



TECHNICAL SUBMITTAL

Project:	Newhouse Academy	T.S No:	SRP1019-ABE-ZZ-ZZ-TS-E-0002
A&B Contract No:	4015	Date:	11.07.2023
Engineer:	Jordan Thompson	Rev: C01	

F.T.A.O.	Name: Tony Watts & Greg Bush Organization: Morgan Sindall
Copies To:	Name: 4p

Plant Item:	Vehicle Charging Points
Specified Manufacturer:	Rolec
Proposed Manufacturer:	Rolec
Model Type:	Single – 1 x Type 2 Socket 7.4kW SPN 1 x 32A ROLEC0211B Dual – 2 x Type 2 Socket 7.4kW SPN 1 x 63A ROLEC0211B
Attachments:	• Specification datasheets • Refer to 7000 drawings

Approval Required By: A.S.A.P

<u>Response:</u>	
Date:	Signed:



ROLEC**EV**

BASICCHARGE

Intelligent EV charging pedestal



Manufactured
in the UK

BASICCHARGE

Intelligent EV charging pedestal

The BASICCHARGE is a simplistic and affordable EV charging pedestal. This versatile charger's integrated LED amenity lighting also provides greater visibility of the charging bays and surrounding areas.

This future-proof OCPP compliant pedestal can offer a simple plug & charge or pay-to-charge solution via the EV driver's smartphone and/or RFID card/fob through any chosen OCPP back-office management system.

Feature-rich, this EV charger supports dynamic load balancing and is equipped with PME fault detection, so there is no requirement for an earth rod, reducing installation costs.

Available in 1way or 2way versions, providing up to 22kW superfast charging.



Product features

- Plug & charge, mobile app or RFID controlled charging
- Choose from 1x or 2x universal charging socket(s)
- Up to 7.4kW or 22kW charging output(s)
- TruePEN PME fault detection (no earth rod required)
- Supports dynamic load balancing & static load management
- OCPP 1.6 compliant (can integrate with any back-office)
- Over-the-air firmware / software updates
- Built-in AC overload & fault current protection (RCBO)
- Built-in 6mA DC leakage protection
- Cable lock security feature (can be permanently locked by user)
- Integrated RFID reader
- LED amenity lighting head (Photocell controlled)
- MID-approved energy metering
- 4G / Wi-Fi / Ethernet connectivity
- IK10 impact resistant design
- Surface or root mountable
- OZEV grant fundable
- Designed & manufactured in the UK

Rolec EV's chargepoint management platform:

 VendElectric

Other preferred app & back-office partners:

 MONTA

 ev.energy

 Fuuse

 ChargePlace Scotland
electric vehicle charging

 Electric Miles



OCPP 1.6 compliant

Ability to integrate with any OCPP compliant back-office management system and app.



Easy to operate

Three quick and easy ways to operate: mobile app, RFID cards and fobs or plug & charge.



Office for Zero Emission Vehicles

Eligible for grant funding

This range is approved for grant funding via the OZEV Workplace Charging Scheme (WCS).



4G / Wi-Fi / Ethernet enabled

Complete with secure 4G, Wi-Fi and Ethernet connectivity, ensuring chargers are always online 24/7.



Branding & colour options available

Rolec offers a bespoke chargepoint branding service; from logos & brand colours, to vinyl wraps.



No earth rod required

Equipped with built-in TruePEN PME fault detection, saving installation time and costs.

The details

UP TO 22KW

Available in both single phase and three phase models, providing up to 22kW superfast charging.

BASICCHARGE is compatible with all EVs & PHEVs, charging at the fastest speed possible, ensuring vehicles are ready to go in no time.

2 WAY CHARGING

The BASICCHARGE is available in 1way and 2way versions, allowing up to two vehicles to charge simultaneously, using just one EV charging pedestal.

The perfect EV charging pedestal solution for fleet, workplace and private car park requirements.



ACCURATE BILLING

Built-in MID-approved energy metering ensures accurate consumption reporting, which is essential for businesses and residential car parks, wishing to bill for their usage. Use our back-office management platform to generate revenue by setting your own tariffs.

SAFE AND SECURE

Rest assured, Rolec's entire EV chargepoint range meets the currently required safety and security standards.

