

BABINDA ELECTRICS (CAIRNS)



Est. 1968

ELECTRICAL CONTRACTORS ENGINEERS SWITCHBOARD MANUFACTURERS

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Company Profile



Introduction

Babinda Electrics and B E Air Conditioning are Cairns owned and operated electrical engineering, contracting, switchboard manufacturing and Mechanical Services companies active in all types of Electrical and Mechanical Contracting. Our combined workforce in Cairns and the Torres Straits numbers at around 180 employees at last count.

We have an accredited QA system to Queensland Purchasing QA requirements that is audited by the Qld Government and we employ a full time Work Place Health and Safety Officer to assist in the implementation of Risk analysis and work methodology.

We also specialize in Cat 5E and 6 data cabling, optic fibre installations and communication networks. Our company is Molex, Krone and Siemon accredited and we are able to offer a 25-year warrantee for all data installations.

We are distributors and Service agents for the full range of Liebert UPS, Surge Suppression and Filter Systems.

Please find below a more detailed summary of the business undertakings of Babinda Electrics and our fully owned subsidiary companies BE Air Conditioning and SEMS Pty Ltd

Babinda Electrics

- ❖ General Electrical contracting including local and remote works with 44 years experience, including design and construction in commercial and industrial fields. Permanent branches in Cairns and Thursday Island.
- ❖ Switchboard Manufacture with extensive experience in Complex Main Switchboards, Motor Control Centres, Light and Power Boards, Mechanical Services Control, Generator Control and Sewerage / Water treatment Control.
- ❖ Installation works in the Sugar Industry and other specialised manufacturing / processing plants
- ❖ Water and sewerage treatment installations including pump supply and installation.
- ❖ Generator supply and installation including seamless transfer and co-generation. (Electrical and Mechanical)
- ❖ HV Installations for private facilities.
- ❖ Solar PV systems for commercial projects.
- ❖ Data and Communications installations to Cat 6 both Molex and Krone accreditation.
- ❖ Single Mode and Multimode Optic fibre installation, termination and testing.
- ❖ Supply and installation of data and communication racks and hardware for integrated communication systems.
- ❖ Queensland Education LAN works through our association with Molex
- ❖ CAD drawing for switchboard and control schematic design and reporting.
- ❖ PLC and SCADA control and monitoring systems.
- ❖ Telemetry systems.
- ❖ Ongoing scheduled maintenance programs for completed projects and 3rd party installations

SEMS Pty Ltd (owned by Babinda Electrics)

- ❖ Manufacturer's distributor for Emerson Liebert UPS and TVSS equipment sales and factory trained service.
- ❖ Suppliers of custom generating plant and control systems.
- ❖ Design of matched back up power supplies complete with UPS, Generating plant and surge suppression and filtration.

B. E. Air Conditioning (owned by Babinda Electrics)

- ❖ Suppliers and installers of Chilled Water, VRV-VRF, ducted and split system air conditioning systems including design and construct.
- ❖ Steam heating systems.
- ❖ Manufacturer and design of cold rooms and freezers
- ❖ Manufacturers of air conditioning and ventilation duct work and steel support systems.
- ❖ Sheet metal fabrication in zinc, galva bond, aluminium and stainless steel including switchboard cubicles.
- ❖ Generator installation (mechanical) including exhaust system fabrication complete with lagging, weather and attenuated louvers, ventilation systems, day fuel tanks.
- ❖ Manufacturer's distributor of Mitsubishi Electric air conditioning products.
- ❖ Mechanical installation of systems supplied by Babinda Electrics Pty Ltd including acoustic treatment, exhaust systems and cooling systems.

Our estimating department is geared to provide prompt budgets and tender submissions for all kinds of projects.

1. General Electrical and Mechanical Contracting

This enterprise prides itself on being a 1 stop shop for its clientele. From Babinda Electric's origins in the small sugar town of Babinda in 1968, we have grown to an Electrical and Mechanical contracting business that will rival any in Queensland.

