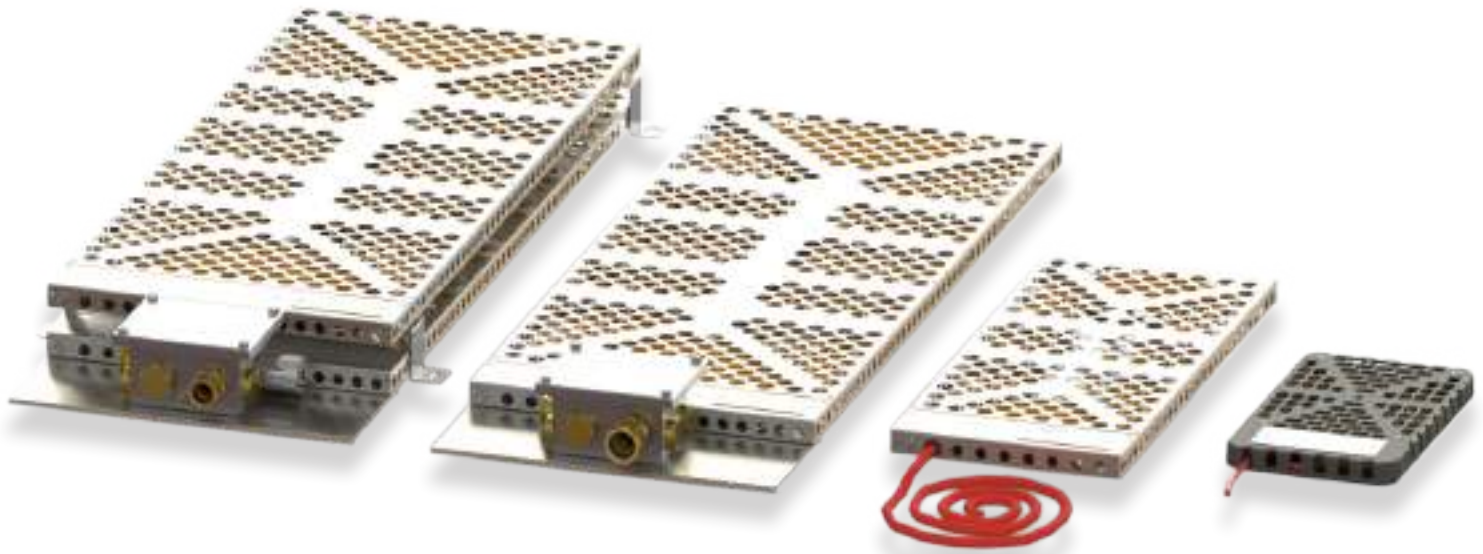


TRANBERG

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## Enclosure Heaters

TRANBERG®

Zone 1, Zone 2 & Safe Area

# CONTACT INFORMATION

## OFFSHORE SOLUTIONS

*Subject to change without prior notice* TPS2121 REV. D 22.08.2017



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# Tranberg Enclosure Heaters

Zone 1, Zone 2 & Safe Area

## Introduction

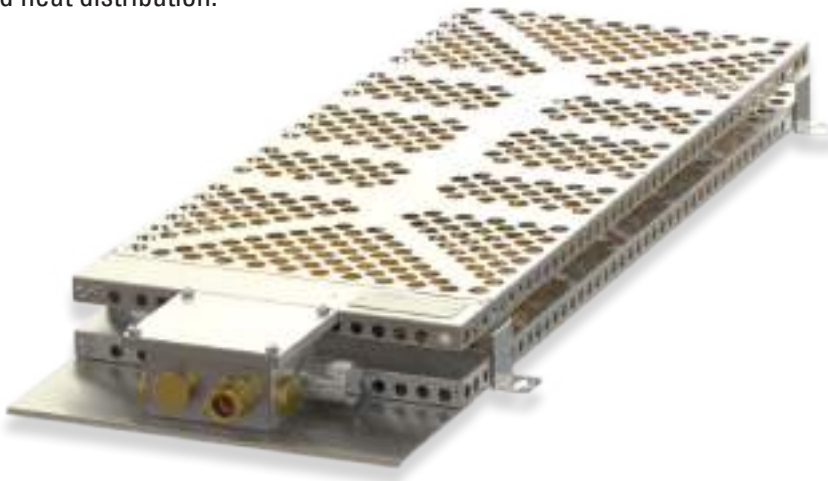
- Tranberg quality heater for the professional oil & gas industry.
- High volumes of heaters delivered to projects worldwide.
- Compact design - easy to install - high effect output - low maintenance.
- Stainless steel and acid proof, AISI 316L.
- 50W - 1000W.
- Self-limiting or thermostat, external thermostat also possible.
- Stable effect curve.
- Very good heat distribution.

## Purpose

To be installed inside junction boxes, cabinets, panels, enclosures, skids, weather protection housings, containers, fi-fi equipment, fire hose cabinets, cabinets for life jackets and survival suits, control rooms, etc.

For the purpose of:

- Prevent moisture/ anti-condensation.
- Climatic control.
- Frost protection.
- Heat up / maintain desired temperature.



## Heat loss calculation

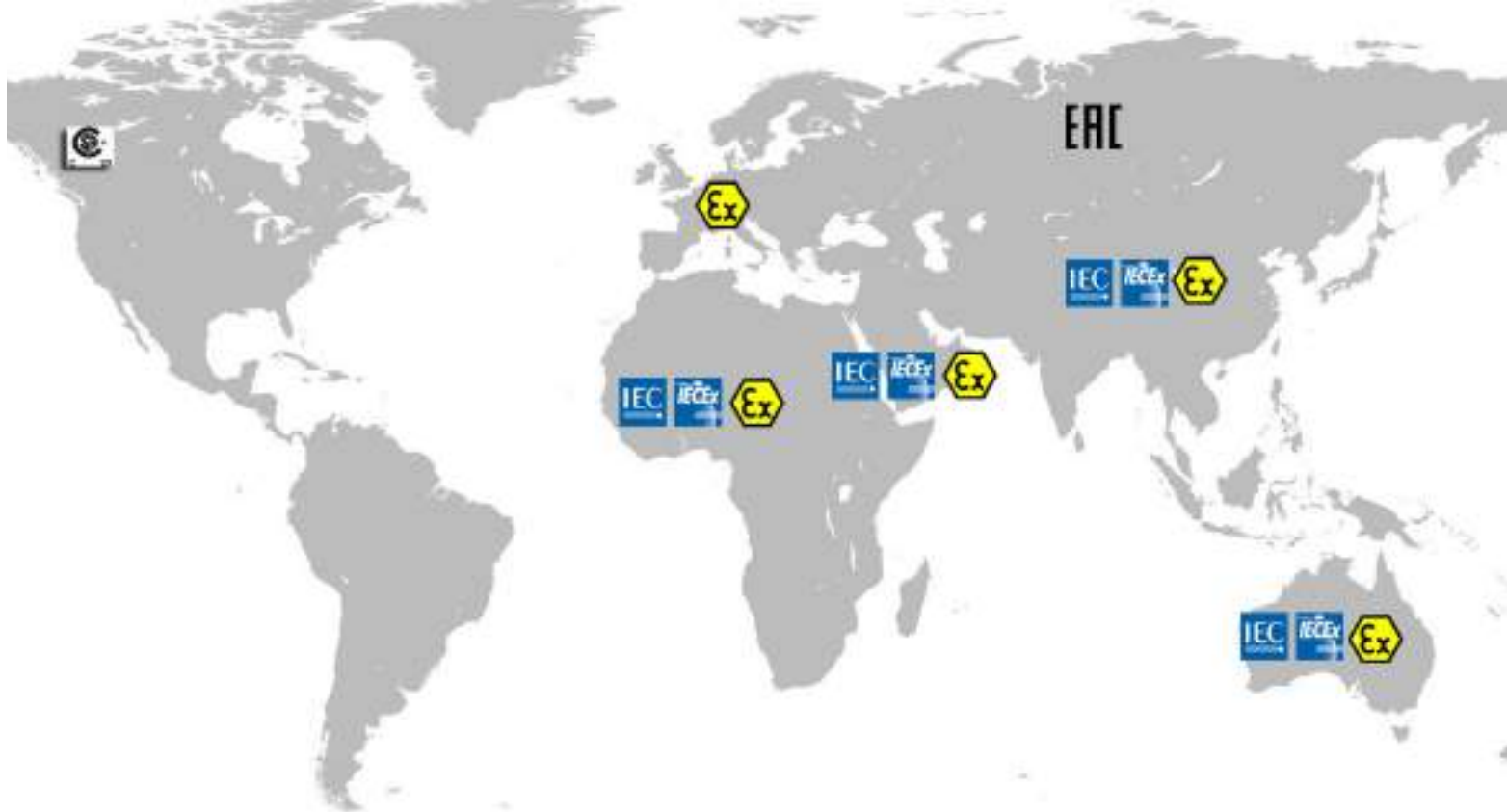
Tranberg can make a heat loss calculation. To calculate the heat loss there are important factors to be considered:

- Volume and size of enclosure.
- Insulation (eg. Armaflex) or not?
- Wind (-speed).
- Indoor or outdoors.
- Minimum ambient temperature.
- Heat up/ temperature maintenance.
- Frost protection.

## Series

- TEF 9202 series, T4, 120V/240V, 50/60 Hz. 50W - 100W. For use in enclosures IP54 or better.
- TEF 9202 series, T3, 240V, 50/60 Hz. 50W - 100W. IP66
- TEF 9207 series, T3, 240V, 50/60 Hz. 100W - 1000W. IP66.
- TEF 9208 series, T4, 240V, 50/60 Hz. 50W - 600W. For use in enclosures IP54 or better.
- TEF 9209 series, T4, 120V, 50/60 Hz. 50W - 600W. For use in enclosures IP54 or better.





