



**Energy Management Centre - Kerala**  
**(Department of Power, Govt of Kerala)**

**CERTIFICATE OF EMPANELMENT**

*This is to certify that **M/s.Athul Energy Consultants Pvt Ltd**(4/2, Capital Legend Building, Korapath Lane, Round North, Thrissur)is empanelled as Energy Audit firm in Energy Management Centre Kerala to conduct mandatory energy audit as per Government of Kerala G.O (Rt) No.2/2011/PD dated 01.01.2011.*

**Empanelment No:**  
**EMCEEA-0811F-3**

<b>Scope/Area</b>	<b>Building</b>	<b>Industry -Electrical</b>	<b>Industry Thermal</b>
	Yes	Yes	Yes

*This empanelment is valid up to 01/02/2024*

*Issuing Date: 02/02/2021*

*Place: Thiruvananthapuram*

Director,  
Energy Management Centre - Kerala


Information of firm	
1.	Name & address of the firm ATHUL ENERGY CONSULTANTS PRIVATE LIMITED 4/2, Capital Legend Building, Korappath Lane, Round North Thrissur, Kerala - 680020
<input type="checkbox"/>	Office(with STD)
	Mobile +91 735611199/0-6
	Fax number
2.	Website (if any) www.athulenergy.com
3.	Email address i n f o @ a t h u l e n e r g y . c o m
4.	Name ,Designation and address of Contact person SANTHOSH. A Managing Director  Athul Energy Consultants Pvt. Ltd. 4/2, Capital Legend Building, Korappath Lane, Round North Thrissur, Kerala- 680020
5.	Office(with STD)
	Residence(with STD) 9746194984
	Mobile +91 7356111990
6.	Email address s a n t h o s h @ a t h u l e n e r g y . c o m
7.	Year of establishment 2011
8.	Year of commencement of energy audit by the firm. 2011
9.	No. of branch offices (List of complete addresses including heads of all branch offices with telephone, fax and email addresses) NIL

**Details of Associated Energy Experts and Audits Conducted by firm**

1.	Number of resource persons available	07
2.	Number of full-time energy auditors in position, with work experience of all energy auditors associated with the firm	03
3.	No. of part-time energy auditors in position during the current year / previous year associated with the firm.	02
4.	Sectors in which the energy audit firm has conducted energy audits since inception and number of audits in each sector	<ul style="list-style-type: none"> <li>• Buildings – 45</li> <li>• Tea – 7</li> <li>• Rubber – 5</li> <li>• Food Processing – 4</li> <li>• Dairy – 14</li> <li>• Textile – 5</li> <li>• Iron steel &amp; Aluminum – 22</li> <li>• Chemical – 08</li> <li>• Engineering – 42</li> <li>• Tyre &amp; tyre Related company – 3</li> <li>• Printing – 15</li> <li>• Hospitals – 12</li> <li>• Mines – 22</li> <li>• Ayurveda – 4</li> <li>• Power Quality Study-5</li> <li>• Hotels – 4</li> <li>• Electrical Safety Audit – 241</li> <li>LT Audits – 40</li> </ul>
5.	Energy audit process system (list sectors) - If no energy audit has been carried out of the process system and parameters, please list nil.	Chemical , Steel, Printing, Coir and Jute, Granite Crushing, Assembly Line, Electronic Components, Ayurveda and Herbs, Tea, Flour Mill etc.
6.	Energy audit of thermal utility system (list sectors)	Coir and Jute. Bread, Rubber Retreading. Tea, Chemical, Hot printing, Ayurveda medicines. Dairy etc
7.	Energy audit of electrical utility system (list sectors)	Coir and Jute, Bread, Rubber Retreading, Spice, Corporate Offices, Hotels, Hospitals, Data centres, Banks, Mattresses, Flour mill., Printing, Electronic components, Crushers, Steel, Asbestoses, , Etc.

