VDC00578

VALID PORTABLE EV CHARGER

OPERATION MANUAL

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Edited by JS

Contents

Safety 1

DANGER: RISK OF SHOCK, FIRE, OR DEATH

Always refer to the instructions provided in your vehicle's user manual to ensure that the vehicle is ready to charge.

- Connection of EV charger to source power to be performed by certified personnel only.
- Never insert fingers or any foreign object into the vehicle connector.
- Do not use this product if the flexible power cord is frayed or damaged in any other way.
- Do not use this product if the enclosure and / or the EV connector are open or appear damaged in any way.
- Use appropriate protection when connecting to the main power distribution cable.
- Do not disassemble the charger.

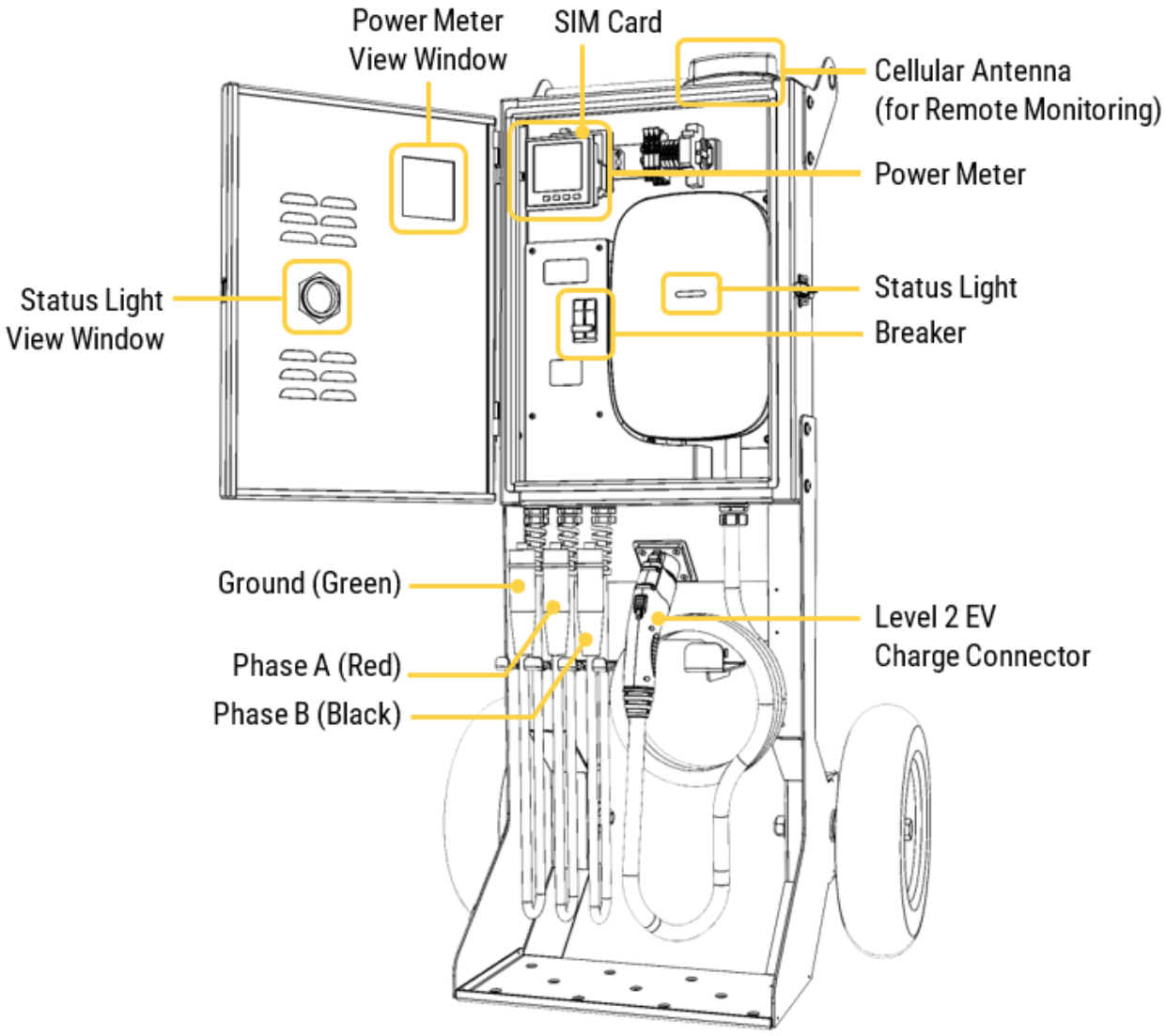
CAUTION

- Do not use the charging cable to lift or move the charger.
- Never spray liquid into the charging unit's connections or onto the charging plug.
- Never immerse the unit or the plug into liquid.
- Always use the cable and plug holders when not in use to avoid damage or a tripping hazard.

Introduction 2

The Valid Portable EV Charger is a portable solution for charging electric vehicles where there is an appropriate power source.

2.1 Unit at a Glance



2.2 Specifications

Rated Input Voltage	200-240 VAC / Single Phase
Rated Output Current	80A
AC Power Frequency	50/60 Hz
Input Protection	UVP, OVP, RCD, SPD, Ground Fault Protection
Output Protection	OCP, OTP, Control Pilot Fault Protection
Output Interface	SAE J1772 AC Charging Connector
Storage Temperature	-4°F(-20°C) to+ 158°F(70°C)
Relative Operation Humidity	95% RH Maximum
Relative Storage Humidity	95% RH Maximum
Protection Level	Enclosure Type: 3R
Dimensions	18.28in W x 52.66in H x 23.09in D (464.3mm W x 1337.6mm H x 586.5 mm D)