## Approvals

ATEX (Europe)



IEC Ex (worldwide)



CSA (USA + Canada)

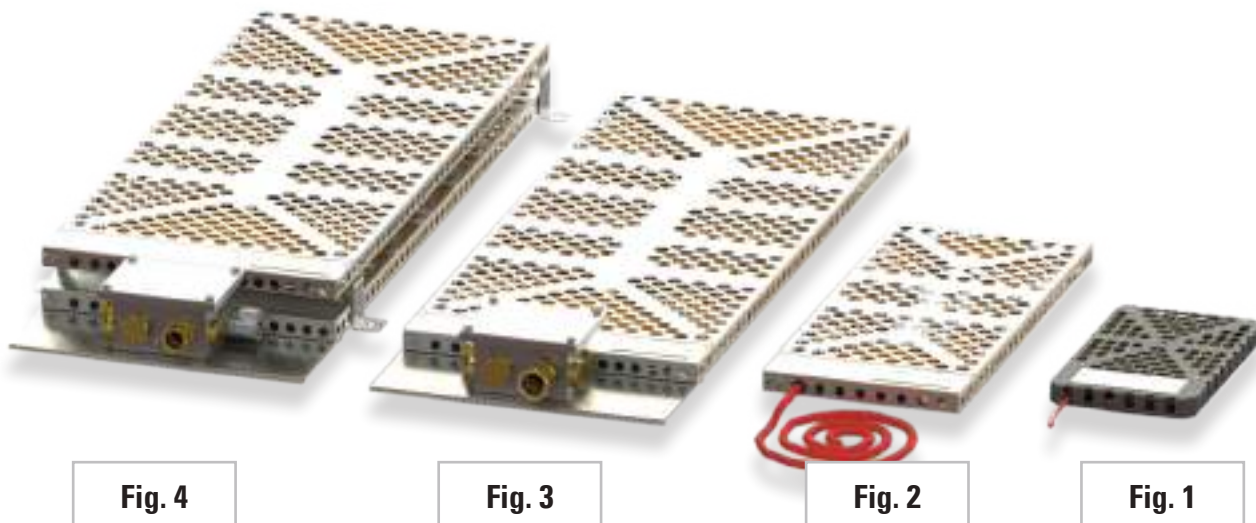


EAC (Russia)



## Versions

- Composite heater -self-limiting (**fig. 1**).
- With flying lead (1 or 1,5 m cold cable) - self-limiting (**fig. 2**).
- With junction box - self-limiting (**fig. 3**).
- With junction box + integrated ambient air thermostat +5 ° C or +15 ° C (**fig. 4**).



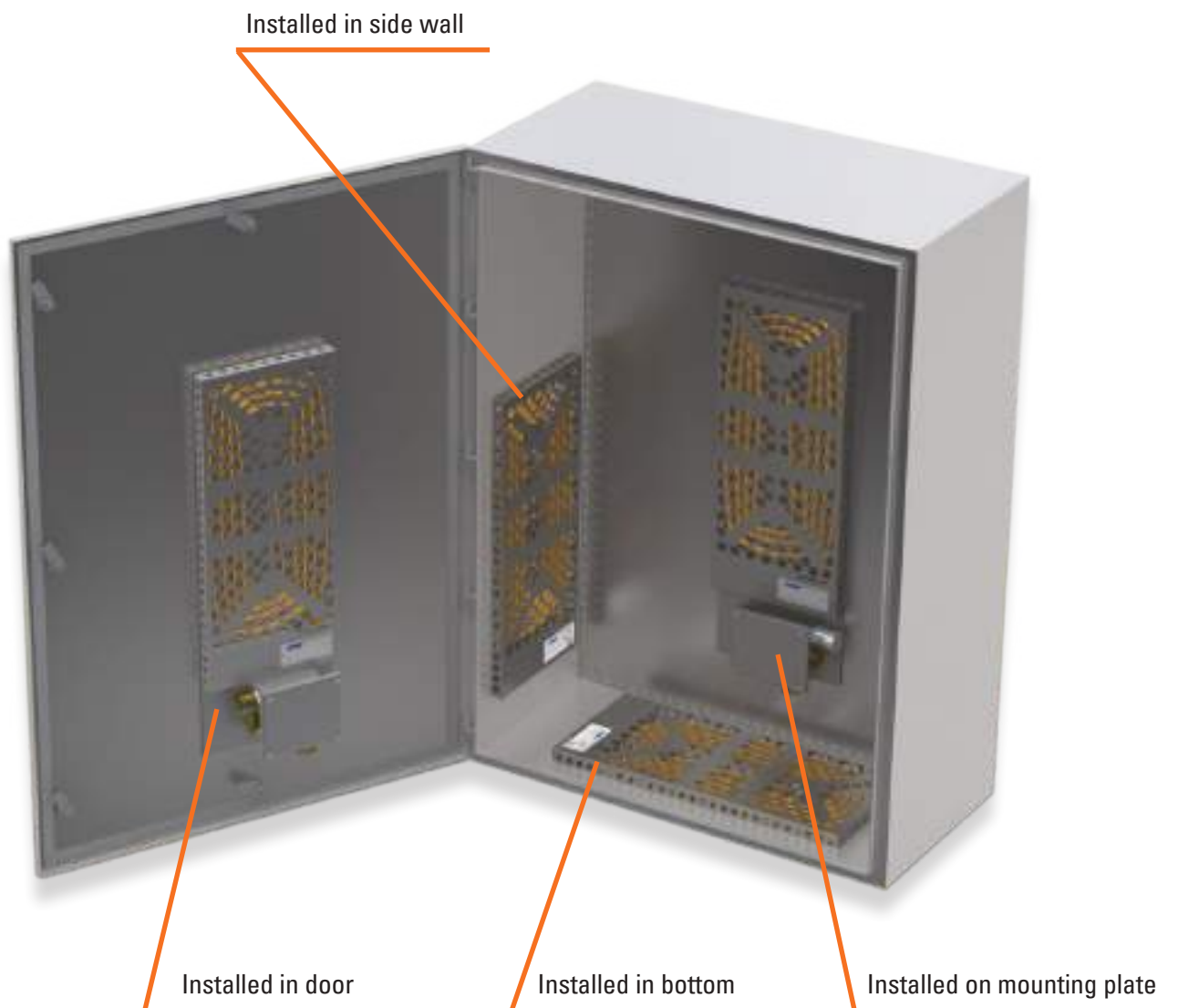
# Tranberg Enclosure Heaters

Zone 1, Zone 2 & Safe Area

## Installation

- Easy to install - see datasheet / user manual.
- To be installed in lower half of enclosure - recommended.
- Vertical / horizontal / flat.

## Possible positions in enclosure



## A short guide for selection of heater type

Heater Type	TEF 9202	TEF 9202	TEF 9207	TEF 9208	TEF 9209
Input power	120/240 VAC	240 VAV	240 VAC	240 VAC	120 VAC
Hertz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Max. circuit breaker	16A	16A	16A	16A	16A
Temp. Class	T4	T3	T3	T4	T4
For outdoor use (IP66)	No	IP66	IP66	No	No
For use in enclosure	For certified enclosure with IP54 or more	Any enclosure	Any enclosure	For certified enclosure with IP54 or more	For certified enclosure with IP54 or more
Anti condensation	✓	✓	✓	✓	✓
Frost protection	✓	✓	✓	✓	✓
Heating	✓	✓	✓	✓	✓
<b>Approvals:</b>					
IECEX	✓	✓	✓	✓	✓
ATEX	✓	✓	✓	✓	✓
CSA			✓	✓	✓
EAC			On request	✓	On request
<b>Available versions:</b>					
Flying lead 1,5 meter	✓	✓	✓	✓	✓
Junction box			✓	✓	✓
Junction box and integrated thermostat			✓	✓	✓
Available effect	50-100W	50-100W	100-1000W	50-600W	50-600W
Heater Applications	TEF 9202	TEF 9202	TEF 9207	TEF 9208	TEF 9209
Junction boxes	✓	✓	✓	✓	✓
Cabinets	✓	✓	✓	✓	✓
Panels	✓	✓	✓	✓	✓
Skids		✓	✓		
Fire hose cabinets		✓	✓		
Cabinets for survival suits and life jackets		✓	✓		
Containers		✓	✓		
Control rooms		✓	✓		
Weater protection houses		✓	✓		
120VAC for US and Canada					✓
240VAC for Russia				✓	



*Installed in fire hose cabinet*



*Installed in junction box*



*Installed in cabinet*

# ENCLOSURE HEATER

## TEF 9207 Ex e

### T3 240 VAC, WITH FLYING LEAD

### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS3007 REV. Q 15.11.2018



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing. With flying lead electrical connection. Delivered with power output from 100W to 500W at 0°C.

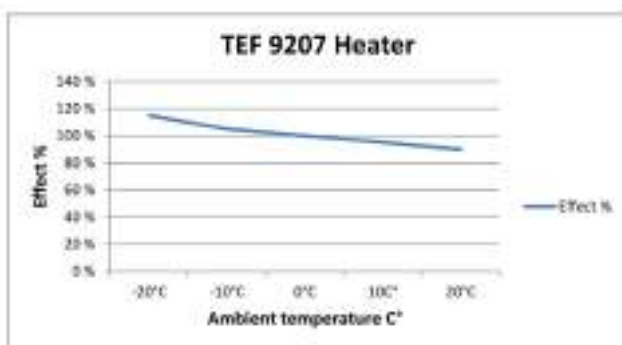
#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Low maintenance.

#### ESTIMATED POWER OUTPUT OF HEATER IN RESPECT TO AMBIENT TEMPERATURE



#### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEx:</b>	Ex II 2 G Ex e IIC T3 Gb
<b>Ex-protection CSA:</b>	AEx e II / Ex e II
<b>Operational ambient temp.:</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is de-energized)
<b>Nominal voltage:</b>	240V 50/60 Hz
<b>Startup current:</b>	See page 3 of this document
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Electrical protection:</b>	The heaters with permanently connected unterminated flying lead cable need an appropriate protection of the free end of the cable (for example terminated in an Ex e junction box).  The heaters with thermostat shall be connected to a circuit breaker with rated current max. 16A and a breaking capacity of min. 1500A.  The supply circuit shall include an electrical protection device in conformity with EN 60079-30-1 cl. 4.3.
<b>Electrical connection:</b>	Flying lead, 2 x 2.5mm <sup>2</sup> + PE
<b>IP protection:</b>	IP66 According to EN 60529
<b>Output accuracy:</b>	Approx. ±10%