Over-the-air updates allow the chargers to receive the very latest features, ensuring a safe and future-proof product 24/7.

3 YEAR WARRANTY

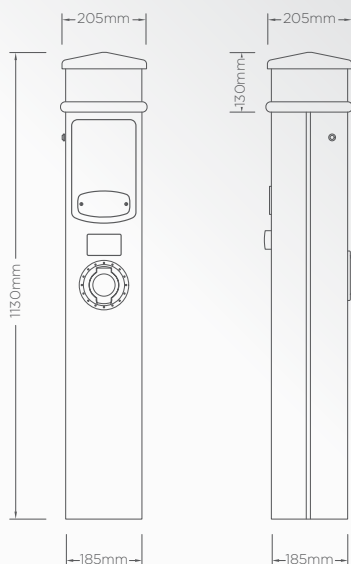
Rolec EV chargepoints are designed, developed and manufactured in the UK and come with a 3 year warranty included as standard, for added peace of mind on your investment.

Specifications

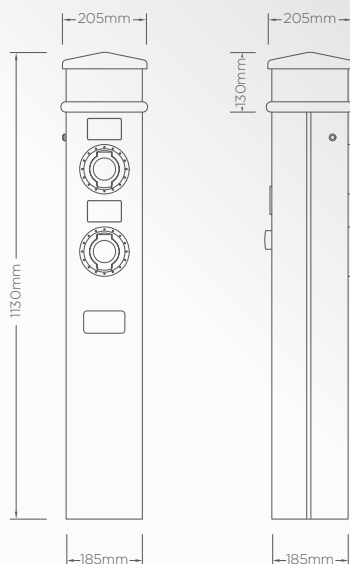
Product Overview:

	Connection Type	Charging Output	Input Supply	Unit Colour	Product Code
Single Phase Units	1x Type 2 (IEC 62196) charging socket	Up to 7.4kW (32A)	1x 32A Single Phase 230V AC ($\pm 10\%$) 50/60Hz	● Black	ROLEC0211B
				● Grey	ROLEC0211G
	2x Type 2 (IEC 62196) charging sockets	Up to 7.4kW (32A) per socket	1x 63A Single Phase 230V AC ($\pm 10\%$) 50/60Hz	○ White	ROLEC0211W
				● Black	ROLEC0221B
Three Phase Units	1x Type 2 (IEC 62196) charging socket	Up to 22kW (32A)	1x 32A Three Phase 400V AC ($\pm 10\%$) 50/60Hz	● Grey	ROLEC0213G
				○ White	ROLEC0213W
				● Black	ROLEC0223B
	2x Type 2 (IEC 62196) charging sockets	Up to 22kW (32A) per socket	1x 63A Three Phase 400V AC ($\pm 10\%$) 50/60Hz	● Grey	ROLEC0223G
				○ White	ROLEC0223W

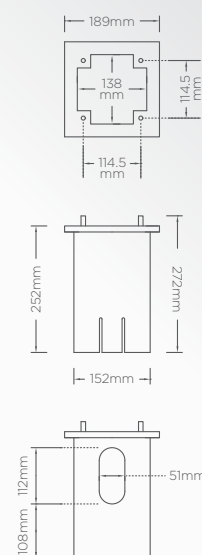
BasicCharge 1way unit:



BasicCharge 2way unit:



Ground mounting base:



Specifications

Technical Data:

User Interface	• Mobile app • RFID reader (MIFARE ISO/IEC 14443 A) • Plug & charge • RGB LED status indicator halo(s) – configurable
Charge Protocol	Mode 3 (IEC 61851-1)
Protection	• AC overload & fault current protection – 40A 30mA Type A RCBO (per socket) • DC fault protection – 6mA • Lightning surge, over temperature protection • TruePEN PME fault detection – No earth electrode/rod required • Supports automatic dynamic load balancing (may require additional hardware) • Supports static load management (software configurable)
Cable Terminals	• Single Phase – 3x 50mm 1P + N + E • Three Phase – 5x 50mm 3P + N + E
Communications	• 4G LTE Cat-1 (built-in nano SIM, subscription required) • Wi-Fi 802.11 b/g/n 2.4 GHz • RJ45 Ethernet connection • Bluetooth Low Energy (BLE 4.1) (for installer configuration purposes) • OCPP 1.6J • Cyber security – Data encryption level TLS 1.2
Energy Metering	Integrated Class 1 MID compliant metering
Amenity Lighting	360° Low energy LED • Rating – 2 x G9 2.3W LED, 230-240V AC • Colour temperature – 6500K • Protection – 6A 30mA Type A RCBO
Standby Power Consumption	< 7.5W (per socket, excluding lighting)
Dimensions	205mm x 1130mm x 205mm (W x H x D)
Weight	< 15kg (model dependant)
Environmental	• Ingress protection – Enclosure IP65, Socket IP54 • Impact protection – IK10 • Operating temperature – -30°C to +50°C • Operating humidity – 5% to 95%
Materials	• Substructure – Hot-dipped Galvanised Steel • Panel – 3.2mm Aluminium composite • Lens – High impact resistant 3mm Polycarbonate • Lid/collar – ABS Granulate Natural Polyethylene
Unit Colour	 Black  Grey  White  Other colours available upon request
Certifications & Compliances	• EV Charging Compliance – EN 61851-1:2019, EN 61851-22:2002 • Smart Charge Points – (SI 2021/1467) Ex. Schedule 1 • Wiring Regulations – BS 7671:2018+A2:2022 • EMC Compliance – EN 61000-6-3:2007+A1:2011, EN 61000-6-2:2005, 2014/30 /EU, SI 2016/1091 • Safety Compliance (LVD) – EN 62368-1:2014, 2014/35/EU, SI 2016/1101 • Communications / RED – EN 62311:2008, 2014/53/EU, SI 2017/1206 • Environmental Protection – BS EN 60529:1992+A2:2013 • Impact Rating – BS EN 62262:2002+A1:2021 • Metering – 2014/32/EU, SI 2016/1153 • RoHS – 2011/65/EU, SI 2012/3032 • REACH – 1907/2006, REACH etc. (Amendment) Regulations 2021 • Certification Markings – CE & UKCA
Warranty	3 years

Options & accessories

Product Code	Item Description
RFID0010	RFID card
RFID0020	RFID fob
GMCP0010	Ground mounting base for BasicCharge pedestal
EVCB0020	Root mount protection barrier – 48mm
EVCB0040	Surface mount protection barrier – 48mm
EVPS0010	EV parking sign – A4 landscape (Other sizes are available)
EVPP0100	5m 32A Type 2 to Type 2 charging cable
EVPP0107	10m 32A Type 2 to Type 2 charging cable
EVPP0105	5m 32A Three phase Type 2 to Type 2 charging cable
EVPP0108	10m 32A Three phase Type 2 to Type 2 charging cable (Other cables are available, including Type 1 options)
ACSR0125	100A up to 35mm ² screened CT clamp with 10m cable
EVAD3090	To add tamper & breach protection – BasicCharge (to meet Schedule 1 of Smart Charge Points Regulations – (SI 2021/1467))

RFID0010
RFID0020

EVCB0040

EVPS0010



GMCP0010



Branding & colour options available

Rolec offer a bespoke chargepoint branding service; from logos & brand colours, to vinyl wraps. This can be arranged at time of order. Contact Rolec for details.



EVPP0100

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BUSINESSES

WORKPLACE | COMMERCIAL | DEVELOPMENT | RESIDENTIAL | DESTINATION | FLEET



Managing chargepoints

Rolec EV's range of AC fast and DC rapid chargepoints are suitable for all types businesses. OCPP integration allows these units to be managed by any compliant back-office, including Rolec EV's own management platform, VENDELECTRIC.