8.	Instruments available	(a) Electrical (list the name of the instruments)	<ul style="list-style-type: none"> <li>1. Power Analyzer <ul style="list-style-type: none"> <li>a. Fluke1730 with flexi probes</li> </ul> </li> <li>2. Power and Harmonic Analyzer Krykard <ul style="list-style-type: none"> <li>a. ALM35, with flexi, HT &amp; DC probes</li> <li>b. ALM30, with flexi and HT probes</li> </ul> </li> <li>3. Power Clamp on meter, F407 Krykard</li> <li>4. LUX meter, Amprobe LM-100</li> <li>5. Motwane Earth Tester</li> <li>6. Phase Sequence Indicator</li> <li>7. Single phase power analyzer Meco 4500</li> <li>8. Digital insulation Tester DT 990</li> <li>9. Air Quality Meter, Pitot tube - Testo 480</li> </ul>
(b) Thermal (list the name of the instruments)		<ul style="list-style-type: none"> <li>10. Fluke, mini 62 Infra-red thermometer</li> <li>11. Flue gas analyzer Testo 330L</li> <li>12. Vane flow meter, Metravi</li> <li>13. Thermal Imager FlirE50</li> </ul>	

**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	Santhosh. A	
2.	Qualifications.	B. Tech (Mechanical)	
3.	Experience. (use additional sheet if required)	25 Years in industry and conducted more than 70 energy audits	
4.	Residence(with STD)	+91 9746194984	
5.	Mobile	+91 7356111990	
6	Email address	santhosh@athulenergy.com	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil	4 <sup>th</sup> September 2008	
8	Date of passing the examination in "Energy Performance Assessment for Equipment and Utility Systems"	11 <sup>th</sup> February 2010	
9	Examination Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems" ( In case of Certified Energy Auditor, please write CEA Registration No.)	EA-7597	
10	Certificate Registration Number of (i) Energy Manager (ii) "Energy Performance Assessment for Equipment and Utility Systems"	For Energy Manager 3105 For Energy Performance 5098	
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.	Yes  AEA 0275 02/11/2017	
<p align="center"><b>Remarks( if any)</b></p> <p><u>Additional Qualifications after B. Tech</u></p> <p>PG Diploma in Energy Management (Hyderabad Central University) Diploma in Energy Engineering MBA (Energy Management) External Faculty (PCRA)</p>			

## **Biodata of Accredited Energy Auditor:**

### **SANTHOSH A**

#### **(Accredited Energy Auditor)**

Qualification : B. Tech (Mechanical)  
Experience : 20 years  
Date of Certification : 11/02/2010  
as Energy Auditor/AEA  
Registration Number of : AEA-0275  
Accredited Energy Auditor/AEA : EA - 7597  
Mobile : +91 7356111990  
E-Mail : santhosh@athulenergy.com