#### APPROVALS AND CERTIFICATES

IECEX certificate No.: IECEx NEM 11.0005X

ATEX certificate No.: Nemko 11ATEX1098X

CSA Certificate:  1370701

CSA Master contract: 216432

# TEF 9207 ENCLOSURE HEATER

## DESCRIPTION

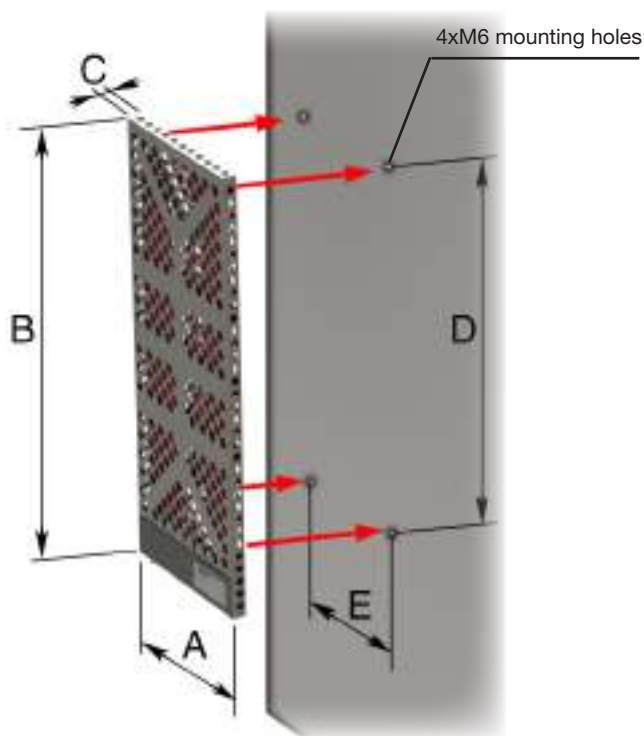
	EL No.	Part No.
Enclosure heater, 100W @ 0°C	5420930	9207 0001
Enclosure heater, 200W @ 0°C	5420931	9207 0002
Enclosure heater, 300W @ 0°C	5420932	9207 0003
Enclosure heater, 500W @ 0°C	5420933	9207 0005

## DIMENSIONS

*Nominal output	Overall dimensions			Mounting dimension		Weight	Length flying lead
	A	B	C	D	E		
100W	200	300	30	190	160	1,62 kg.	1 meter
200W	240	550	30	440	200	3,44 kg.	1,5 meter
300W	280	700	30	590	240	5,42 kg.	1,5 meter
500W	360	870	30	760	320	8,02 kg.	1,5 meter

\*Note:  
Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



4xØ6 mounting holes on the rear side of the heater.



Hold the heater close to the installation surface, and insert the M6 screws in each of the 4 mounting holes.



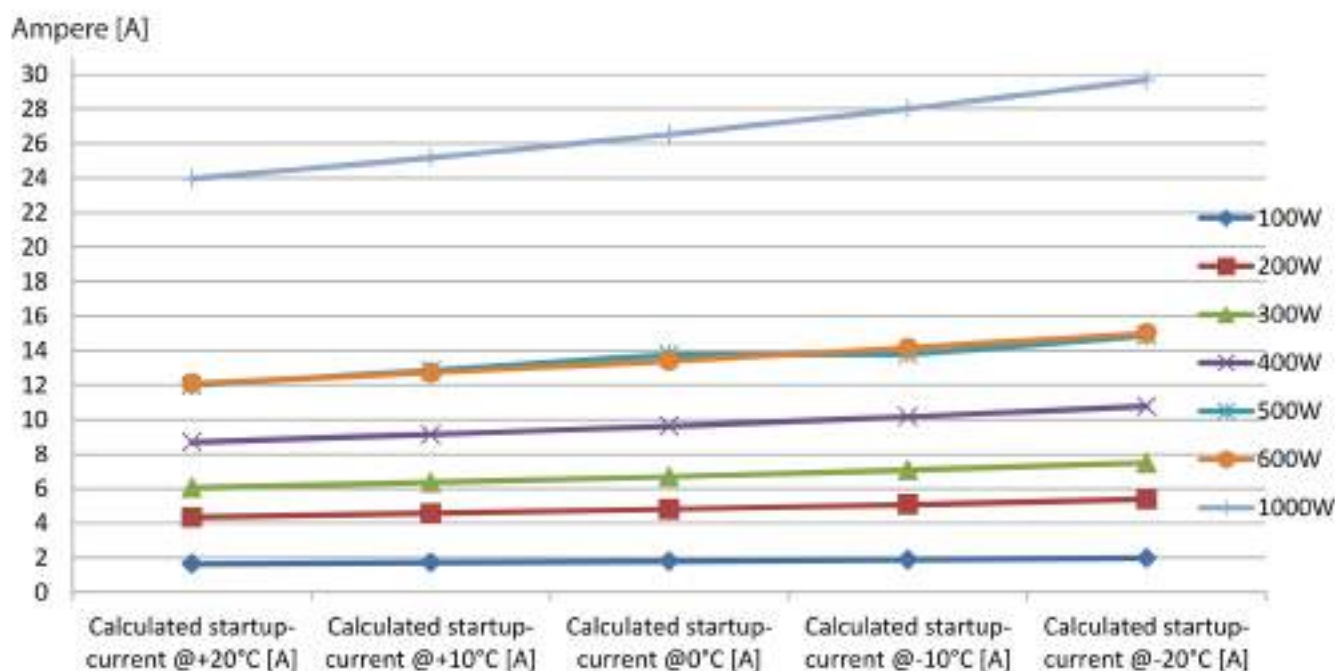
Use a tool to tighten the screws firmly to secure the heater.



# TEF 9207 ENCLOSURE HEATER

## STARTUP CURRENT FOR TEF 9207 @ 230VAC \*

Nominal power [W]	Calculated startup-current @+20°C [A]	Calculated startup-current @+10°C [A]	Calculated startup-current @ 0°C [A]	Calculated startup-current @ -10°C [A]	Calculated startup-current @ -20°C [A]	Max no. of heaters on 16A type C MCB @-20°C
100	1.6	1.7	1.8	1.9	2.0	15
200	4.3	4.6	4.8	5.1	5.4	6
300	6.1	6.4	6.7	7.1	7.5	4
400	8.7	9.1	9.6	10.2	10.8	3
500	12.0	12.8	13.8	13.8	14.8	2
600	12.1	12.7	13.4	14.2	15.0	1
1000	24.0	24.0	26.5	28.0	29.7	1



### \* Note:

The data contained in this document is based on a limited number of tests, and are presented based on our existing knowledge.

The real startup-current is affected by a series of parameters including, but not limited to:

- Voltage fluctuations
- Defined HT-cable tolerance (+/- 10%)
- Installed cable cross-section and voltage drop in the circuit

The current is foreseen to drop to half of the calculated startup current after approximately 1 minute (no wind, 0°C).

The values shown are presented as a guide for installation and selection of circuit breakers. The precise startup current for each individual heater can not be guaranteed.

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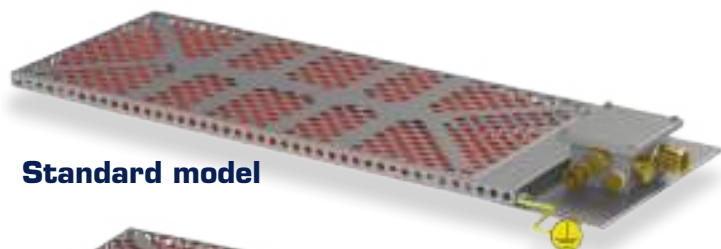
# ENCLOSURE HEATER

## TEF 9207 Ex e

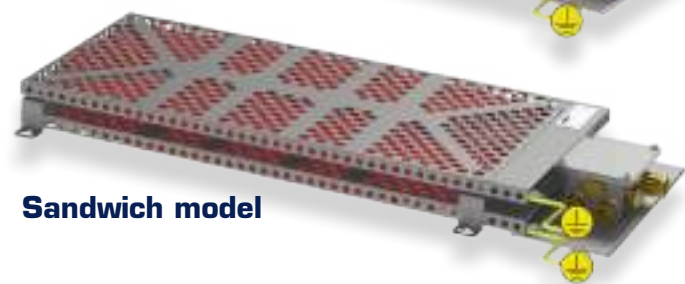
### T3 240 VAC, WITH JUNCTION BOX

### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS3008 REV.R 26.11.2018



**Standard model**



**Sandwich model**

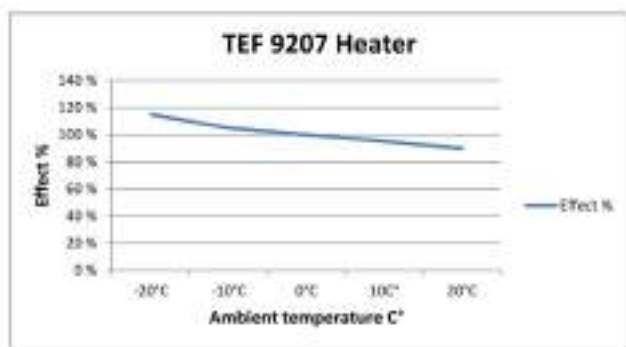
#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Low maintenance.

#### ESTIMATED POWER OUTPUT OF HEATER IN RESPECT TO AMBIENT TEMPERATURE



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing and junction box. Junction box for electrical connections. Delivered with power output from 100W to 600W at 0°C.

#### TECHNICAL DATA

<b>Ex-protection ATEX and IECEx:</b>	Ex II 2 G Ex e IIC T3 Gb
<b>Ex-protection CSA:</b>	AEx e II / Ex e II
<b>Optional ambient temp. :</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is deenergized)
<b>Nominal voltage:</b>	240V 50/60Hz
<b>Startup current:</b>	See page 3 of this document
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Electrical protection:</b>	The heaters with permanently connected unterminated flying lead cable need an appropriate protection of the free end of the cable (for example terminated in an Ex e junction box).
	The heaters with thermostat shall be connected to a circuit breaker with rated current max. 16A and a breaking capacity of min. 1500A.
	The supply circuit shall include an electrical protection device in conformity with EN 60079-30-1 cl. 4.3.
<b>Terminals in junction box:</b>	6mm²: 2 + 2 pcs 2,5mm²: 2 pcs 10mm² PE terminals: 3 pcs
<b>Cable glands:</b>	1 pc. TEF E204/622 M25/D2/9mm (Ø11,0-15,0mm). 1 pc. TEF 7302 M25 breather/drain plug. TEF 650 M20/M25 stopping plugs
<b>IP protection:</b>	IP66 According to EN 60529
<b>Output accuracy:</b>	Approx. ±10%

#### APPROVALS AND CERTIFICATES

IECEx certificate No.: IECEx NEM 11.0005X  
ATEX certificate No.: Nemko 11ATEX1098X