Charge Cord Length	18 ft (5.48 m)

2.3 Status Light

A status indication light is visible through the window on the front of the enclosure. See "Unit at a Glance" on the previous page.

Light	Status
Blue Light	Standby
Green Light	Waiting for charge. After the vehicle connector is connected to the vehicle inlet, the charge light is constantly lit.
Green Light Flashing	Charging
Red Light	Fault light. Refer to "Red Status Light Codes" on page 13 for more information on red light status .
Blue Light Flashing	App setup mode

Charging an Electric Vehicle 3

CAUTION

- Always refer to the instructions provided in your vehicle's user manual to ensure that the vehicle is ready to charge.
- Always follow the safety instructions for operation of the charger. For more information, see "Safety" on page 4.

To charge a vehicle, the order of operations is:

1. Connect the camlock cables to a power source.
2. Connect the Valid Portable EV Charger to the vehicle.

After charging is complete, the order of steps is reversed:

1. Disconnect the vehicle from the Valid Portable EV Charger.
2. Disconnect the 3 camlock cables from the power source.

3.1 Camlock Connections

WARNING

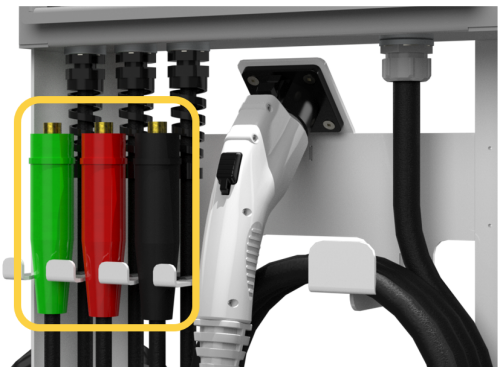
- Connection of the Valid Portable EV Charger to the power source using the camlock connectors should be performed by electrical certified personnel only.
- Do not connect the EV charger to a live power source. Ensure the breaker is turned off before connecting the camlock connectors.

The Valid Portable EV Charger is designed to be connected to a 200 - 230 VAC power source.

The charger has three camlock connectors:

- Hot One (black)
- Hot Two (red)
- Ground (green)

Connect these three camlocks to the proper attachments on a suitable power source.