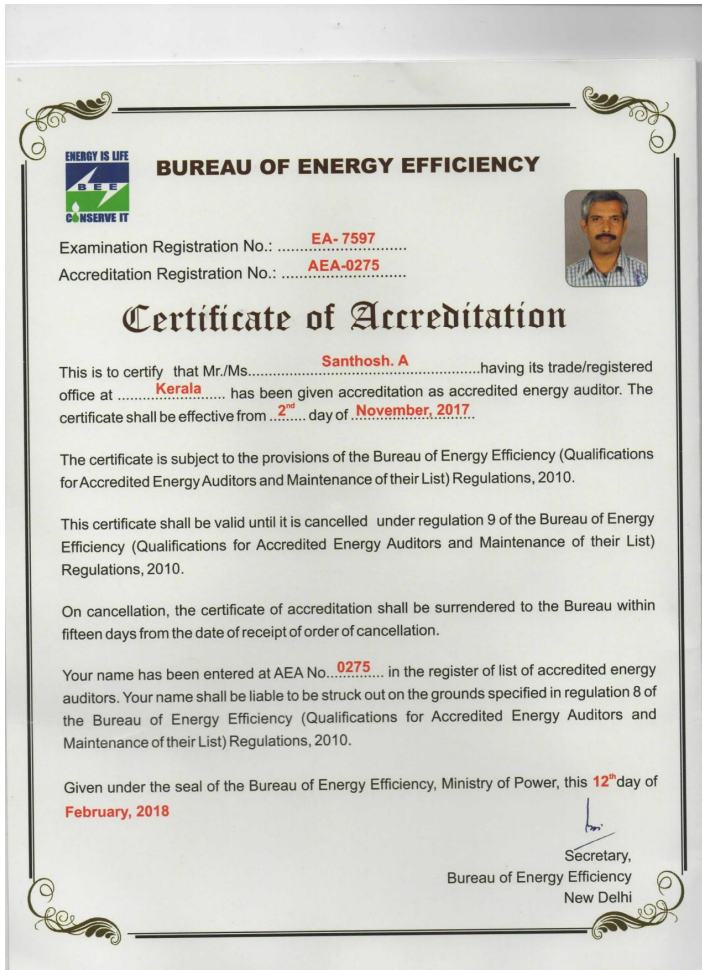
#### **PROFESSIONAL EXPERIENCE**

- 20 years' Transnational experience in hard core chemical & Process industries at core executive level as a mechanical engineer.
- Executed & managed critically important industrial operations in high risk environments.
- Possess a solid Engineering instinct with a perfect amalgamation of mass management in multiple area interlinked operations.
- Well exposed to the realities and vivid engineering problems barring the barrier of individual states.
- Associated with the industrial corporate of India viz. Hindustan lever, Tata, Birla, Jyothi laboratories etc.
- Have vivid exposure and seasoned training in the following areas.
  - Soap and Detergent Industry.
  - Petrochemicals.
  - Pharma Ingredients.
  - Agro Chemicals.
  - Spice extracts and food packaging.
  - Toxic and Hazardous chemical products.
  - Dye Intermediates
  - Drug & pharmaceutical industry
  - Solvent Extractions.


#### **PREVIOUS EMPLOYERS & ASSOCIATES**

- ❖ Tata vasishti Detergents Ltd, Chiplune, Maharashtra, India.
- ❖ Hindustan Lever Ltd, Chiplune, Maharashtra, India.
- ❖ Kesar Petrochemicals Ltd, Chiplune, Maharashtra, India.
- ❖ Sriman Organic Chemical Industries Ltd, Tharapur, Maharashtra, India.
- ❖ Zenith Chemicals Ltd (A Unit of Yash Birla Group), Tharapur, Maharashtra, India.
- ❖ Jyothi Laboratories Ltd, Indore, Madhya Pradesh.

- ❖ Gujarat Agro Chemicals Ltd, Ankaleshwar, Gujarat, India.
- ❖ Aarathi Drugs Ltd, Ankaleshwar, Gujarat, India.
- ❖ Kancor Ingredients Ltd, Angamaly, Kerala, India.
- ❖ Energy Conservation Society, (An NGO working in the Energy –Environmental sector).
- ❖ Treasurer of Society of Energy Engineers & Managers.



**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	K. K. Babu		
2.	Qualifications.	B. sc. Engineering (Electrical)		
3.	Experience. (use additional sheet if required)	34 Years		
4.	Residence(with STD)	0485-2207204		
5.	Mobile	+91 9447987935		
6	Email address	babukilinal@gmail.com		
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil	18 <sup>th</sup> November 2005		
8	Date of passing the examination in “Energy Performance Assessment for Equipment and Utility Systems”	30 <sup>th</sup> April 2006		
9	Examination Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems” ( In case of Certified Energy Auditor, please write CEA Registration No.)	EA-2422		
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”	For Energy Manager - 0657 For Energy Performance -2231		
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.	No		
	<p align="center"><b>Remarks( if any)</b></p> <p><u>Additional Qualifications after B. Tech</u></p> <p>Having Advanced Diploma in Management from IGNOU</p>			



## **K. K. BABU**

### **(Certified Energy Auditor)**

Qualification	:	B.Sc. Engineering (Electrical)
Experience	:	34 years
Date of Certification as Energy Auditor	:	30/04/2006
Registration Number of Energy Auditor	:	EA-2422
Mobile	:	+91 9447987935
Residence	:	0485-2207204
E-Mail	:	bmassociates1949@gmail.com babukilinal@gmail.com

### **PROFESSIONAL EXPERIENCE**


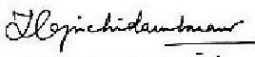
Retired as Dy. Chief Engineer from Kerala State Electricity Board(KSEB) in 2004.  
Entered in service as Asst. Engineer and completed 30 years of Service (1974 – 2004).