CSA Certificate: 1370701  
CSA Master contract: 216432

# TEF 9207 ENCLOSURE HEATER W/JUNCTION BOX

## DESCRIPTION

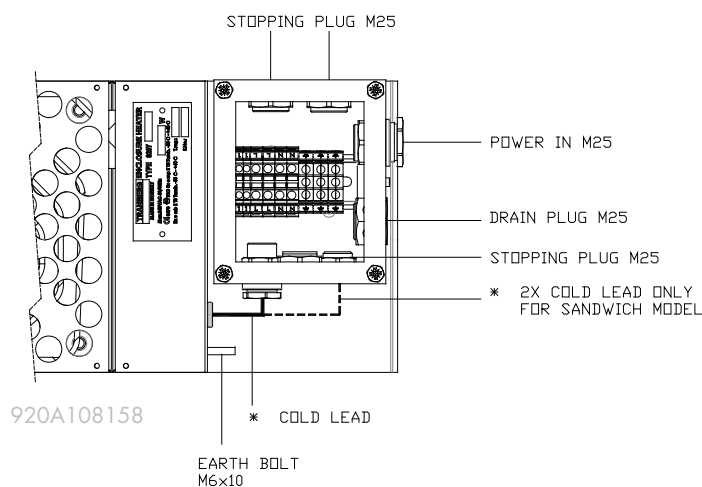
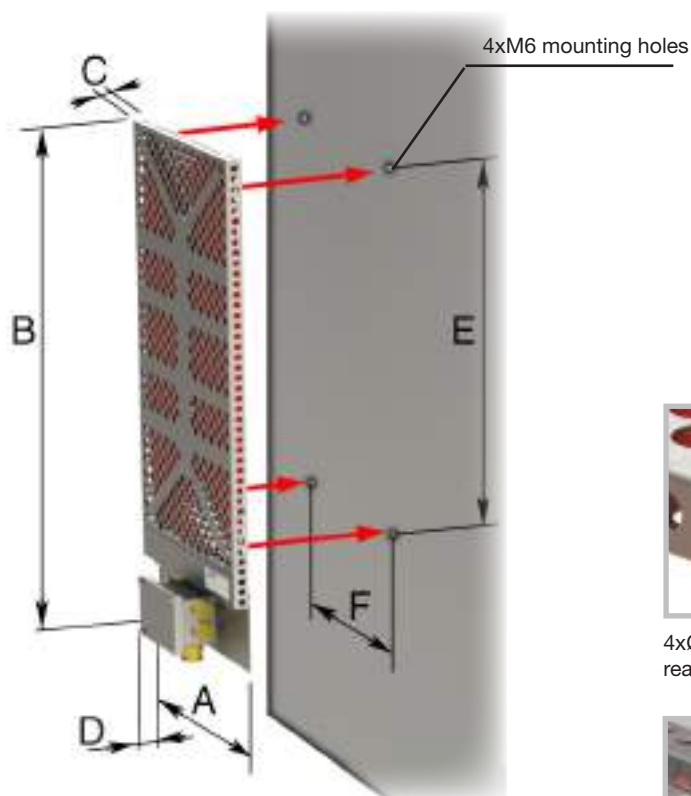
	El No.	Part No.
Enclosure heater with junction box, 100W @ 0°C	5420934	9207 1001
Enclosure heater with junction box, 200W @ 0°C	5420935	9207 1002
Enclosure heater with junction box, 300W @ 0°C	5420936	9207 1003
Enclosure heater with junction box, 400W @ 0°C (Sandwich)	5420946	9207 3004
Enclosure heater with junction box, 500W @ 0°C	5420937	9207 1005
Enclosure heater with junction box, 600W @ 0°C (Sandwich)	5420947	9207 3006
Enclosure heater with junction box, 1000W @ 0°C (Sandwich)	5420948	9207 3010

## DIMENSIONS

*Nominal output	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100W	200	430	30	80	190	160	2,92 kg.
200W	240	684	30	80	440	200	4,74 kg.
300W	280	834	30	80	590	240	6,72 kg.
400W	303	684	80	80	440	276	6,44 kg.
500W	360	1004	30	80	760	320	9,32 kg.
600W	343	834	80	80	590	316	11,76 kg.
1000W	424	1004	80	80	760	397	18,50 kg.

\*Note: Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



4xØ6 mounting holes on the rear side of the heater.



Use a tool to tighten the screws firmly to secure the heater.



For the sandwich model, insert the M6 screws and a washer in the mounting brackets as shown. Use a wrench for tightening the screws firmly.

**Note!**  
Never install the heater with junction box facing upwards.



R. Stahl Tranberg AS

E info@stahl-tranberg.com | stahl-tranberg.com

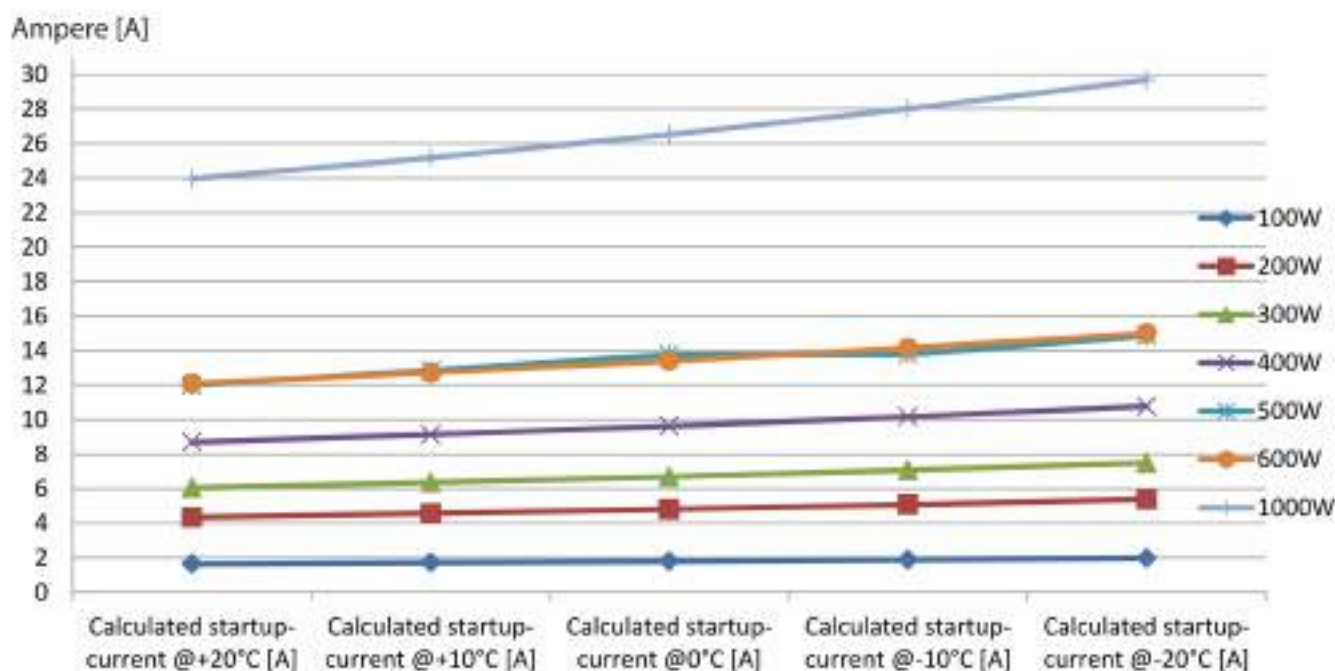
Main office: Strandsvingen 6 | N-4032 Stavanger | Norway | T +47 51 57 89 00 | F +47 51 57 89 50

Office Oslo: Lohrtoppen 2 | N-1470 Lørenskog | Norway | T +47 24 08 44 10

# TEF 9207 ENCLOSURE HEATER W/JUNCTION BOX

## STARTUP CURRENT FOR TEF 9207 @ 230VAC \*

Nominal power [W]	Calculated startup-current @+20°C [A]	Calculated startup-current @+10°C [A]	Calculated startup-current @ 0°C [A]	Calculated startup-current @ -10°C [A]	Calculated startup-current @ -20°C [A]	Max no. of heaters on 16A type C MCB @-20°C
100	1.6	1.7	1.8	1.9	2.0	15
200	4.3	4.6	4.8	5.1	5.4	6
300	6.1	6.4	6.7	7.1	7.5	4
400	8.7	9.1	9.6	10.2	10.8	3
500	12.0	12.8	13.8	13.8	14.8	2
600	12.1	12.7	13.4	14.2	15.0	1
1000	24.0	24.0	26.5	28.0	29.7	1



### \* Note:

The data contained in this document is based on a limited number of tests, and are presented based on our existing knowledge.

The real startup-current is affected by a series of parameters including, but not limited to:

- Voltage fluctuations
- Defined HT-cable tolerance (+/- 10%)
- Installed cable cross-section and voltage drop in the circuit

The current is foreseen to drop to half of the calculated startup current after approximately 1 minute (no wind, 0°C).

The values shown are presented as a guide for installation and selection of circuit breakers. The precise startup current for each individual heater can not be guaranteed.



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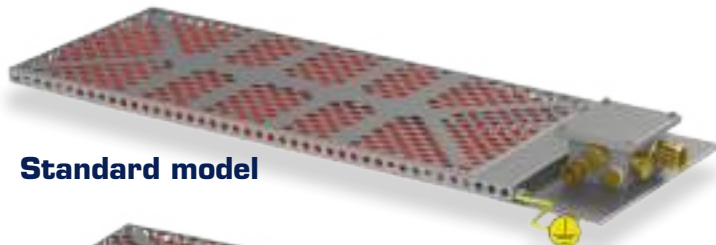
# ENCLOSURE HEATER

## TEF 9207 Ex e, T3 240 VAC,

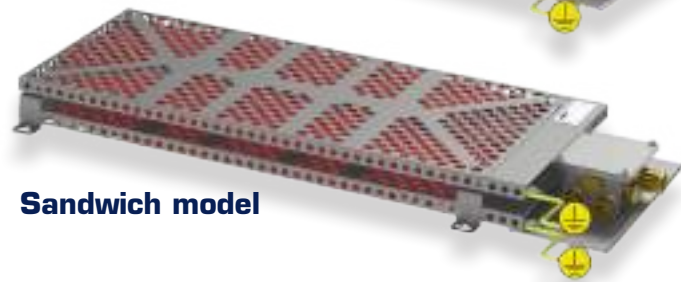
### WITH JUNCTION BOX AND THERMOSTAT

### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS3009 REV. T 26.11.2018



**Standard model**



**Sandwich model**

Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing and junction box. Junction box for electrical connections. Delivered with ambient air thermostat, +5°C or +15°C and power output from 100W to 600W at 0°C ambient, still air.

#### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEx:</b>	Ex II 2 G Ex e mb IIC T3 Gb
<b>Ex-protection CSA:</b>	AEx e mb II / Ex e mb II
<b>Operational ambient temp.:</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is de-energized)
<b>Nominal voltage:</b>	240V 50/60Hz
<b>Startup current:</b>	See page 3 of this document
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Electrical protection:</b>	The heaters with permanently connected unterminated flying lead cable need an appropriate protection of the free end of the cable (for example terminated in an Ex e junction box).  The heaters with thermostat shall be connected to a circuit breaker with rated current max. 16A and a breaking capacity of min. 1500A. The supply circuit shall include an electrical protection device in conformity with EN 60079-30-1 cl. 4.3.
<b>Terminals in junction box:</b>	6mm <sup>2</sup> : 2 + 2 pcs 2,5mm <sup>2</sup> : 2 pcs 10mm <sup>2</sup> PE terminals: 3 pcs
<b>Cable glands:</b>	1 pc. TEF E204/622 M25/D2/9mm (Ø11,0-15,0mm). 1 pc. TEF 7302 M25 breather/drain plug. TEF 650 M20/M25 stopping plugs
<b>Thermostat:</b>	1 pc. ambient air sensing thermostat. Switching temp.: +5°C or +15°C. Hysteresis: +5°C / -5°C
<b>IP protection:</b>	IP66 According to EN 60529
<b>Output accuracy:</b>	Approx. ±10%

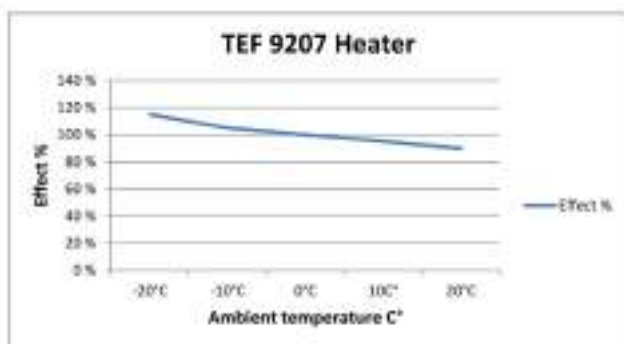
#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Ambient air thermostat, integrated in heater junction box.
- Low maintenance.

#### ESTIMATED POWER OUTPUT OF HEATER IN RESPECT TO AMBIENT TEMPERATURE



#### APPROVALS AND CERTIFICATES

IECEx certificate No.: IECEx NEM 11.0005X  
 ATEX certificate No.: Nemko 11ATEX1098X  
 CSA Certificate: 1370701  
 CSA Master contract: 216432

# TEF 9207 ENCLOSURE HEATER W/ JUNCTION BOX AND THERMOSTAT

## DESCRIPTION

	EL No.	*Part No. +5°C(+5/-5°C)	EL No.	*Part No. +15°C(+5/-5°C)
Enclosure heater with junction box and thermostat, 100W @ 0°C	5420938	92072401	5420942	92072601
Enclosure heater with junction box and thermostat, 200W @ 0°C	5420939	92072402	5420943	92072602
Enclosure heater with junction box and thermostat, 300W @ 0°C	5420940	92072403	5420944	92072603
Enclosure heater with junction box and thermostat, 500W @ 0°C	5420941	92072405	5420945	92072605
Enclosure heater with junction box and thermostat, 400W @ 0°C (Sandwich)	5420949	92074404	5420952	92074604
Enclosure heater with junction box and thermostat, 600W @ 0°C (Sandwich)	5420950	92074406	5420953	92074606
Enclosure heater with junction box and thermostat, 1000W @ 0°C (Sandwich)	5420951	92074410	5420954	92074610

\*Note:

Ambient Air Thermostat : +5°C : Switches heater ON at approx. +3°C ambient temperature, and OFF at approx. 11°C ambient temperature

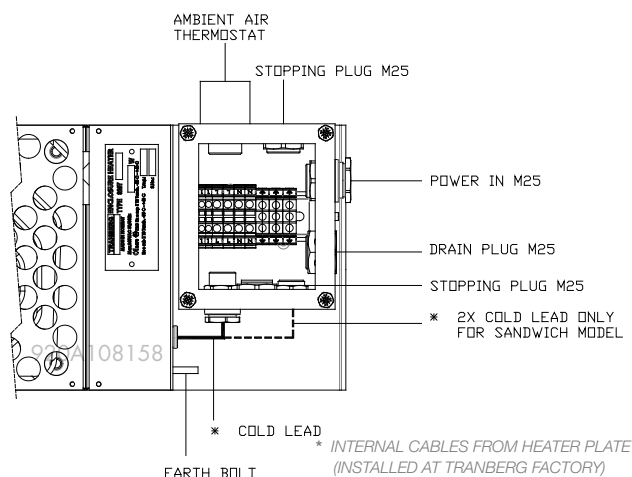
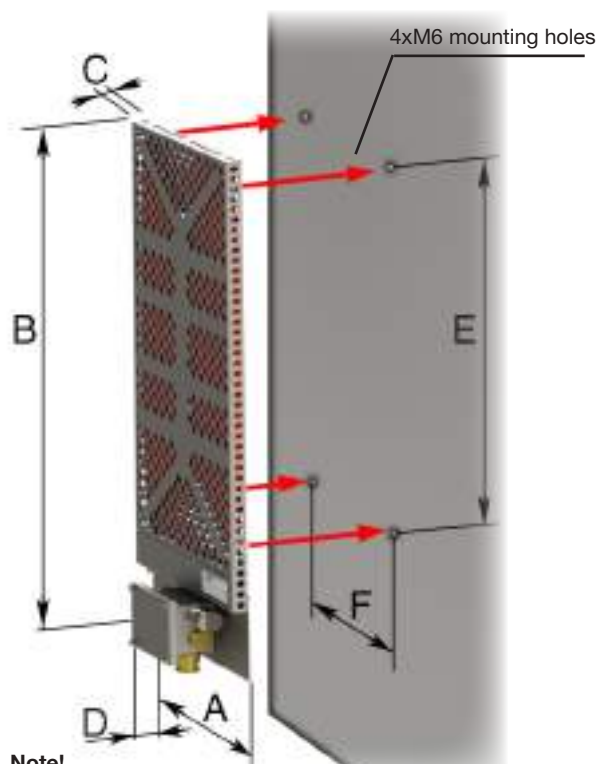
Ambient Air Thermostat : +15°C : Switches heater ON at approx. +10°C ambient temperature, and OFF at approx. 20°C ambient temperature

## DIMENSIONS

*Nominal output	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100W	233	430	30	80	190	160	2,92 kg.
200W	245	684	30	80	440	200	4,74 kg.
300W	280	834	30	80	590	240	6,72 kg.
400W	303	684	80	80	440	276	6,44 kg.
500W	360	1004	30	80	760	320	9,32 kg.
600W	343	834	80	80	590	316	11,76 kg.
1000W	424	1004	80	80	760	397	18,50 kg.

\*Note: Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



**Standard model:**  
4xØ6 mounting holes on the rear side of the heater.



**Standard model:**  
Use a tool to tighten the 4xM6 screws firmly to secure the heater.



**Sandwich model:**  
Insert 4xM6 screws and washers in the mounting brackets as shown. Use a wrench for tightening the screws firmly.



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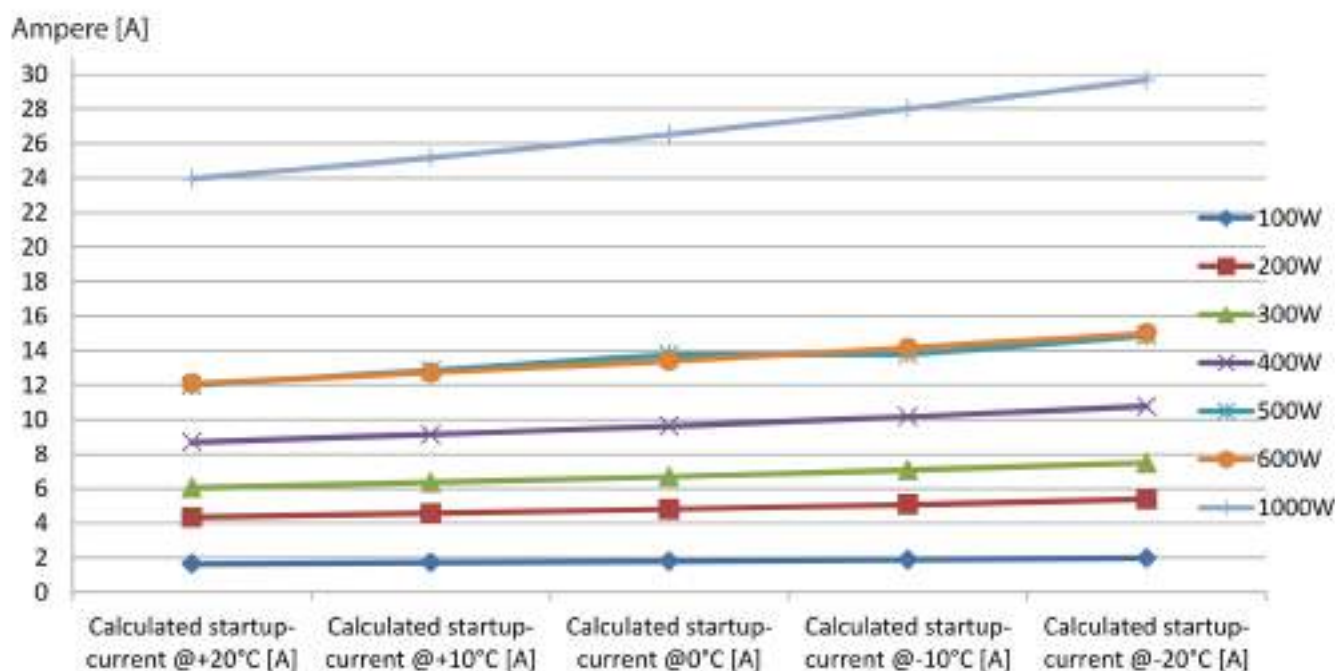
Main office: Strandsvingen 6 | N-4032 Stavanger | Norway | T +47 51 57 89 00 | F +47 51 57 89 50

Office Oslo: Lohrtoppen 2 | N-1470 Lørenskog | Norway | T +47 24 08 44 10

# TEF 9207 ENCLOSURE HEATER W/ JUNCTION BOX AND THERMOSTAT

## STARTUP CURRENT FOR TEF 9207 @ 230VAC \*

Nominal power [W]	Calculated startup-current @+20°C [A]	Calculated startup-current @+10°C [A]	Calculated startup-current @ 0°C [A]	Calculated startup-current @ -10°C [A]	Calculated startup-current @ -20°C [A]	Max no. of heaters on 16A type C MCB @-20°C
100	1.6	1.7	1.8	1.9	2.0	15
200	4.3	4.6	4.8	5.1	5.4	6
300	6.1	6.4	6.7	7.1	7.5	4
400	8.7	9.1	9.6	10.2	10.8	3
500	12.0	12.8	13.8	13.8	14.8	2
600	12.1	12.7	13.4	14.2	15.0	1
1000	24.0	24.0	26.5	28.0	29.7	1



### \* Note:

The data contained in this document is based on a limited number of tests, and are presented based on our existing knowledge.

