

WATLOW®

Watlow's ECO-HEAT® Functions as Your System's Smart Internal Load Bank



Maximize Generator Performance

- > Eliminate the need for an external load bank
- > Place exhaust heat exactly where it is needed
- > Reduce fuel consumption by over 50% as compared to an external load bank
- > Enable passive diesel particulate filter (DPF) to regenerate more effectively
- > Avoid unplanned downtime and expensive service calls



The ECO-HEAT system installs directly in the exhaust pipe to save space and provide efficient heating of the aftertreatment system.

Watlow's
ECO-HEAT® System Ideal
for Diesel Generator
Aftertreatment Systems





Watlow's ECO-HEAT System for Diesel Generators up to 9L

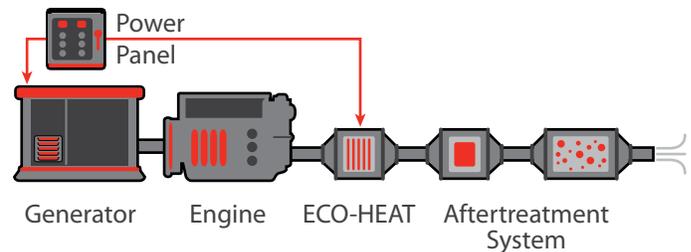
Low exhaust gas temperatures (resulting from low load or low ambient conditions) can compromise the performance of your diesel generator's aftertreatment system and eventually lead to unplanned downtime and expensive repairs. Whether your aftertreatment configuration has a DPF, an SCR or just a DOC, Watlow's ECO-HEAT system delivers reliable electric heat that can quickly raise the exhaust gas temperature to the correct level.

Designed to be installed in the exhaust pipe, the ECO-HEAT system places heat directly where it is needed. It uses electricity from your diesel generator to operate when exhaust gas temperatures are too low. Unlike an external load bank that requires additional space and wastes heat to the surrounding environment, the ECO-HEAT system is compact and efficient. You can think of it as a smart internal load bank for your diesel generator. When you place a higher load demand on your generator, the ECO-HEAT system will shut off as the engine exhaust temperature reaches an acceptable threshold.

Heater Selection Matrix

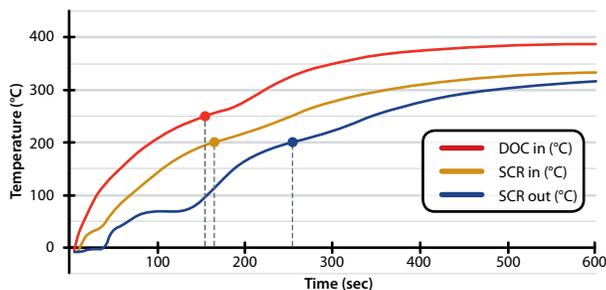
(200-480V Input Required)

Length inches (mm)	Heater Size O.D. inches (mm)	Number of Elements	kW
14.5 (368.3)	9.65 (245.1)	12	50
14.5 (368.3)	9.65 (245.1)	12	40
14.5 (368.3)	9.65 (245.1)	12	30
8.5 (215.9)	9.65 (245.1)	6	25
8.5 (215.9)	9.65 (245.1)	6	20
8.5 (215.9)	9.65 (245.1)	6	15
8.5 (215.9)	7.15 (181.6)	6	18
8.5 (215.9)	7.15 (181.6)	6	15
8.5 (215.9)	7.15 (181.6)	6	12



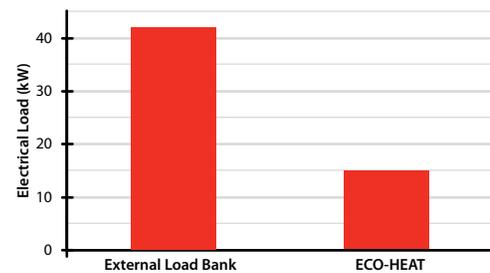
Watlow's DIN-A-MITE® power switches and EZ-ZONE® heater controls complete the ECO-HEAT thermal system. The exact power switching needs are determined based on the amperage for your application.

**Cold Start After Overnight Soak (-8°C/17.6°F outdoor ambient)
DOC-SCR Aftertreatment, 25kW ECO-HEAT Installed Pre-DOC**



On a 7L generator that was cold-soaked outdoors overnight, a 25kW heater was able to achieve DOC light off (250°C) in just 155 seconds and SCR light off (200°C) in 165 seconds. Full SCR heating to an outlet temperature of 200°C was reached in only 255 seconds.

**Load Required to Reach 315°C/600°F
Passive DPF, ECO-HEAT Installed Pre-DPF**



In this testing conducted on a 7L generator, the ECO-HEAT system required about one third of the electrical load as compared to an external load bank to achieve the same target temperature.

Watlow makes it possible.



Watlow®, ECO-HEAT®, DIN-A-MITE® and EZ-ZONE® are registered trademarks of Watlow Electric Manufacturing Company.

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