### **Responsibilities held:**


1. Electrical Design, Planning and Estimation:
  - Design, Planning and Estimation of various Electrical Installations (LT & HT)
  - Design, Construction, Operation and Maintenance
  - Undertaken Design, Construction, Operation and Maintenance of various Distribution Systems (LT & HT), Transmission Lines and Substations (EHT), and Generating Stations.
2. System Operation and Load Despatching:
  - Involved in functions like Grid Management, Load Generation Balance and Water Management which were highly challenging under ABT regime.
3. Human resource management:
  - Always tried to motivate the supporting Engineers & Technicians and enhanced their service skills and competencies.
4. Major Achievements:
  - Directly involved in the construction and commissioning of 3 Nos. EHT Substations and 2 Nos. EHT Transmission Lines.
  - As Dy. Chief Engineer in charge of Grid Management, led a team of dedicated Engineers and Technicians to successfully implement Availability Based Tariff (ABT) in KSEB.

## AS AN ENERGY CONSULTANT

- ❖ Bcubenergy Systems, Cochin. (Energy Management Consultants)  
Senior Consultant, Jan 2007 - Oct 2009
- ❖ Connect It, Palarivattom, Kochi. (Electrical Consultants)  
Chief Consultant, Feb 2007 – Oct 2009
- ❖ BM Associates, Kochi, Kerala. (Electrical & Energy Management Consultants)  
Chief Consultant, 2009-11.

Regn. No. EA-2422		No. 2231
<b>National Productivity Council</b> (National Certifying Agency) <b>PROVISIONAL CERTIFICATE</b>		
<i>This is to certify that Mr. / Ms. <b>Babu K K</b> son / daughter of Mr. <b>Korath Y</b></i>		
<i>has passed the National Certification Examination for Energy Auditors in 2006, conducted on behalf of the Bureau of Energy Efficiency, Ministry of Power, Government of India.</i>		
<i>He / She is qualified as Certified Energy Manager as well as Certified Energy Auditor.</i>		
<i>He / She shall be entitled to practice as Energy Auditor under the Energy Conservation Act 2001, subject to the fulfillment of qualifications for the Accredited Energy Auditor and issue of certificate of Accreditation by the Bureau of Energy Efficiency under the said Act.</i>		
<i>This certificate is valid till the issuance of an official certificate by the Bureau of Energy Efficiency.</i>		
Place : Chennai, India		 Controller of Examination
Date : 30 <sup>th</sup> April 2007		

**\*Bio data of Certified Energy Auditor**

1	Name of energy auditor	Ashok K M P	
2.	Qualifications.	B. Tech Electrical ME Energy engineering	
3.	Experience. (use additional sheet if required)	05 Years	
4.	Residence(with STD)	8547800305	
5.	Mobile	7356111991	
6	Email address	ashok@athulenergy.com	
7	Date of certification as Energy Manager or Energy Auditor (pl specify) by Bureau of Energy Efficiency (BEE) ( if not appeared list as nil	10 <sup>th</sup> March 2017	
8	Date of passing the examination in “Energy Performance Assessment for Equipment and Utility Systems”	NIL	
9	Examination Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems” ( In case of Certified Energy Auditor, please write CEA Registration No.)	EA-25612	
10	Certificate Registration Number of (i) Energy Manager (ii) “Energy Performance Assessment for Equipment and Utility Systems”	For Energy Manager - 8078	
11	Are you a BEE accredited Energy auditor. If so: Date of accreditation Accreditation No.	No	
	<p align="center"><b>Remarks( if any)</b></p> <p><u>Additional Qualifications after B. Tech</u></p> <ul style="list-style-type: none"> <li>• Griha Certified Professional</li> <li>• ETAP certified holder</li> <li>• MNRE certified Solar professional</li> <li>• CE&amp;QIP Grid Connected Solar PV System (IIT Bombay)</li> <li>• Design &amp; installation of Solar PV off grid &amp; on grid (NIWE)</li> </ul>		