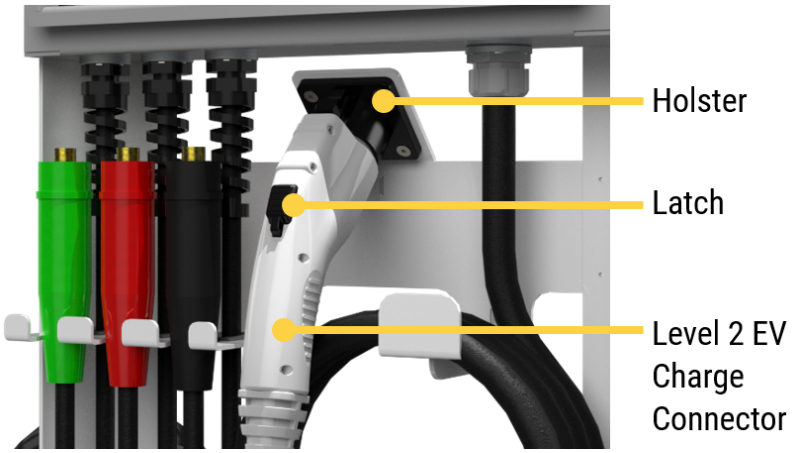
IMPORTANT Connect in this order: Ground (green) ➔ Phase A (red) ➔ Phase B (black)

After the camlocks are connected, turn on the power from the power source to the Valid Portable EV Charger.

3.2 Connect to a Vehicle

To connect to a vehicle:

1. Hold the latch down to remove the connector from the holster.
2. Still holding the latch down, insert the connector into the vehicle inlet.
3. Release the latch to lock the connector into position.



The charging process starts automatically, and the status light flashes green.

NOTE Refer to "Status Light" on page 6 for more information on the status light.

3.3 Disconnect from a Vehicle

To stop the charging process, press and hold the latch on the charge connector and remove the connector from the vehicle.

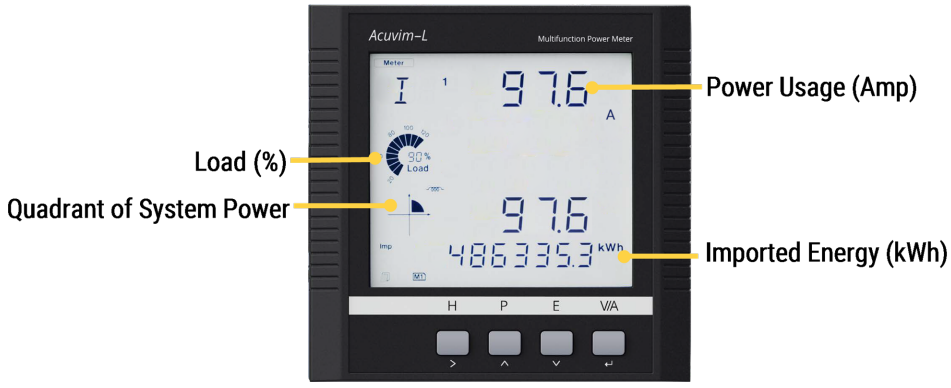
Usage Monitoring 4

Power usage can be monitored in three ways:

- Via a power meter display, visible through the larger of the two windows on the front of the box.
- Within a close range, a local Wi-Fi network allows data to be viewed and downloaded on a mobile device.
- Remote monitoring and data download is available on AcuCloud, a cloud-based energy metering platform.

4.1 Power Meter

The power meter is visible through the front square window and displays real-time measurement of current and kWh usage.



4.1.1 Display Elements

The top line displays current power usage in amps.

The load is shown in percentage (relative to maximum load rating).

The graph displays the quadrant of the system power.

4.2 Monitor Over Wi-Fi

When located within a close physical range of the Valid Portable EV Charger, it is possible to view and download data on the dashboard for the AccuEnergy power meter.

The unit serial number is required to connect to the Wi-Fi network. The serial number can be found on the inside of the unit.

Connect to the Wi-Fi network of the power meter:

Example: Wi-Fi network: 562889-01_EVCE-800
Password: SP6477VM

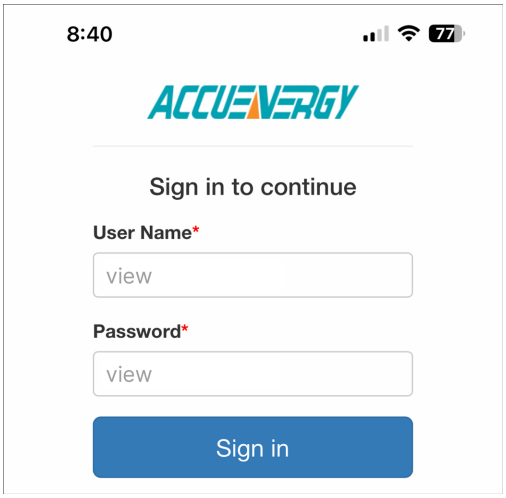
NOTE EVCE-800 refers to the model. 562889-01 refers to the serial number.

