

Thermo 230/300/350

Operational Readiness Through Large Water Heater Systems

Ready to Start Even at Low Temperatures

The high-performance water heaters of the Thermo series heat up large engines up to appropriate operational temperatures before actually starting the engine. The passenger cabins in public-transit busses or coach busses can be warmed after long standing periods to a comfortable temperature level without running the motor.

Machines like rail cars or locomotives can be warmed up without idling. Aside from the operational readiness, an increased life expectancy of the engine is ensured. Units needed for the preparation of warm water are found to be useful not only in the marine sector; they are also applied as mobile solutions for the cleaning of material or for the frost-free preparation of water for domestic use.

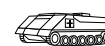
A very reliable and high-quality technology is a necessity in the transport of people and cargo. The water heater systems exceed the legal requirements and are developed according to the high standards of bus OEMs.

Increased product specifications provide a high-performance system with approval of the Federal Railway Authority for the operation in the rail market. Additionally Webasto offers water heaters for the operation on boats and yachts.



Product Benefits:

- Diagnosis for preventative maintenance and short repair times
- Pre-configured complete system with easy installation
- Optional fuel pre-heating
- Fulfills the approval conditions for operation in the rail market as well as the high standards of bus OEMs
- Reduction of the standing and malfunction times of the vehicle through diagnosis function of the heater



Model	Light-Duty Commercial Vehicles	Truck	Bus	Rail	Construction & Agricultural Machinery	Special Vehicles	Defense
Thermo 230 / 300 / 350		■	■	■	■	■	■

Technical Specifications:

	Thermo 230	Thermo 300	Thermo 350
EC type approval label	e1*2001/56*2004 EG-0007	e1*2001/56*2004 EG-0008	e1*2001/56*2004 EG-0009
EMC-certification	72/245*2006/28 EG		
Heating performance (kW)	23	30	35
Fuel consumption (kg/h)	3.0	4.0	4.5
Nominal voltage (V)	24 (20-28)		
Nominal power consumption (W)	65	110	140
Fuels	Diesel EN590 (B5), Arctic-Diesel, Heating oil (EL)		
Operation temperature range (°C)	-40 to +80		
Measurements L x W x H (mm)	610 x 246 x 220		
Weight (kg)	19		
Circulation pump	U4814	Aquavent 5000S	Aquavent 6000S
Flow rate (l / h)	5200	5200	6000
Measurements L x W x H (mm)	221 x 100 x 105	249 x 100 x 105	284 x 115 x 110
Weight (kg)	2.1	2.2	2.95

Additional Specifications for Rail Heaters:

Heaters with rail type approval		Thermo 230	Thermo 300	Thermo 350
Heater rail approval	Type approval number	EBA 32AZ3 /0174/08		
Specific market requirements	Heater type approval	DIN EN 50155, DIN EN 50125-1, DIN 6700-1 to 6		
	EMC	DIN EN 61000-6-2:2005, DIN EN 61000-6-3:2007		
	Fire protection	DIN EN 5510 level 1.2		
Operation voltage range	Variant .155	20-28		
	Variant 350.190	-	-	19-28

Variants:

■ Rail Application

The water heaters are available in special rail variants and guarantee the operational readiness of the locomotives and rail cars at low temperatures. These pre-installed, complete systems with filter heaters and circulation pumps are offered for the heating categories of 23-35 kW.



■ Marine Water Station

The high-performance and reliable Thermo 230 Waterstation is applicable especially for the heating up of boats and yachts of large volumes. The climate is warm on board and additionally warm water is amply available. Should one heater unit not suffice for appropriate heating, two units can be combined.