## **ASHOK K. M. P. (Certified Energy Manager)**

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Educational Qualification	:	B. Tech (Electrical) M tech (Energy engineering)
Experience	:	5 Years
Date of Certification as Energy Manager	:	10/03/2017
Registration Number of Energy Manager	:	EA - 25612
Mobile	:	+91 7356111991
E-Mail	:	ashok@athulenergy.com

### **EXECUTIVE SUMMARY**

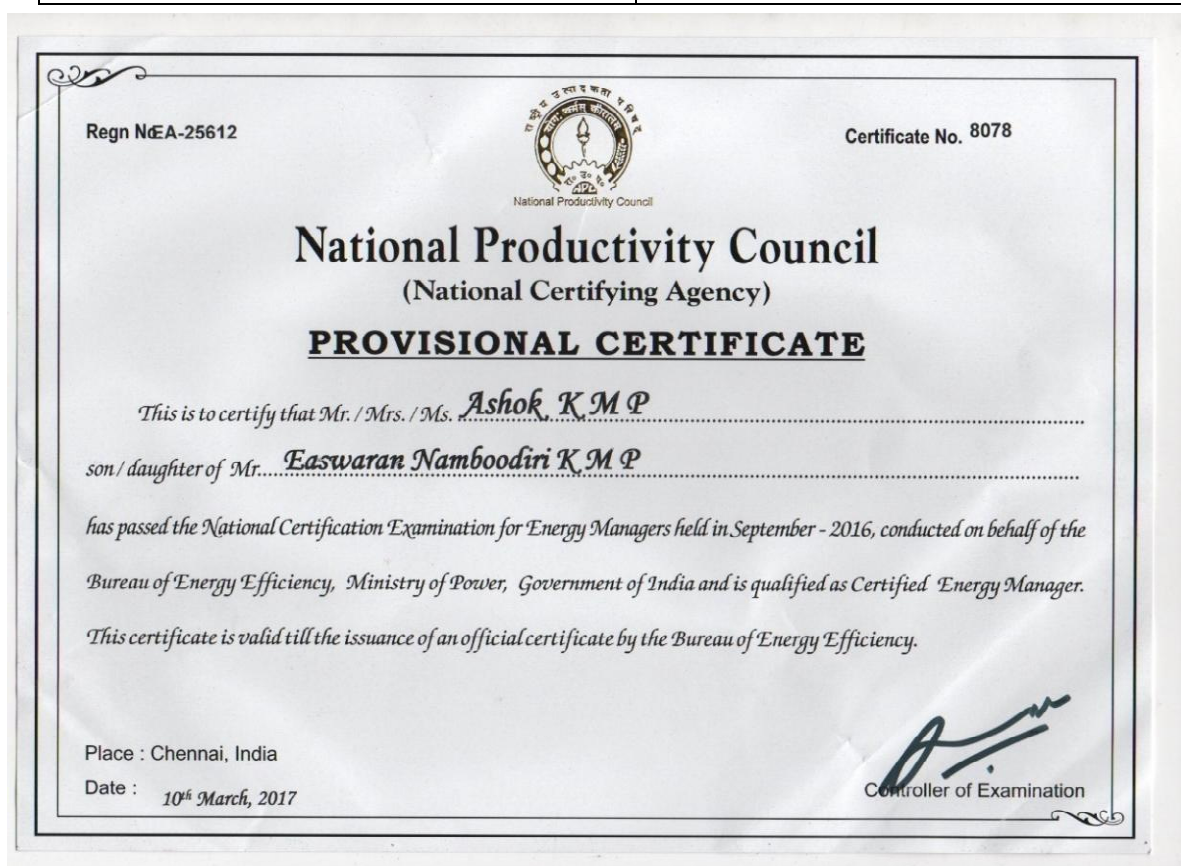
- Possess extensive experience in Energy Auditing, Energy Conservation Training, supervising and managing energy efficiency programs and policy planning initiatives;
- Has closely worked with many energy experts, government agencies and civil groups to promote energy conservation objectives;
- Has the ability to provide leadership to new and innovative initiatives.
- An energy manager trained in the various electrical & mechanical design and certified personal.
- Has widely participated in the energy conservation activities even during the academics' period.
- Was state representative from the college in the NSS tech cell and student coordinator for various Social groups such as Nature club & Debate club.
- Passionately worked in the Malabar cements Ltd, a cement factory in Kerala, for 2 years and had exposed to electrical and mechanical systems, by doing the wholesome project on the Renovation and maintenance of Bag filter of the company.
- Started working in the Athul Energy in the latter part of 2012 as project engineer later on become one of the Directors of the company.
- Since then, he leads in more than 100 energy and safety audits and identified improvement opportunities for many Industries.
- Carried out many case studies especially focused on the Power quality issues on various industries and Distribution sectors.
- Since then he is actively participated in various NGO in the Energy conservation fields such as SEEM, GRIHA, ECS etc.