Open a web browser window.

In the URL bar, enter **192.168.100.1**

Log in. The default login credentials are as follows:

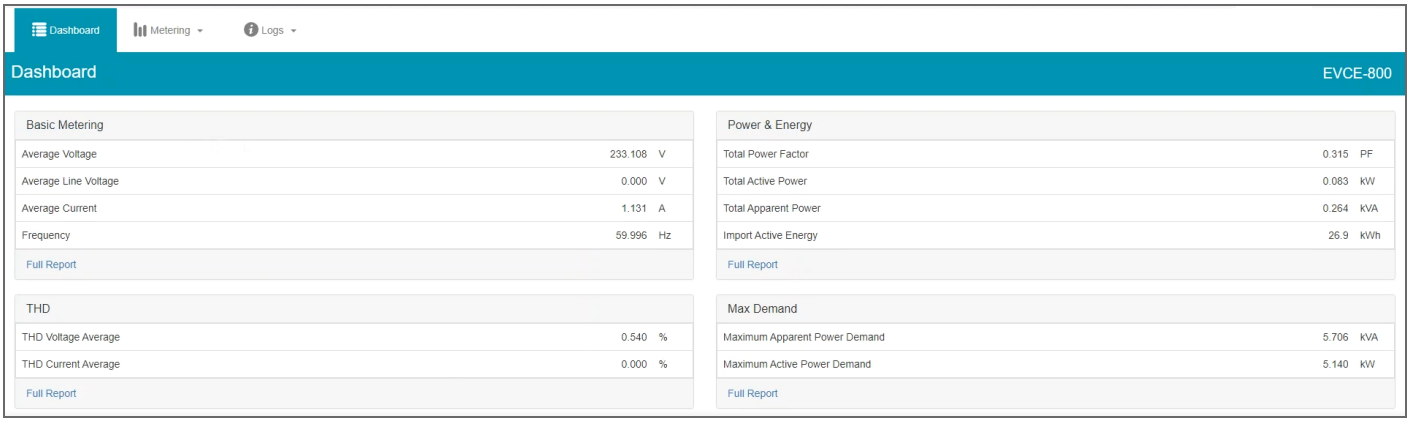
User Name	Password
view	view



NOTE If one user is logged on to a device and another user wishes to log on to the same device, the first user's connection will be terminated.

4.2.1 View Dashboard

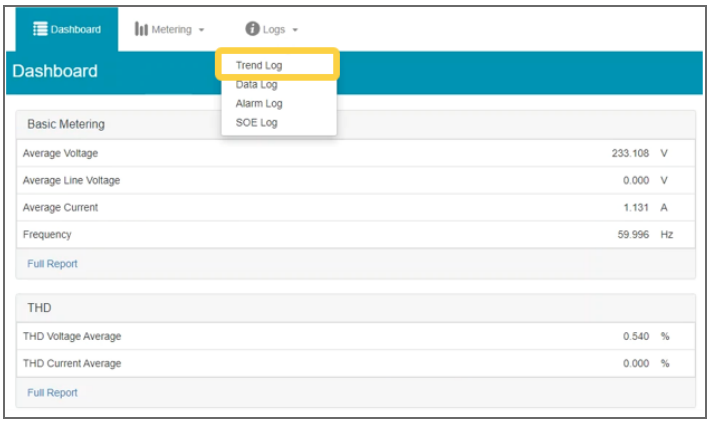
A variety of screens can be accessed after login.