The real startup-current is affected by a series of parameters including, but not limited to:

- Voltage fluctuations
- Defined HT-cable tolerance (+/- 10%)
- Installed cable cross-section and voltage drop in the circuit

The current is foreseen to drop to half of the calculated startup current after approximately 1 minute (no wind, 0°C).

The values shown are presented as a guide for installation and selection of circuit breakers. The precise startup current for each individual heater can not be guaranteed.

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# ENCLOSURE HEATER

## TEF 9208 Ex e

### T4 240 VAC, WITH FLYING LEAD

### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS5003 REV. E 07.07.2017



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing. With flying lead electrical connection. Delivered with power output from 50W to 300W at 0°C.

#### TECHNICAL DATA

##### Ex-protection ATEX & IECEx:

Ta= -50°C..+50°C

Ex II 2 G

Ex e IIC T4 Gb

Ex e mb IIC T4 Gb

##### Ex-protection CSA:

AEx e II / Ex e II

##### Ex-protection EAC:

1Ex e IIC T4 Gb X or

1Ex e mb IIC T4 Gb X



##### Operational ambient temp.:

-50°C to +50°C

##### Max. withstand ambient temp.:

+50°C (Heater is energized)

+80°C (Heater is de-energized)

##### Nominal voltage:

240V 50/60 Hz

##### Inrush current:

4 x Nominal current for min. 30 sec.

##### Material:

AISI 316L / EN 1.4404

##### Electrical protection:

Connect to max. 16A circuit breaker. Earth leakage protection device or isolation device, depend on type of system of earth according to IEC 364-3, chapter 31, and EN60079-7 Annex D.

##### Electrical connection:

Flying lead,

2 x 2.5mm<sup>2</sup> + PE

##### IP protection:

For use in enclosures with IP54 or higher.

##### Output accuracy:

Approx. ±10%

#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Low maintenance.


#### APPROVALS AND CERTIFICATES

IECEX certificate No.: IECEX NEM 11.0005X

ATEX certificate No.: Nemko 11ATEX1098X

CSA Certificate:  1370701

CSA Master contract: 216432

EAC certificate:  TC: RU C-NO.MШ06.B.00091  
Серия RU  0007345

# TEF 9208 ENCLOSURE HEATER

## DESCRIPTION

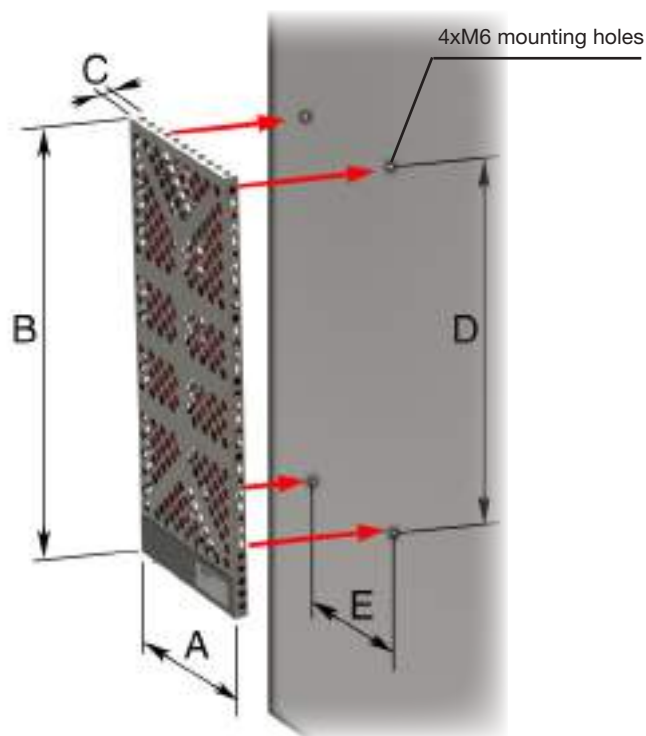
	Part No.
Enclosure heater, 50W @ 0°C	9208 0000
Enclosure heater, 100W @ 0°C	9208 0001
Enclosure heater, 175W @ 0°C	9208 0002
Enclosure heater, 300W @ 0°C	9208 0003

## DIMENSIONS

*Nominal output	Overall dimensions			Mounting dimension		Weight	Length flying lead
	A	B	C	D	E		
50W	200	300	30	190	160	2 kg.	1 meter
100W	240	550	30	440	200	3 kg.	1 meter
175W	280	700	30	590	240	5 kg.	1,5 meter
300W	360	870	30	760	320	8 kg.	1,5 meter

\*Note:  
Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



4xØ6 mounting holes on the rear side of the heater.



Hold the heater close to the installation surface, and insert the M6 screws in each of the 4 mounting holes.



Use a tool to tighten the screws firmly to secure the heater.

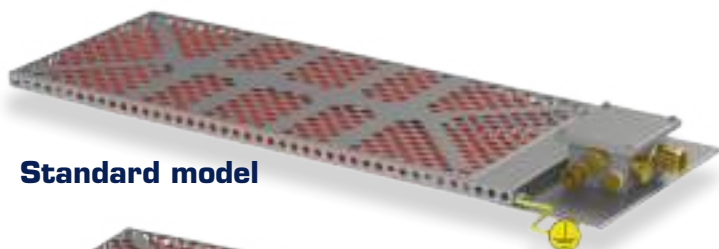
# ENCLOSURE HEATER

## TEF 9208 Ex e

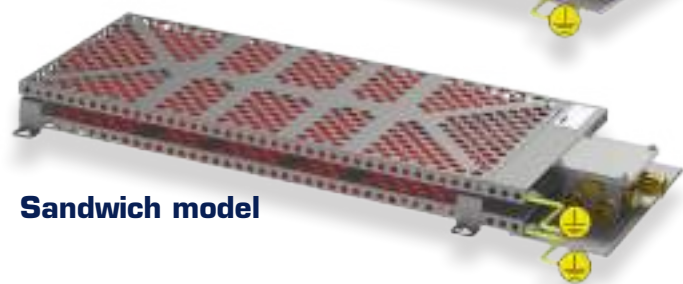
### T4, 240 VAC, WITH JUNCTION BOX

### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS5004 REV. E 07.07.2017



**Standard model**





**Sandwich model**



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing and junction box. Junction box for electrical connections. Delivered with power output from 100W to 600W at 0°C.

#### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEX:</b>	Ta= -50°C...+50°C  II 2 G Ex e IIC T4 Gb Ex e mb IIC T4 Gb
<b>Ex-protection CSA:</b>	AEx e II / Ex e II
<b>Ex-protection EAC:</b>	1Ex e IIC T4 Gb X or 1Ex e mb IIC T4 Gb X
	
<b>Optional ambient temp. :</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is deenergized)
<b>Nominal voltage:</b>	240V 50/60Hz
<b>Inrush current:</b>	4 x Nominal current for min. 30 sec.
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Electrical protection:</b>	Connect to max. 16A circuit breaker. Earth leakage protection device or isolation device, depend on type of system of earth according to IEC 364-3, chapter 31, and EN60079-7 Annex D.
<b>Terminals in junction box:</b>	4mm <sup>2</sup> : 2 + 2 pcs 2,5mm <sup>2</sup> : 2 pcs 10mm <sup>2</sup> PE terminals: 3 pcs
<b>Cable glands:</b>	1 pc. TEF E204/622 M25/ D2/9mm (Ø11,0-15,0mm) 1 pc. TEF 7302 M25 breather/ drain plug TEF 650 M20/M25 stopping plugs
<b>IP protection:</b>	For use in enclosures with IP54 or higher.
<b>Output accuracy:</b>	Approx. ±10%

#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Low maintenance.



#### APPROVALS AND CERTIFICATES

**IECEX certificate No.:** IECEX NEM 11.0005X

**ATEX certificate No.:** Nemko 11ATEX1098X

**CSA Certificate:**  1370701

CSA Master contract: 216432

**EAC certificate:**  TC: RU C-NO.MШ06.B.00091  
 Серия RU  0007345

# TEF 9208 ENCLOSURE HEATER W/JUNCTION BOX

## DESCRIPTION

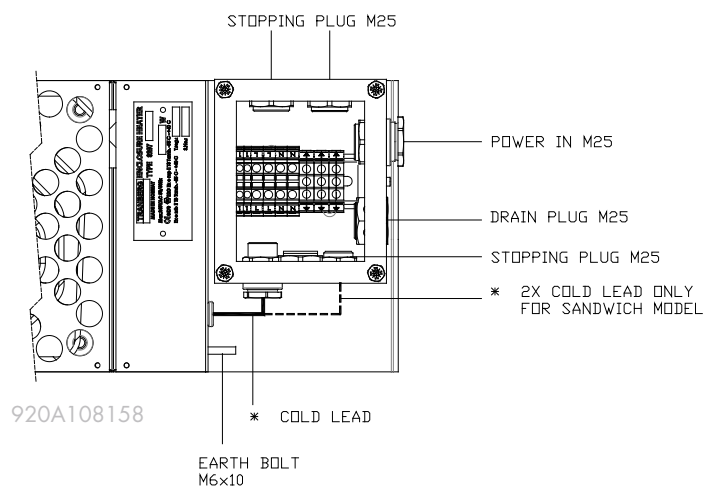
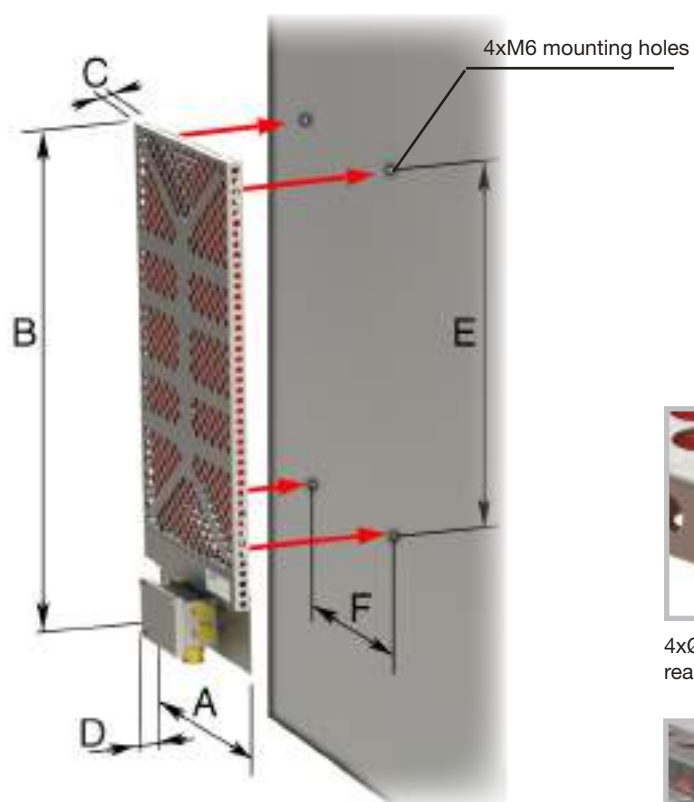
	Part No.
Enclosure heater with junction box, 100W @ 0°C	9208 1001
Enclosure heater with junction box, 175W @ 0°C	9208 1002
Enclosure heater with junction box, 300W @ 0°C	9208 1003
Enclosure heater with junction box, 600W @ 0°C (Sandwich)	9208 3006