### Core Accomplishments in the Field of Energy and Environment

- ❖ **Certified Energy Manager**, Certified by Bureau of Energy Efficiency, under Department of Power, Govt. of India (EA - 25612)
- ❖ **ETAP certified holder.**
- ❖ **GRIHA certified professional (2017-19)**
- ❖ **Teaching faculty for Energy Conservation society's budding engineers program.**

### Leadership Capability Chart

Association/ Organization	Responsibility/ Posts Held
SEEM	Member
ECS	Member & faculty



# Company registration certificate:

## 1. CIN



GOVERNMENT OF INDIA  
MINISTRY OF CORPORATE AFFAIRS

Central Registration Centre

### Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 of the Companies Act, 2013 and rule 8 the Companies (Incorporation) Rules, 2014]

I hereby certify that ATHUL ENERGY CONSULTANTS PRIVATE LIMITED is incorporated on this Twenty seventh day of September Two thousand sixteen under the Companies Act, 2013 and that the company is limited by shares.

The CIN of the company is U74999KL2016PTC046898.

Given under my hand at Manesar this Twenty seventh day of September Two thousand sixteen .

DS Ministry of  
Corporate Affairs -  
(Govt of India) 14

MANGAL RAM MEENA  
Deputy Registrar of Companies  
Central Registration Centre

For and on behalf of the Jurisdictional Registrar of Companies

Mailing Address as per record available in Registrar of Companies office:

ATHUL ENERGY CONSULTANTS PRIVATE LIMITED

KEERAMKULANGARA WARRIAM, KORAPPATHU LANE, THRISSUR,  
Thrissur, Kerala, India, 680020



## 2. MSME

भारत सरकार Govt. of India सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES		MSME MICRO, SMALL & MEDIUM ENTERPRISES		
उद्योग आधार MSME		Udyog Aadhaar		
E	Type of Enterprise	Micro	Small	Medium
	Manufacturing	A	B	C
	Services	D	E	F
	UAN	KL13E0002883		
<b>Udyog Aadhaar Memorandum</b>				
1. Aadhaar Number	679685220464			
2. Name of Entrepreneur	ASHOK K M P			
3. Social Category	GENERAL			
4. Name of Enterprise	ATHUL ENERGY CONSULTANTS PVT LTD			
5. Type of Organization	PRIVATE LIMITED COMPANY			
6. Postal Address	DOOR NO-2, 4TH FLOOR, CAPITAL LEGEND BUILDING, KORAPPATHU LANE, ROUND NORTH, THRISSUR			
	District	THRISSUR	State	KERALA PIN 680020
	Mobile No:	7356111990	Email:	info@athulenergy.com
7. Date of commencement	27/09/2016			
8. Previous Registration details-if any	::			
9. Bank Details	IFS Code	IDIB000T054		
	Bank Account:	6481534338		
10. Major Activity	SERVICES			
SN	NIC 2 Digit	NIC 4 Digit	NIC 5 Digit Code	Activity Type
1	Information service activities	Other information service activities n.e.c.	Other information service activities n.e.c.	Services
2	Architecture and engineering activities; technical testing and analysis	Technical testing and analysis	Technical testing and analysis	Services
3	Other professional, scientific and technical activities	Other professional, scientific and technical activities n.e.c.	Other professional, scientific and technical activities n.e.c.	Services
12. Persons employed	5			
13. Investment (Plant & Machinery / Equipment's)	15 (Rs. In Lakhs)			
14. District Industry Centre	THRISSUR			
<b>Declaration</b>				
I hereby declare that information given above is true to the best of my knowledge. Any information, that may be required to be verified, shall be provided immediately before the concerned authority.				
MyMsme Mobile App (Beta Version) is available now for download. <a href="https://play.google.com/store/apps/details?id=msme.mysmsme">https://play.google.com/store/apps/details?id=msme.mysmsme</a>				