VendElectric

- Full control of your own chargepoint network
- A future-proof and scalable solution
- Mapped network
- Customisable tariffs
- Generate revenue
- Smart reporting and analytical feedback
- Fleet management solutions
- Automatic fault notifications
- Over-the-air updates
- Optional electrical load management:

(Ideal for sites where the collective load may be greater than the electrical supply)



Other preferred back-office partners:

MONTA

Fuuse



ChargePlace Scotland
electric vehicle charging

Operating chargepoints

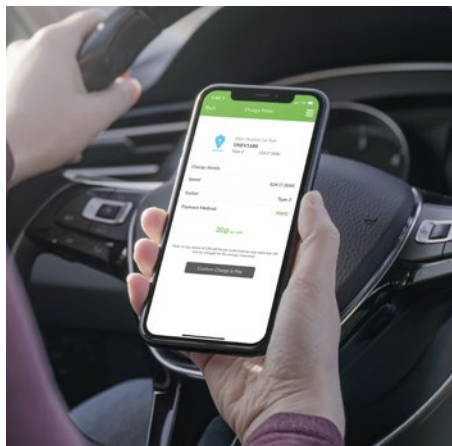
There are 3 quick and easy ways for drivers to operate the chargepoints: mobile app, RFID cards and fobs or plug & charge.



VendElectric app

Manage your charging activity whilst benefiting from an variety of features.

- Easily find and navigate to a chosen destination using the chargepoint map
- Sort and save favourite locations
- View current & past charge sessions
- Review statistics and analytical data
- Exportable data
(ideal for submitting benefit-in-kind claims)
- Live charge session notifications
- Virtual wallet for quick activation
- Multiple EVs can be added and used on a single registered account



DOWNLOAD THE APP



RFID card/fob

Ideal for workplace employees who frequently use the same charging points, whether for their own or their company vehicle. Hosts can assign an RFID to either the driver or a vehicle (VRM).



▶ For more about **VendElectric**, including data management pricing & plans, visit www.rolecserv.com/chargepoint-management-system

HOMES

HOUSES | FLATS | RENTED ACCOMMODATION | PRIVATE GARAGES & PARKING SPACES



Operating your chargepoint

Rolec EV's range of chargepoints for the home have been designed to provide an easy charging experience for EV drivers, allowing them to recharge their vehicle using their smartphone or handy RFID card/fob.

This range of chargepoints are OCPP compliant, enabling them to integrate with any compatible app the user desires.

Other preferred mobile app partners:

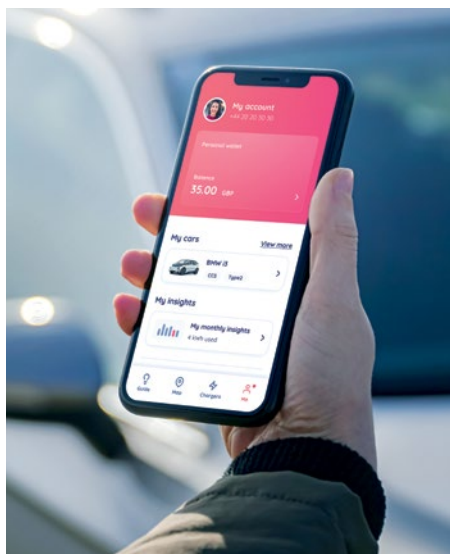
ev. energy



Monta app

Flexible charging at home, at work, or on the go. Smart charging just got smarter.

- Choose your ready time and choose to prioritise lower costs, lower CO₂ or only using renewable energy
- Schedule charges so your car is ready when you are
- Integrates with over 350 car models, check charges without leaving the app
- Share your chargepoint with others and set how much they should pay
- Access to over 195,000 public chargepoints across Europe
- Secure payment methods
- Automatic software updates & bug fixes
- Online chat or support line for help when you need it most



DOWNLOAD THE APP



RFID card/fob

Great for EV drivers who want to quickly activate their home chargepoint. RFID cards or key fobs are easily accessible and add for a much simpler charging experience, which can also be used alongside the mobile app.



► For more details about the monta app, go to www.monta.com/uk/home-charging



THIS DOCUMENT CONTAINS INFORMATION THAT IS SUBJECT TO CHANGE WITHOUT NOTICE.
The latest version of this publication can be downloaded at <https://www.rolecserv.com/downloads-ev-charging>

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EVBD-V02-R0 BasicCharge Data Sheet



ROLECEV

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CHARGING PLATFORM OVERVIEW



EV driver operation via
smartphone or RFID

ENABLING YOU TO **MANAGE & OPERATE** **YOUR OWN** CHARGING NETWORK

VENDELECTRIC is a unique EV charging platform providing businesses, organisations and similar with the ability to deploy and self manage their very own EV charging network without having to incur any of the significant costs associated with developing a back-office, phone app and secure payment/management platform.

