TEST 2)**

WITHOUT	• From	12:30 PM	
AIRCO	• То	01:30 PM	
WITH	• From	01:45 PM	
AIRCO	• То	02:45 PM	

#### **ANALYSIS ON ENERGY CONSUMPTION**

TIME PEF	RIOD	WITHOUT AIRCO (Kwh)	WITH AIRCO (Kwh)	SAVINGS (Kwh)
1 Hour		11.1	8	3.1
1 day	( 10 Hours)	111	80	31
1 Month	( 26 Days )	2867	2066	801
1 Year	(310 Days)	34410	24800	9610

#### ANALYSIS ON COST (Cost of electricity / unit assumed at Rs.6.08)

TIME PEF	RIOD	WITHOUT AIRCO (Rs)	WITH AIRCO (Rs)	SAVINGS (Rs)
1 Hour		67.49	48.64	18.85
1 day	( 10 Hours)	675	486	188
1 Month	( 26 Days )	17432	12564	4868
1 Year	(310 Days)	209213	150784	58429

### **GREEN TEST SUMMARY**

Parameter	Details
TEST Date	10/10/2009
TEST Duration	2 Hours
Capacity of Air-conditioner	11.5 Ton
Type of Air-conditioner	Carrier , Packaged Unit
Measured Energy Savings	27.92%
Cost/Unit of AIRCO (Rs.)	14350* (Excluding VAT @ 4%)
Estimated Payback Period	2 Months 25 Days

# **GREEN TEST OBSERVATION & COMPARITIVE STUDY (TEST 3)**

WITHOUT	• From	10:55 PM	
AIRCO	• То	11:55 PM	
VVIIH	• From	01:13 PM	
AIRCO	• То	02:13 PM	

#### **ANALYSIS ON ENERGY CONSUMPTION**

TIME PEF	RIOD	WITHOUT AIRCO (Kwh)	WITH AIRCO (Kwh)	SAVINGS (Kwh)
1 Hour		10.13	8.53	1.6
1 day	(10 Hours)	101	85	16
1 Month	( 26 Days )	2617	2203	413
1 Year	(310 Days)	31403	26443	4960

## ANALYSIS ON COST (Cost of electricity / unit assumed at Rs.6.08)

TIME PEF	RIOD	WITHOUT AIRCO (Rs)	WITH AIRCO (Rs)	SAVINGS (Rs)
1 Hour		61.59	51.86	9.73
1 day	(10 Hours)	616	519	97
1 Month	( 26 Days )	15909	13396	2513
1 Year	(310 Days)	190930	160773	30157

### **GREEN TEST SUMMARY**

Parameter	Details
TEST Date	12/10/2009
TEST Duration	2 Hours
Capacity of Air-conditioner	8.5 Ton
Type of Air-conditioner	Carrier , Packaged Unit
Measured Energy Savings	33.00%
Cost/Unit of AIRCO (Rs.)	14350* (Excluding VAT @ 4%)
Estimated Payback Period	5 Months 20 Days

#### **DISCUSSION AND GREEN PROPOSAL**

The energy savings in your environment is an impressive 25.00% in Server Room TEST, 27.92% in 7<sup>th</sup> Floor Oceanic Towers TEST and 33.00% in Ground Floor Oceanic Towers TEST

The performance of air-conditioners may vary depending on a variety of parameters like the model, ambient temperature, humidity levels, frequency of usage, age, room size, installation capacity, amount of open space etc.,

Whatever may be the environment AIRCO ENERGY SAVER adapts itself intelligently and saves energy. The savings in your environment has been demonstrated by conducting the **GREEN** TEST.

The payback period for the Server Room TEST is 5 Months 15 Days and for 7<sup>th</sup> Floor Oceanic Towers TEST it is 5 Months 20 Days and Ground Floor Oceanic Towers 2 Months 25 Days.

#### AIRCO ENERGY SAVER

- ✓ Comes with replacement warranty of 2 Years
- ✓ Long life
- ✓ Maintenance free

#### YOUR contribution in SAVING EARTH

Conservation of energy directly contributes to reduction in rate of increase of green house gases and there by dampens the Global Warming process. Organizations across the global consider this as a social responsibility and contribute in SAVING EARTH.

We are sure you would consider the cause of both SAVING COST and SAVING EARTH and take the **GREEN wise** decision.

Awaiting your favorable response

GO GREEN

**Principal Consultant** 

Sai Sumanth Battepati

# TECHNICAL SPECIFICATION OF TEST UNIT

Operating Parameters		
Input Voltage	230 V AC (+/- 10%)	
Frequency	50 / 60 Hz	
Sensor Measuring Range	Minimum -10 Degrees C, Max 55 Degrees C	
Maximum allowable temperature at senor	70 Degrees C	

Output (Relay)	
Contact function	NO (Normally open)
Switch Voltage	24 V AC to 230 V AC
Maximum Switch Current	12 A continuously / 120 A temporarily (20 ms) at 250 V switching voltage
Anti-short cycle protection	3 minutes (1 minute upon power-up)

Operating Conditions	
Operating temperature	Minimum 0 Degrees C, Maximum 55 Degrees C
Relative humidity	Minimum 15%, Max 90%
No condensation	

Storage and Transportation conditions	
Storage temperature	Minimum -25 Degrees C, Max 85 Degrees C
Relative humidity	Minimum 10%, Maximum 95%

Dimensions	
length * height * width	173*32*42 mm without tension relief