## Measuring instrument list of Athul Energy Consultants Pvt Ltd, Kerala

S l n o	Ma ke	Model	Measures	Components/m easuring probes	Specification
<b>POWER QUALITY ANALYSER</b>					
1	Kry kar d	ALM 35	<ul style="list-style-type: none"> <li>• Voltage, Current, Frequency</li> <li>• KW, KVA, KVA<sub>r</sub>, Distorted kVA<sub>r</sub></li> <li>• PF, Cos<math>\phi</math>, Tan<math>\phi</math></li> <li>• 4 Quadrant Energy: Wh, VAh, VA<sub>r</sub>h, Dh (Distortion Energy)</li> <li>• Short-term Flicker, FHL, CF, K-Factor</li> <li>• THDf, THDr on V, U &amp; I</li> <li>• Harmonics up to 50 order</li> <li>• V &amp; I Transients</li> <li>• Complies with IEC 61000-4-30 measurement standard under Class B</li> </ul>	Ampflex CT - 4 nos	0 - 10000A CAT IV with +/- 0.5% CT Accuracy
				Voltage probes - 5 nos	2 - 2000V CAT IV
				MN 93A clamp CT - 4 nos	0-100 A CAT IV with +/- 0.5% CT Accuracy
				PAC 93 AC/DC clamp CT - 3 nos	1000A ac & 1000A dc with +/- 0.5% CT Accuracy
2	Kry kar d	ALM 30	<ul style="list-style-type: none"> <li>• Voltage, Current, Frequency</li> <li>• KW, KVA, KVA<sub>r</sub>,</li> <li>• PF, Cos<math>\phi</math>, Tan<math>\phi</math></li> <li>• 4 Quadrant Energy: Wh, VAh, VA<sub>r</sub>h,</li> <li>• Short-term Flicker, FHL, CF, K-Factor</li> <li>• THDf, THDr on V, U &amp; I</li> <li>• Harmonics up to 50 order</li> <li>• Complies with IEC 61000-4-30 measurement standard under Class B</li> </ul>	Ampflex CT - 4 nos	0 - 10000A CAT IV with +/- 0.5% CT Accuracy
				Voltage probes - 5 nos	2 - 2000V CAT IV
				MN 93A clamp CT - 4 nos	0-100 A CAT IV with +/- 0.5% CT Accuracy
3	FL UK E	1730	<ul style="list-style-type: none"> <li>• Voltage, Current, Frequency</li> <li>• KW, KVA, KVA<sub>r</sub>,</li> <li>• PF, Cos<math>\phi</math>, Tan<math>\phi</math></li> <li>• 4 Quadrant Energy: Wh, VAh, VA<sub>r</sub>h</li> <li>• THDf, THDr on V, U &amp; I</li> <li>• Harmonics up to 50 order</li> </ul>	<b>iFlex3000-24 flexible CT - 4 nos</b>	0-3000 A with +/- 1% CT Accuracy
				Voltage probes - 4 nos	0-1000V with +/- 0.2% Accuracy
4	ME CO	power guard - 09	<ul style="list-style-type: none"> <li>• Single phase analyser</li> <li>• Range - 0-20 A with accuracy level of class 1</li> </ul>		
5	Kry kar d	F407	<ul style="list-style-type: none"> <li>• Three phase clamp on power analyser</li> <li>• True inrush current upto</li> </ul>		AC-DC current measurement up to 1000A with +/- 1%