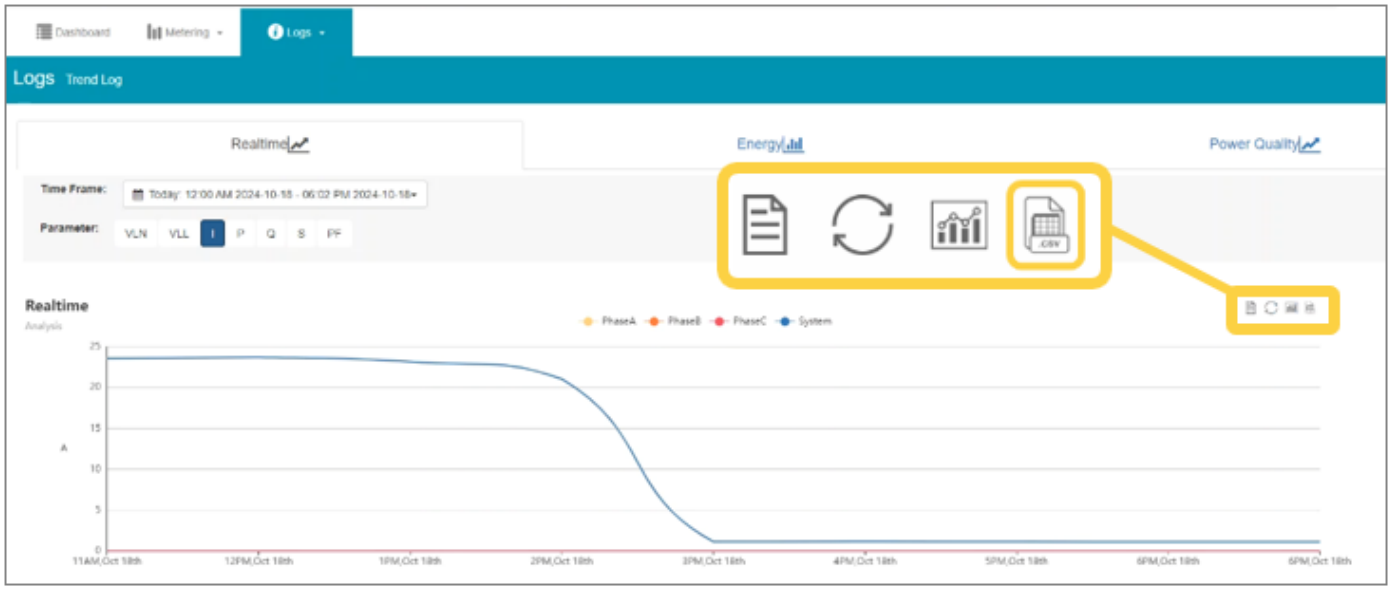
The Dashboard displays reports on basic metering, power and energy, THD, and max demand; with a full report available for each of these.

4.2.2 Trend Log

Select the drop-down menu to go from the dashboard to the logs screen. Select **Trend Log** to view an energy usage log.



On the log screen, the data may be downloaded if desired. Select the rightmost icon to the right above the graph.



NOTE Depending on your device, you may be given the option to either view or download the data.

4.3 Monitor Over AcuCloud

AcuCloud is an energy management platform for monitoring and analysis.

With an AcuCloud account, it is possible to view usage data provided by the power meter in the Valid Portable EV Charger.

Go to **https://acucloud.accuenergy.com/** and create an account. If you are an end user, an account may already have been created for you.

4.3.1 Analysis

Select **Analysis** on the side menu bar. Ensure **562889-01_EVCE-800** is selected to view energy usage in real-time or over a given period in the past.

At the top of the main window, the **Energy** button displays the accumulative analysis of kWh usage, with an option to display temperature.

Troubleshooting 5

WARNING

Always use care when dealing with electrical connections.

Situation	Action
Charge light is not on.	Ensure the charge plug is correctly inserted into the inlet, adequate power is supplied to the unit, and breakers are on. Wait 10 seconds. If light is still not on, then cycle power to the unit.
Fault indicator flashes red during charging process.	Indicates a temporary error. Wait for this error to be resolved. If fault indicator does not change back to green within 10 seconds, then cycle power to the unit.
Fault indicator is solid or flashing red. Refer to "Red Status Light Codes" below	A critical error has occurred. Unplug the charging connector and then cycle power to the unit.