- ✓ **NO** Driver Annual Membership Fees
- ✓ **NO** Driver Monthly Subscription Fees
- ✓ **NO** Driver Connection Fees

VENDELECTRIC PAY-TO-CHARGE
PAYMENT PARTNERS/ASSOCIATES



*“VENDELECTRIC provides the operator with
complete chargepoint network visibility,
management and monitoring”*

A SELECTION OF VENDELECTRIC FEATURES



Smart Charging
Network



Mobile App / RFID
Operated Charging



Operator
Management



Optional Revenue
Stream



Analytical
Feedback



Customisable
EV Driver Tariffs

BENEFITS OF VENDELECTRIC...

...FOR YOUR BUSINESS/ORGANISATION

✓ You're In Complete Control

Unlimited use of an industry leading back-office platform enabling you to have full management and control of your entire EV charging network.

✓ Future-proof & Scalable Solution

Manage single or multiple charge points with the option to accommodate private network charging (staff members, fleet drivers etc), ensuring your chargepoints are secure from unauthorised usage. Add more EV charging points to your infrastructure as and when demand increases.

✓ Mapped Network

Complete mapped overview of your network as well as the ability to group your chargepoints at your premises/sites using the platform's interface.

✓ Customisable Tariffs

Operate your charging points via pay-to-charge, free-to-charge or BIK options. For example, you may wish to offer free charging to employees, whilst providing visitors with a pay-to-charge service.

✓ Generate Revenue

Immediate revenue stream by simply setting your own EV charging tariffs, with the ability to change as and when you wish to suit your business requirements. The revenue summary page provides you with a clear itemised overview of your generated revenue.

✓ Smart Reporting & Analytical Feedback

Full visibility of real-time chargepoint activity, monitoring and energy usage all at the click of a button, helping you understand charging behaviours and where further infrastructure is required. You can easily access and export all historic data and reports.

✓ Fleet Management Solutions

Ability to assign RFID card/fobs to drivers or vehicles which can then be used to authorise charging sessions. There is also the option to restrict chargepoints to specific VRMs (Vehicle Registration Marks), making the ideal solution for fleets.

✓ Automatic Fault Notifications

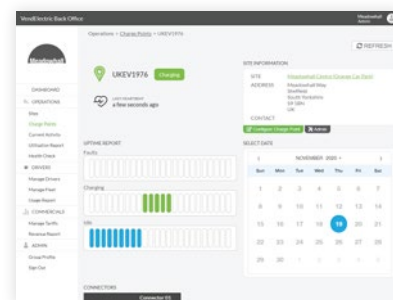
Fault notification feature allows the VENDELECTRIC team to provide support when required.

✓ Over The Air Updates

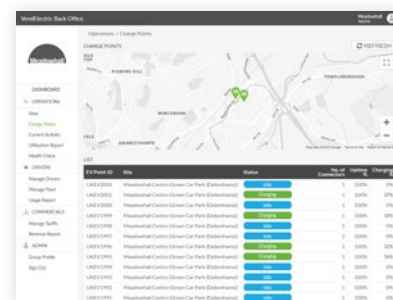
VENDELECTRIC's OCPP integration enables remote over the air firmware updates ensuring you're always on the latest version.

✓ Optional Electrical Load Management

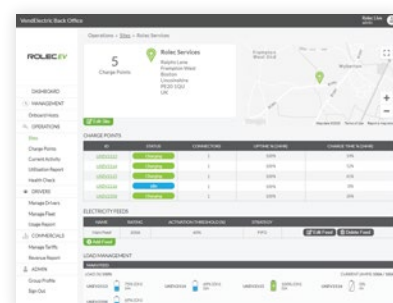
Ideal for locations that require multiple EV charging points where the collective load may be greater than electricity supply. The optional load management feature ensures all charging facilities are available for use.



Chargepoint Summary Screen



Chargepoint Network Screen



Site and Load Management Screen



BENEFITS OF VENDELECTRIC...

...FOR THE EV DRIVER

✓ Easy To Operate

The EV driver plugs in to the chargepoint and activates their charging session by simply scanning the chargepoint's QR code using their smartphone's camera. Alternatively, they can enter the socket ID number via the VENDELECTRIC app or present their chargepoint host issued/personal RFID cards/fobs (eg. vehicle/charging network/security access).