We still provide a day to day service / installation part of the business that will be quite comfortable in installing a fan or a power outlet in a remote island school in the Torres Straits. This is then supplemented by a business model that also provides complete Electrical / Communication and complex Mechanical installations in the commercial, manufacturing and industrial markets to multi-million dollar projects in the private and public sector.

We have experience in providing services in hazardous locations and confined spaces. We also pride ourselves on providing flexible work practices that will fit into the overall construction program of a large contract.

2. Design and Construction.

This company has built a reputation for providing second to none solutions in the Design and Construct section of the Industry. We are able to bring to the table extensive experience in construction techniques and budget control and along with our chosen Consulting Engineering team provide a design that not only meets the clients exacting standards but provides real value for money.

This method of delivery was a proven success in the 2008 Mulgrave Central Mill Spray Ponds Upgrade Project that saw the design and construction of a 2 x 400 kW and VSD motor and drive installation for the upgraded spray pond cooling system. Babinda Electrics were employed to facilitate the planning and design of the cabling infrastructure and supply and installation of Switchboards, motors and drives.



One of the two 400 kW Spray Pond injection pump motors awaiting final commissioning at Mulgrave Central Mill supplied and installed by Babinda Electrics;

Two 400kW 415volt variable speed drives at the Mulgrave Central Mill supplied and installed by Babinda Electrics;



3. Switchboard Manufacturing

Babinda Electrics maintains a switchboard building division at our Newell Street facility in which we support a number of different board building systems. Our trained team is able to manufacture any LV switchboard up to and including 7000A per phase in any form required.



We utilise a number of construction types in some of the following applications:

Babinda Electrics Custom enclosure: - High Current Main Switch boards, MCCs, Pump and Process Control Boards, Meter Panels, MSSB boards, Weather Proof MSBs.

Cubic enclosure (Type Tested):- International Airport MSBs, Power Factor Control Boards, MSSB boards, Baggage Handling Control Panels, Hospital MSBs, Hospital DBs, Hospital Generation Boards.

Elsteel enclosure (Type Tested):- High Rise MSBs, High Rise DBs, High Rise Meter Panels, Fuel Station MSBs, Defence Installation Control Boards, Marine Panels.

B&R enclosure (Type Tested):- Sugar Mill extensions, High Rise MSBs, High Rise DBs Remote Meter Panels.

We specialise in the design, construction and installation of Main and Distribution Switchboards and Motor Control Centres and also the modification and repair of existing switch boards particularly in the Sugar Industry.



Partially complete modified bar work to ACB upgrade at Victoria Mill. Works carried out on site.



Bus bar and CT assembly for the Weipa Health Care Facility new Main Switchboard



Weipa Health Care Facility new
MSB awaiting dispatch from Newell
Street

4. Controls

Babinda Electrics Group switchboard division's personnel have experience in complex control system design, installation, testing and commissioning. With technicians that have detailed knowledge of pumping, motor starting, control circuitry, power generation and synchronization applications. Working in these fields has provided excellent experience in process control, PLC installation and programming, SCADA, data acquisition and field measurement devices.

5. Sheet metal.

At our Newell Street facility we operate a complete sheet metal workshop where custom made switch board cubicles are constructed and Air Conditioning ducting is fabricated for all of our projects. This enables us to keep full control of the manufacturing process and ensure all product is on time and correctly built.

6. Documentation and Manuals

We currently employ dedicated personal for the sole purpose of creating documentation/manuals for a completed project. This includes the manufacture of the manual, as constructed drawings in hard copy as well as electronic in which ever medium that is required; research all technical data relevant to the project to be included and any additional information required by the client.

7. High/Medium Voltage and Transformer Supply and Installation

We have provided HV installations up to 22kV for numerous clients over recent years. Installations include:

- The supply and installation of Kiosk style pad mount sub stations up to 1000kVA
- The supply and installation of indoor substations complete with HV switchboards, transformers and LV switchgear up to 3 x 1500kVA.
- Wharf mounted HV/LV 22kV/415V pad mount sub stations complete with under wharf cabling for both 22kV and 415V systems.
- Undergrounding of the Complete General Aviation 22 kV system at Cairns International Airport.
- HV Cable terminations and HV switching.
- Underground 22kV cabling, terminations and testing. Independent auditing is provided for all HV installations.