			1500A <ul style="list-style-type: none"> <li>AC-DC power measurements</li> <li>PF, DPF measurement</li> <li>THDv &amp; THDi measurement with individual harmonics up to 25<sup>th</sup> order.</li> </ul>		accuracy AC-DC voltage measurement upto 1000V with +/- 1% accuracy.
<b>S</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>C</b>	<b>S</b>
<b>l</b>	<b>a</b>	<b>o</b>	<b>e</b>	<b>o</b>	<b>p</b>
<b>n</b>	<b>k</b>	<b>d</b>	<b>s</b>	<b>m</b>	<b>e</b>
<b>o</b>	<b>e</b>	<b>e</b>	<b>u</b>	<b>e</b>	<b>n</b>
<b>TEMPERATURE/CLIMATE ANALYSER</b>					
5	TE ST O	480	<ul style="list-style-type: none"> <li>Temperature (°C, °F, difference-°C, difference-°F)</li> </ul>	IAQ probe (0632 1543) - 1 no	CO2 - 0 to 10000 ppm Humidity - 0 to 100% RH Temperature - 0 to 50 degC
			<ul style="list-style-type: none"> <li>Humidity (%RH, td°C, td°F, wet bulb °C, wet bulb °F, g/m3, g/ft3, g/kg, g/lb, kJ/kg, BTU/lb, ppm, Vol%)</li> </ul>	Pitot tube (0635 2045) - 1 no	Flow velocity - -1 to 100 m/s operating temperature - 0 to 600 degC
			<ul style="list-style-type: none"> <li>Flow velocity (m/s, ft/m)</li> </ul>	Hot wire probe with telescope (0635 1543) - 1 no	Temp -20 to 70 degC with +/-0.5 deg C accuracy, Humidity 0 to 100% RH with +/- 1.8% accuracy, Velocity 0 to 20 m/s with +/- 0.03 m/s
			<ul style="list-style-type: none"> <li>Pressure (Pa, hPa, mbar, kPa, bar, psi, inH2O, inHg, mmH2O, Torr</li> </ul>	K probe - immersion (0602 5693) - 2 nos	Measuring range: -200 to +1300 °C with accuracy class 1
			<ul style="list-style-type: none"> <li>CO2 (ppm, Vol%)</li> </ul>		
			<ul style="list-style-type: none"> <li>Memory capacity For approx. 10000 measurement protocols</li> </ul>		
6	FLI R	E50	Thermal imager with a range of -20 to 650 deg C		
			Digital camera with 3.1MP resolution		
7	Flu ke	62max	<ul style="list-style-type: none"> <li>Infrared thermometer</li> <li>temperature (°C, °F)</li> <li>Range - -30 to 500 degC</li> </ul>		
<b>FLUE GAS ANALYSER</b>					
8	Tes to	330	<ul style="list-style-type: none"> <li>Differential pressure -200 to 200 hPa, Absolute Pressure +600 to +1150 hPa, Flue gas O<sub>2</sub> - 0 to 25 Vol.%, Flue gas CO (with H<sub>2</sub>-compensation) - 0 to 10000 ppm., Temperature - -40 to +1200 °C,</li> </ul>	Probe (0554 9763) - 1 no	Tmax - 500 degC, Probe length - 300mm
			<ul style="list-style-type: none"> <li>Flue gas loss (calculated)</li> </ul>	Probe (0554 8764) - 1 no	Tmax - 1000 degC, Probe length - 300mm
			<ul style="list-style-type: none"> <li>Flue gas dewpoint (calculated)</li> </ul>		
			<ul style="list-style-type: none"> <li>Flue gas CO<sub>2</sub> calculation</li> </ul>		
			<ul style="list-style-type: none"> <li>Flue gas degree of effectivity, Eta</li> </ul>		
			<ul style="list-style-type: none"> <li>Storage max - 200 logs</li> </ul>		
			<ul style="list-style-type: none"> <li></li> </ul>		



S l n o	Ma ke	Model	Measures	Components/m easuring probes	Specification
<b>LUX METER</b>					
9	Am pro be	LM100	Range - 0 to 2 lakhs LUX		
<b>TACHOMETE R</b>					
1 0	Me tra vi	NCTM1 00	<ul style="list-style-type: none"> <li>range - 2 to 99,999 rpm with accuracy of +/- 0.05%</li> <li>sampling time - 0.5 sec</li> </ul>		
<b>INSULATION TESTER</b>					
1 1	ME CO	DIT 99C	500 V, 200Mohm, Digital insulation tester		

I hereby state that information furnished above is true and correct to the best of my knowledge.

Place: Thrissur

Date: 25-04-2018



Santhosh A  
Managing Director