NEOVOLTA

Technical Product Notes

NV7600 ESS EPO and RSS Initiation Device

DATE CREATED:	TN NUMBER:	PREPARED BY:
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Per NEC 2023 Section 706.15, a disconnecting means is required for Energy Storage Systems (ESS)

Details:

This note covers the integration of an external ESS & PV RSS emergency shutdown disconnect device with the NV7600 Inverter.

Connect an external **emergency shutoff switch (EPO)** to the **B/B terminals** on the Master Inverter. Turning this switch on (closing the circuit) will shut down the entire ESS. To initiate the ESS for complete shutdown, the ports/pins (B/B) need to be closed.

Note: RSS devices such as TIGO or APsmart need to either be powered by the backup loads panel; or the external EPO or disconnect switch may be wired directly to the + / – auxiliary terminals.

Caution: The + / – auxiliary terminals provide 12 VDC output only, with a maximum current of 1 A. For TIGO CCA and optimizers, use an external power supply powered from the backup loads panel.

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NEC 2023 Code Verbiage:

706.15 Disconnecting Means.

(A) ESS Disconnecting Means. *Means shall be provided to disconnect the ESS from all wiring systems, including other power systems, utilization equipment, and its associated premises wiring.*

N (B) Location and Control. *The disconnecting means shall be readily accessible and shall comply with one or more of the following:*

(1) Located within the ESS

(2) Located within sight and within 10 feet from the ESS

(3) Where not located within sight of the ESS, the disconnecting means, or the enclosure providing access to the disconnecting means, shall be capable of being locked, in accordance with 110.25

Where controls to activate the disconnecting means of an ESS are used and are not located within sight of the ESS, the disconnecting means shall be lockable in accordance with 110.25, and the location of the controls shall be marked on the disconnecting means.

For one- and two-family dwellings, an ESS shall include an emergency shutdown function to cease the export of power from the ESS to premises wiring of other systems. An initiation device(s) shall be located at a readily accessible location outside the building and shall plainly indicate whether in the "off" or "on" position. The "off" position of the device(s) shall perform the ESS emergency shutdown function.

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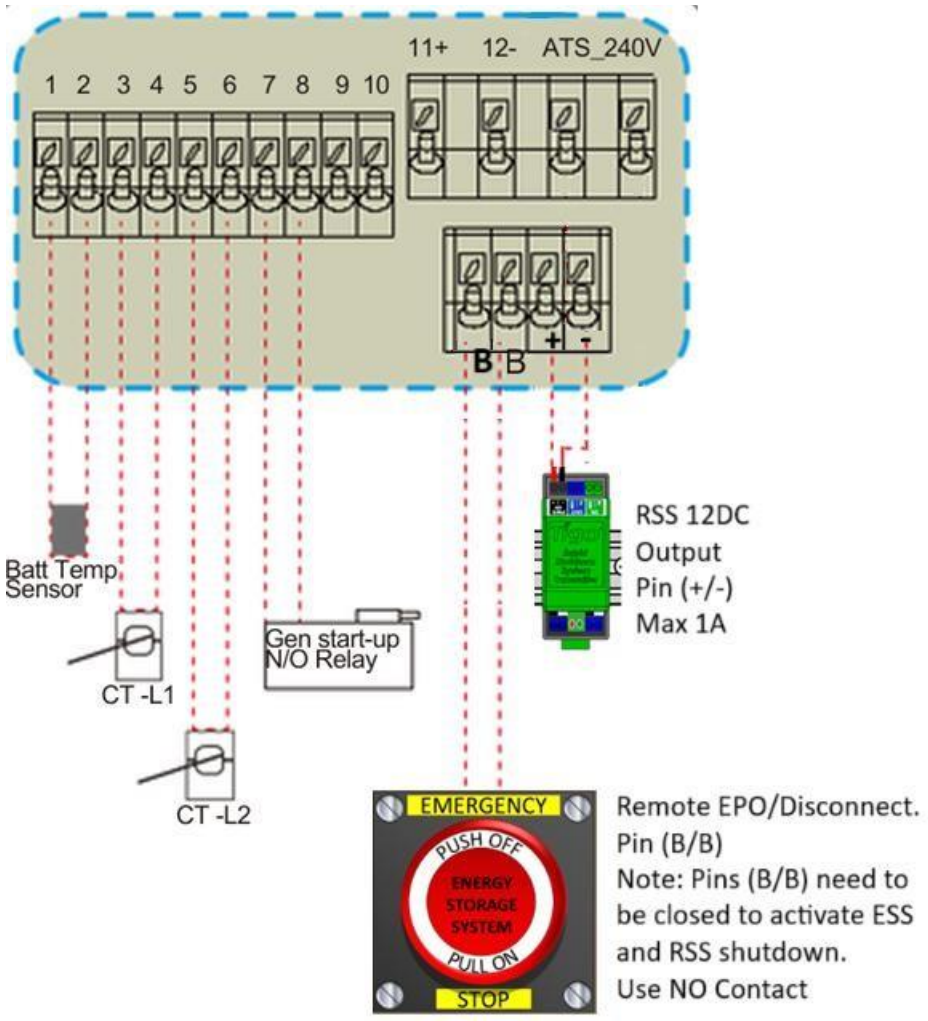
NV7600 Auxiliary Function Ports/Pins:



When the Port/Pins (B/B) terminals are closed, the inverter performs a complete shutdown and ceases power delivery to the backup loads panel. When the inverter shuts down, the + / – terminals lose 12 VDC, which powers off the RSS and triggers PV rapid shutdown (RSD).

Version	Revision Date	Brief Description of Change
V1.0	12/19/2025	Document Published