22kV Sub Station Cairns Base
Hospital – Supplied and Installed by
Babinda Electrics

8. Generator Supply and Installation

We have been involved in countless generation projects ranging from small stand by sets to multiple 1mW stand by and prime power installations. We have extensive experience in co-generation with supply authority mains and synchronization of multiple machines. Load shedding and load management systems have been common place.

Makes of Generators with which we have had recent experience are:

- Cummins
- Caterpillar
- FG Wilson – Perkins
- Volvo
- Detroit
- Daewoo
- John Deere

Our mechanical services subsidiary, BE Air Conditioning are skilled in the mechanical installations of generating plant including:

- Attenuated Louvres
- Acoustic applications to generator and plant rooms
- Engine exhaust installations
- Remote cooling systems including heat exchanger systems.

2 x 300 kVA generator supply and installation by Babinda Electrics



Specialised diesel fuel installations are carried out by a number of specialist sub contractors that we have developed associations with after many successful contracts. These installations range from purpose built day tanks to multiple in-ground fuel tanks as large as 10,000 lts

9. UPS Supply and Installation

SEMS Pty Ltd is a wholly owned subsidiary of Babinda Electrics and since 1999 has been the regions Sales and Service distributor for Emerson UPS. We are able to assist in Design, Supply and Installation of UPS and Power Protection applications for Large Data Centres, Servers and stand alone Computers. We have in the past provided complete data room packages including False Flooring and Air Conditioning.



10. Solar PV Systems.

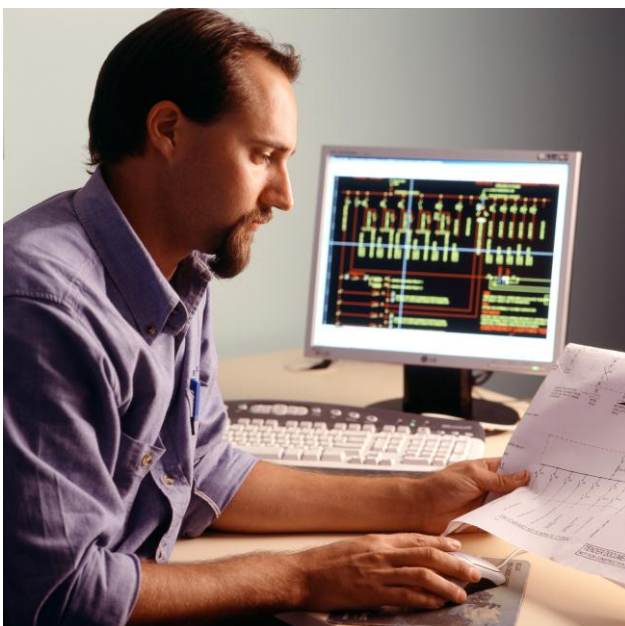
Babinda Electrics has put itself in position to take advantage of the increased interest and demand for Solar Energy systems. We have developed working relationships with a number of industry leaders in Queensland and have experience in the design and

installation of multiple installations for the School sector and large single installations for Energy wise commercial and industrial projects.



11. Design

Babinda Electric Group employs a number of full time staff skilled in the design and documentation of all aspects of the projects we embark on. We also draw on the skills of the industry by working closely with the specialists in any particular field to get the benefit of hands on experience from manufacturers and suppliers of the equipment to be incorporated to any project.



We have developed close working relationships with the electrical and Mechanical consulting industries in our region and have recently embarked on a number of projects

where the electrical engineering firm is working with us to bolster our design approach and provide registered engineering certification.