✓ No Upfront Costs

There are no hidden fees, unnecessary charging network membership, subscription or connection fees.

✓ Secure Payment Platform

For chargepoints that are set to operate on a pay-to-charge tariff, the user pays for the charge advertised on the app using secure Visa, MasterCard and JCB payment methods via Opayo.

Opayo

VISA



THE VENDELECTRIC APP FEATURES



Locate & Navigate

Easy to find and navigate to a chosen charging point



My Favourites

Save your favourite charging locations for future use



Charge Sessions

View all of your current and past charging session information



Statistics & Analytics

Understand your EV charging activity/behaviour



Exportable Data

Ideal for submitting your benefit-in-kind claims



Live Notifications

Receive charging session notifications and alerts



Virtual Wallet

Top-Up a virtual wallet which makes activating a charge much quicker



Multi Vehicle Access

Multiple EVs can be added to a single registered account

DOWNLOAD THE APP



3 YEAR DATA MANAGEMENT PRICING & PLANS

	Essential	Premium
OZEV GRANT ELIGIBLE:		
WCS (Workplace Charging Scheme)	✓*	✓
USER ACCESS:		
Plug & Play Charging	✓	✓
Mobile Phone App		✓
RFID Card/Fob		✓
HOST MANAGEMENT:		
Unlimited Back-Office Platform Access		✓
Chargepoint Management Dashboard		✓
Visibility Of Your Entire Chargepoint Network		✓
Real-Time, Historical & Analytical Feedback		✓
Customisable Tariffs		✓
Optional Revenue Stream**		✓
Private, Public & Fleet Charging Options		✓
Exportable Usage, Revenue & BIK (Benefit In Kind) Data		✓
Automatic Maintenance Response Notifications		✓
Electrical Load Management*** (Optional)		✓

* PLEASE NOTE: The VendElectric Essential management plan provides the host with an automated quarterly chargepoint consumption report as required in order to meet eligibility for the OZEV Workplace Charging Scheme Grant (WCS).

** All revenue will be subject to a 7.5% payment processing fee which will be deducted from the Host prior to payment of the agreed payment schedule.

*** Subject to additional costs.

£50
per 3 Years
(each socket)

£135
per 3 Years
(each socket)



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ADDITIONAL COSTS

CONNECTIVITY

To connect a chargepoint(s) to the VENDELECTRIC network via GPRS a SIM card is required. The below costs cover the SIM card connection for a 36-month period:

- 1way OCPP unit - £45 per SIM
- 2way OCPP unit - £65 per SIM

Should you wish to have the units solely Ethernet connected, the SIM card costs above will not apply.

COMMISSIONING

A remote commissioning fee of £30 per unit is applicable on the premium data management plan.

Commissioning is to be carried out by the client's appointed installer with support from a VendElectric back-office representative via telephone, if required.

DC chargepoints may require on-site commissioning***

OPTIONAL LOAD MANAGEMENT

Additional costs apply which are determined by the installation / site's specific requirements.

PRICING EXAMPLE

3 YEAR ESSENTIAL PLAN				
UNIT TYPE	DESCRIPTION	QTY	PRICE (£)	TOTAL (£)
1way Charging Unit	Essential Plan Data Management Fees (per socket)	1	50.00	50.00
	1way Unit GPRS SIM	1	45.00	45.00
2way Charging Unit	Essential Plan Data Management Fees (per socket)	2	50.00	100.00
	2way Unit GPRS SIM	1	65.00	65.00

3 YEAR PREMIUM PLAN				
UNIT TYPE	DESCRIPTION	QTY	PRICE (£)	TOTAL (£)
1way Charging Unit	Premium Plan Data Management Fees (per socket)	1	135.00	135.00
	1way Unit GPRS SIM	1	45.00	45.00
	Remote Commissioning (per unit)	1	30.00	30.00
2way Charging Unit	Premium Plan Data Management Fees (per socket)	2	135.00	270.00
	2way Unit GPRS SIM	1	65.00	65.00
	Remote Commissioning (per unit)	1	30.00	30.00



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EVVESO-V01-R3 VendElectric - System Overview Sheet