If an error situation persists, contact Valid Manufacturing at 250-832-6477 or by email at **Support_PG@validmfg.com**.

5.1 Red Status Light Codes

Status	Red LED	Comment
Emergency Fault	On solid	Power cycle
Input Over Voltage (OVP)	1 flash followed by 3 second pause	Auto recover
Input Under Voltage (UVP)	2 flashes followed by 3 second pause	Auto recover

Status	Red LED	Comment
Output Over Current (OCP)	3 flashes followed by 3 second pause	Auto recover (Pull out the charging connector) **NOTE** If an Over Current error occurs, the charger automatically makes two attempts to restart the charging process.
Over Temperature (OTP)	4 flashes followed by 3 second pause	Auto recover
RCD Abnormal	5 flashes followed by 3 second pause	Auto recover (Pull out the charging connector)
Ground Fault	6 flashes followed by 3 second pause	Auto recover
Control Pilot Fault	7 flashes followed by 3 second pause	Auto recover (Pull out the charging connector)
Relay Fault	8 flashes followed by 3 second pause	Contact Customer Service
RCD Self-Test Fault	9 flashes followed by 3 second pause	Contact Customer Service
Relay Self-Test Fault	10 flashes followed by 3 second pause	Contact Customer Service
Meter Fault	Steady flashing	Contact Customer Service

5.2 Charge Interruption

A charging session may be interrupted by a temporary error condition or by a charge circuit interrupting device (CCID) trip.

5.3 Recovery After a Power Outage

The charger is programmed to restart automatically after a power outage. No user authentication is required for this restart.

NOTE There will be a grid-protection delay of between 5 and 100 seconds before the unit will restart.

Ensure that this information is kept in a safe place.

Warranty Terms

COVERAGE: This warranty applies to the original purchaser and subsequent owners, subject to the approval of Valid Manufacturing Ltd. (hereafter, referred to as VML).

WARRANTY PERIOD: The warranty period of 12 months begins on the satisfactory commissioning of the system.

DEFECTS: This warranty covers repairs to correct any malfunctions occurring during the warranty period resulting from defects in material or workmanship.

REPAIRS: To obtain warranty repairs, you must request the required repairs within the warranty period from VML. On-site warranty and repair service will be provided by Valid or its authorized representative. VML will endeavor to perform the requested repairs in a reasonable amount of time. However, there may be situations where the warranty repairs may be performed by the owner's organization or a third party. Reasonable parts and labour cost (as determined by VML) will be reimbursed. Labour rates and estimate of required time will be confirmed and approved prior to the commencement of the repair work.

SERVICE SUPPLIES: Any supplies used during servicing which become unusable because of required warranty repairs are covered by this warranty.

SHIPPING CHARGES: Any charges incurred for the shipping of parts from VML to the repair location which needs emergency warranty repairs to be made operational are covered under this warranty, with prior approved by VML.

This Warranty Does Not Cover

ADDITIONAL LABOUR: Labour required to render VML components accessible for required warranty service.

MAINTENANCE: Repairs and service adjustments caused by accident, misuse, negligence, abuse, non-authorized modifications, damage, fire, parts not supplied by VML, failure to perform required maintenance, and failure to perform modifications as requested by VML.

OTHER EXPENSES: Any economic loss, including communication expenses, meals, lodging, loss of operation, loss of revenue, loss of time, inconvenience, or any other cost or expense resulting from a defect covered by this warranty.

Warranty Claims

CLAIM NOTIFICATION: To make a claim, the claimant must contact VML and request an RMA (Return Material Authorization), stating with the part number and, if possible, the kiosk number. An authorization number will be supplied to the claimant.

TIME LIMIT: The claimant must notify VML of any defect occurring during the warranty period within 30 days from the date the defect becomes apparent. Out-of-date claims are subject to rejection.

REIMBURSEMENT: VML will reimburse the claimant for the cost incurred in the repair or replacement (including shipping) of defective parts. The reimbursement will be based on the number of required man-hours at a pre-approved base rate.

PARTS TO BE RETURNED: All parts must be returned to VML for warranty approval and processing. The assigned RMA number must be attached to the part.

Contact

Valid Manufacturing Ltd.

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CANADA

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