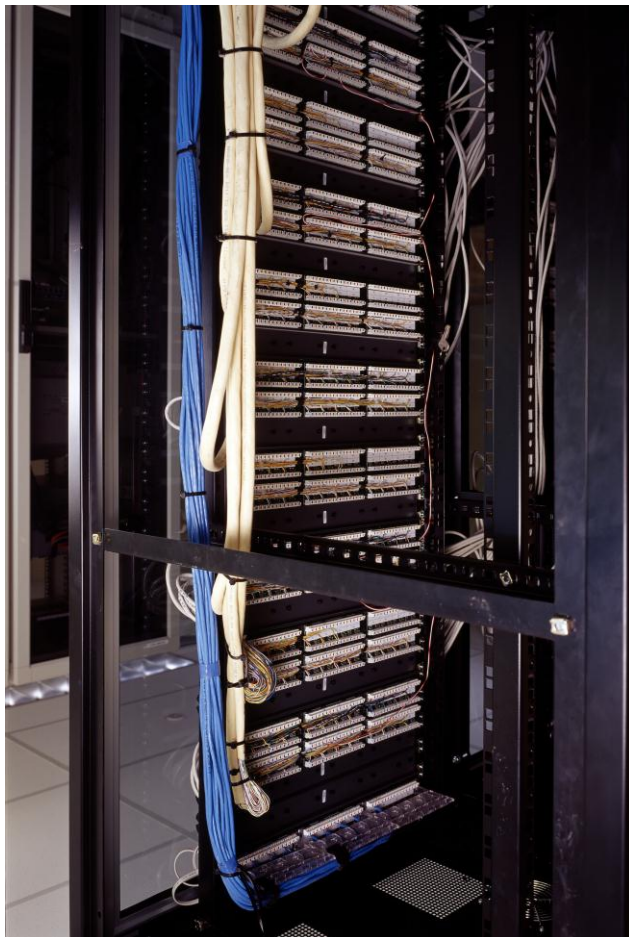
We have in-house drafting and plan printing to ensure all current and up to date documentation is produced and distributed to all relevant parties with no delay. Electronic transmittal and distribution is also a major part of our document control.

12. Labour Hire

We are more than happy to provide specialist labour hire services to industry customers. We have provided teams recently to Victoria Sugar Mill and Silcar at the Stanwell Kareeya Power Station at Tully for the 110 volt switching upgrade.

13. Communications

We are one of the leading suppliers of communication and structured cabling systems in our region. We have been involved in this part of the industry since the before the 1st Cat 5 installations became a reality. We have been accredited in both Molex and Krone systems for an extended period and more recently Siemon. We have extensive experience in Optical fibre installation, termination and testing.



Communications Rack James Cook University

We have provided Cat 5, Cat 5e, Cat 6 and both single mode and multimode optical fibre systems to all aspects of the industry from commercial, Education Queensland, Queensland Health, Queensland Government, Defense, Universities and international air and sea ports.

Complex communication involving telemetry from remote sites and wireless communications has also been undertaken with complete success.

14. Underground Cabling Installations

This business has geared itself to be considered a specialist in the supply and installation of underground conduit, cabling and pit construction. We have 2 of our own backhoes, 1 mini excavator and trench compacting equipment. Our underground cabling teams are kitted with up to date winching equipment to ensure all cable installations are completed safely, on time, on budget and electrically sound. We are Class A members of the Ergon URD panel.

15. Workplace Health and Safety.

Both Babinda Electrics and BE Air Conditioning have the same exacting standards of WH&S. We employ a fully trained full time WH&S officer who monitors and implements the safety standards that the companies are committed to. Full project safety plans complete with risk analysis and method statements are prepared for each project with those projects individual complexities in mind. We have a first rate record with injuries and time lost kept to an absolute minimum. Full rehabilitation programs are in place to ensure any employees that are unable to perform their normal duties are re-integrated back into the workforce as soon as possible.

16. Quality Assurance.

A fully audited and approved by the Queensland Government QA System is in place and is utilized to ensure the installations that we embark upon are carried out in the most efficient, timely and cost effective manner. All of our project Managers and staff are committed to both the WH&S and QA policies that are employed by the combined group.

We thank you for the opportunity of presenting Babinda Electrics, SEMS and BE Air Conditioning and would welcome any involvement in the coming projects you are undertaking.



**BABINDA
ELECTRICS**



BE AIR

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Distributors of quality power systems

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