## DIMENSIONS

*Nominal output	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100W	240	684	30	80	440	200	4,92 kg.
175W	280	834	30	80	590	240	6,74 kg.
300W	360	1004	30	80	760	320	9,72 kg.
600W	424	1004	80	80	760	397	18,76 kg.

\*Note:  
Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



4xØ6 mounting holes on the rear side of the heater.



Use a tool to tighten the screws firmly to secure the heater.



For the sandwich model, insert the M6 screws and a washer in the mounting brackets as shown. Use a wrench for tightening the screws firmly.

**Note!**  
Never install the heater with junction box facing upwards.

# ENCLOSURE HEATER

## TEF 9208 Ex e, T4 240 VAC,

### WITH JUNCTION BOX AND THERMOSTAT

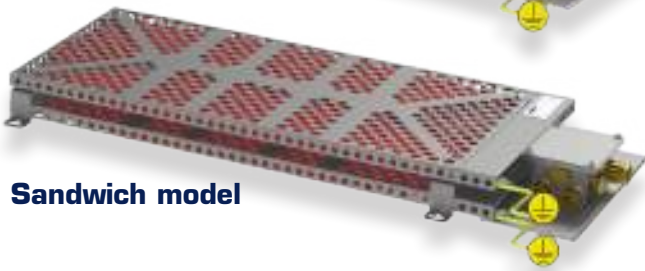
### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS5005 REV. G 07.07.2017



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing and junction box. Junction box for electrical connections. Delivered with ambient air thermostat, +5°C or +15°C and power output from 100W to 600W at 0°C ambient, still air.

**Standard model**



**Sandwich model**

#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Ambient air thermostat, integrated in heater junction box.
- Low maintenance.

#### APPROVALS AND CERTIFICATES

**IECEX certificate No.:** IECEX NEM 11.0005X

**ATEX certificate No.:** Nemko 11ATEX1098X

**CSA Certificate:**  1370701

CSA Master contract: 216432

**EAC certificate:**  TC: RU C-NO.MШ06.B.00091  
Серия RU  0007345

#### TECHNICAL DATA

##### Ex-protection ATEX & IECEX:

Ta= -50°C..+50°C

 II 2 G

Ex e IIC T4 Gb

Ex e mb IIC T4 Gb

##### Ex-protection CSA:

AEx e II / Ex e II

##### Ex-protection EAC:

1Ex e IIC T4 Gb X or

1Ex e mb IIC T4 Gb X



##### Operational ambient temp.:

-50°C to +50°C

##### Max. withstand ambient temp.:

+50°C (Heater is energized)

+80°C (Heater is deenergized)

##### Nominal voltage:

240V 50/60Hz

##### Material:

AISI 316L / EN 1.4404

##### Electrical protection:

Connect to max. 16A circuit breaker. Earth leakage protection device or isolation device, depend on type of system of earth according to IEC 364-3, chapter 31, and EN60079-7 Annex D.

##### Terminals in junction box:

4mm<sup>2</sup>: 2 + 2 pcs

2,5mm<sup>2</sup>: 2 pcs

10mm<sup>2</sup> PE terminals: 3 pcs

##### Cable glands:

1 pc. TEF E204/622 M25/D2/9mm

(Ø11,0-15,0mm), 1 pc. TEF 7302

M25 breather/drain plug & TEF 650

M20/M25 stopping plugs

##### Thermostat:

1 pc. ambient air sensing thermostat. Switching temp.: +5°C or +15°C. Hysteresis: +5°C / -5°C

##### IP protection:

For use in enclosures with IP54 or higher.

##### Output accuracy:

Approx. ±10%



# TEF 9208 ENCLOSURE HEATER W/ JUNCTION BOX AND THERMOSTAT

## DESCRIPTION

	*Part No. +5°C(+5/-5°C)	*Part No. +15°C(+5/-5°C)
Enclosure heater with junction box and thermostat, 100W @ 0°C	92082401	92082601
Enclosure heater with junction box and thermostat, 175W @ 0°C	92082402	92082602
Enclosure heater with junction box and thermostat, 300W @ 0°C	92082403	92082603
Enclosure heater with junction box and thermostat, 600W @ 0°C (Sandwich)	92084406	92084606

**\*Note:**

Ambient Air Thermostat : +5°C : Switches heater ON at approx. +3°C ambient temperature, and OFF at approx. 11°C ambient temperature

Ambient Air Thermostat : +15°C : Switches heater ON at approx. +10°C ambient temperature, and OFF at approx. 20°C ambient temperature

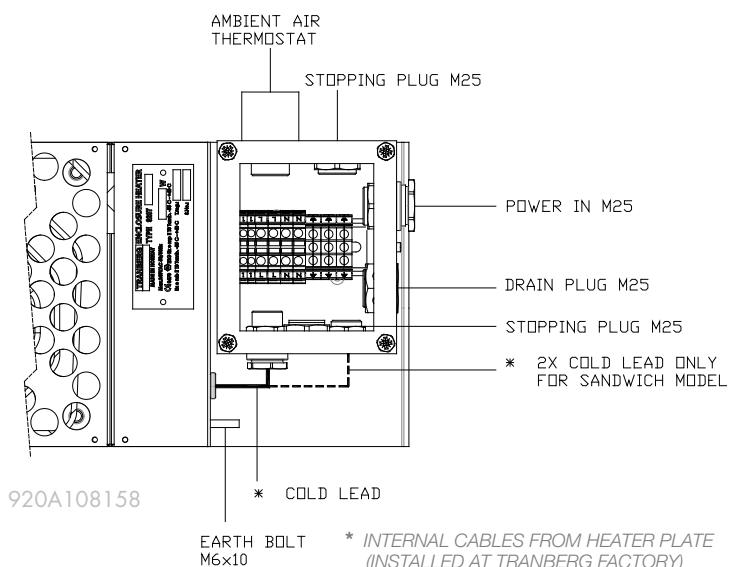
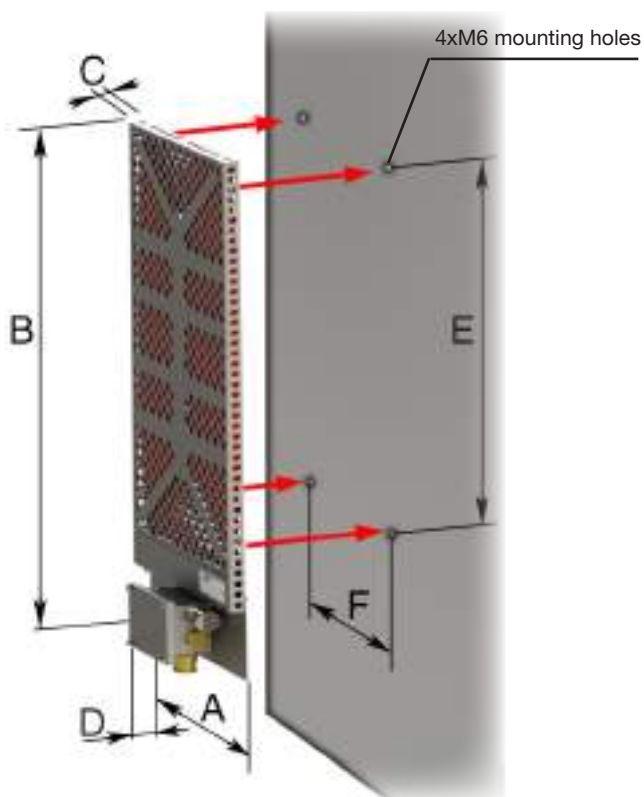
## DIMENSIONS

*Nominal output	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100W	245	684	30	80	440	200	4,92 kg.
175W	280	834	30	80	590	240	6,74 kg.
300W	360	1004	30	80	760	320	9,72 kg.
600W	424	1004	80	80	760	397	18,76 kg.

**\*Note:**

Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



**Standard model:**  
4xØ6 mounting holes on the rear side of the heater.



**Standard model:**  
Use a tool to tighten the 4xM6 screws firmly to secure the heater.



**Sandwich model:**  
Insert 4xM6 screws and washers in the mounting brackets as shown. Use a wrench for tightening the screws firmly.

**Note!**

Never install the heater with junction box facing upwards.



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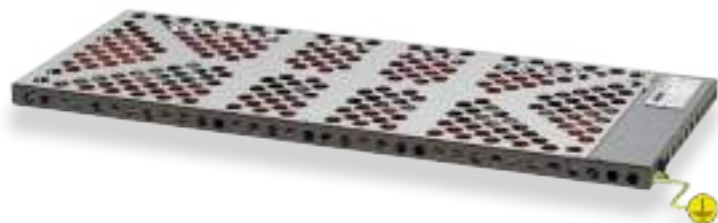
# ENCLOSURE HEATER

## TEF 9209 Ex e

### T4 120 VAC, WITH FLYING LEAD

### ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS5065 REV. D 07.07.2017



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing. With flying lead electrical connection. Delivered with power output from 50W to 300W at 0°C.

#### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEx:</b>	Ta= -50°C..+50°C <div>Ex</div> II 2 G Ex e IIC T4 Gb Ex e mb IIC T4 Gb
<b>Ex-protection CSA:</b>	AEx e mb II / Ex e mb II
<b>Operational ambient temp.:</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is de-energized)
<b>Nominal voltage:</b>	120V 50/60 Hz
<b>Inrush current:</b>	4 x Nominal current for min. 30 sec.
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Electrical protection:</b>	Connect to max. 16A circuit breaker. Earth leakage protection device or isolation device, depend on type of system of earth according to IEC 364-3, chapter 31, and EN60079-7 Annex D.
<b>Electrical connection:</b>	Flying lead, 2 x 2.5mm <sup>2</sup> + PE
<b>IP protection:</b>	For use in enclosures with IP54 or higher.
<b>Output accuracy:</b>	Approx. ±10%

#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Low maintenance.

#### APPROVALS AND CERTIFICATES

**IECEx certificate No.:** IECEx NEM 11.0005X

**ATEX certificate No.:** Nemko 11ATEX1098X

**CSA Certificate:**  1370701

CSA Master contract: 216432

# TEF 9209 ENCLOSURE HEATER

## DESCRIPTION

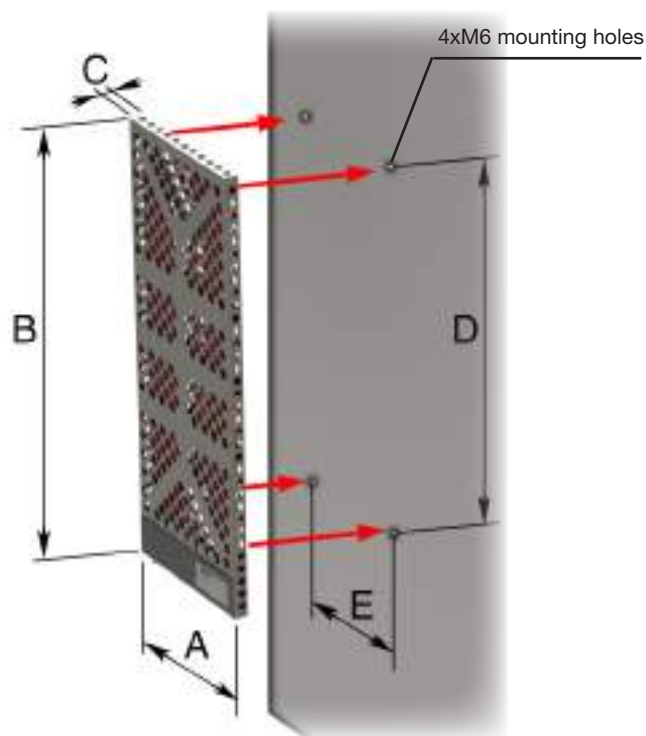
	Part No.
Enclosure heater, 50W @ 0°C	9209 5000
Enclosure heater, 100W @ 0°C	9209 5001
Enclosure heater, 175W @ 0°C	9209 5002
Enclosure heater, 300W @ 0°C	9209 5003

## DIMENSIONS

*Nominal output	Overall dimensions			Mounting dimension		Weight	Length flying lead
	A	B	C	D	E		
50W	200	300	30	190	160	2 kg.	1 meter
100W	240	550	30	440	200	3 kg.	1 meter
175W	280	700	30	590	240	5 kg.	1,5 meter
300W	360	870	30	760	320	8 kg.	1,5 meter

\*Note:  
Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



4xØ6 mounting holes on the rear side of the heater.



Hold the heater close to the installation surface, and insert the M6 screws in each of the 4 mounting holes.



Use a tool to tighten the screws firmly to secure the heater.

# ENCLOSURE HEATER

## TEF 9209 Ex e

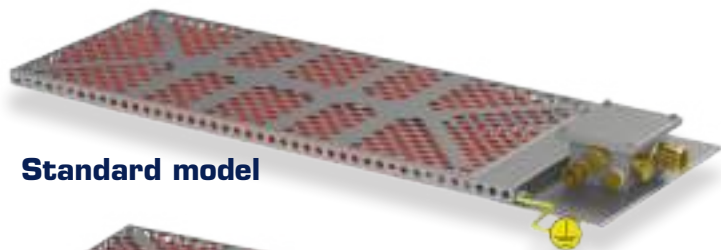
### T4, 120 VAC, WITH JUNCTION BOX

### ZONE 1 , ZONE 2 & SAFE AREA

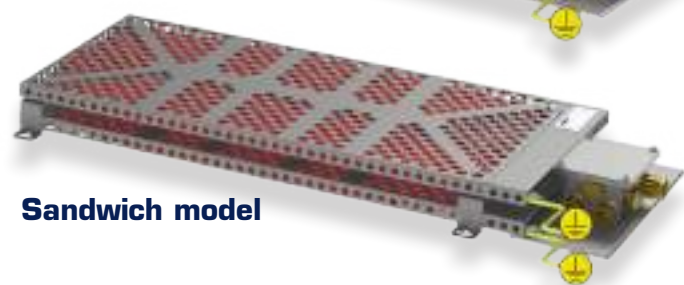
Subject to change without prior notice TPS5066 REV. D 07.07.2017



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing and junction box. Junction box for electrical connections. Delivered with power output from 100W to 600W at 0°C.



**Standard model**



**Sandwich model**


#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Low maintenance.

#### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEX:</b>	Ta= -50°C...+50°C  II 2 G Ex e IIC T4 Gb Ex e mb IIC T4 Gb
<b>Ex-protection CSA:</b>	AEx e mb II / Ex e mb II
<b>Optional ambient temp. :</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is deenergized)
<b>Nominal voltage:</b>	120V 50/60Hz
<b>Inrush current:</b>	4 x Nominal current for min. 30 sec.
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Electrical protection:</b>	Connect to max. 16A circuit breaker. Earth leakage protection device or isolation device, depend on type of system of earth according to IEC 364-3, chapter 31, and EN60079-7 Annex D.
<b>Terminals in junction box:</b>	4mm <sup>2</sup> : 2 + 2 pcs 2,5mm <sup>2</sup> : 2 pcs 10mm <sup>2</sup> PE terminals: 3 pcs
<b>Cable glands:</b>	1 pc. TEF E204/622 M25/ D2/9mm (Ø11,0-15,0mm) 1 pc. TEF 7302 M25 breather/ drain plug TEF 650 M20/M25 stopping plugs
<b>IP protection:</b>	For use in enclosures with IP54 or higher.
<b>Output accuracy:</b>	Approx. ±10%

#### APPROVALS AND CERTIFICATES

IECEX certificate No.: IECEX NEM 11.0005X

ATEX certificate No.: Nemko 11ATEX1098X

CSA Certificate:  1370701

CSA Master contract: 216432

# TEF 9209 ENCLOSURE HEATER W/JUNCTION BOX

## DESCRIPTION

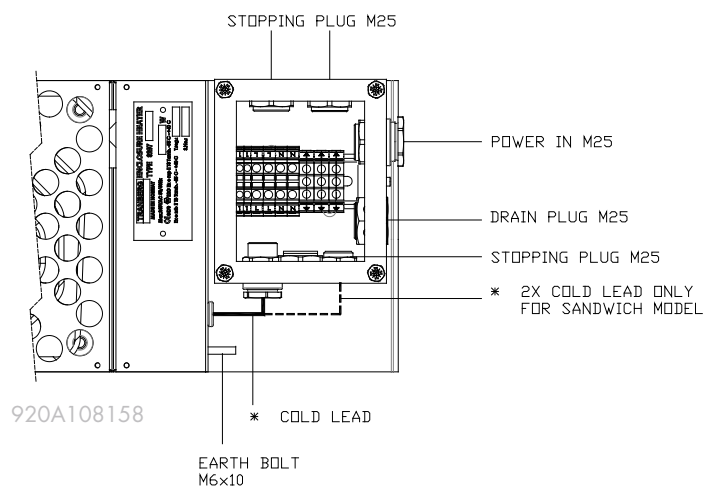
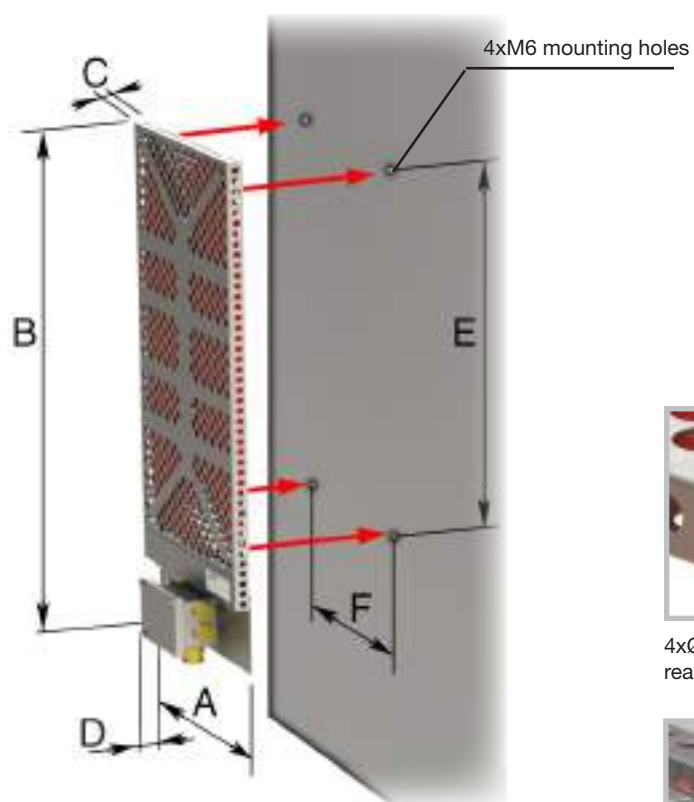
	Part No.
Enclosure heater with junction box, 100W @ 0°C	9209 6001
Enclosure heater with junction box, 175W @ 0°C	9209 6002
Enclosure heater with junction box, 300W @ 0°C	9209 6003
Enclosure heater with junction box, 600W @ 0°C (Sandwich)	9209 8006

## DIMENSIONS

*Nominal output	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100W	240	684	30	80	440	200	4,92 kg.
175W	280	834	30	80	590	240	6,74 kg.
300W	360	1004	30	80	760	320	9,72 kg.
600W	424	1004	80	80	760	397	18,76 kg.

\*Note:  
Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



4xØ6 mounting holes on the rear side of the heater.



Use a tool to tighten the screws firmly to secure the heater.



For the sandwich model, insert the M6 screws and a washer in the mounting brackets as shown. Use a wrench for tightening the screws firmly.

**Note!**  
Never install the heater with junction box facing upwards.



# ENCLOSURE HEATER

## TEF 9209 Ex e, T4 120 VAC,

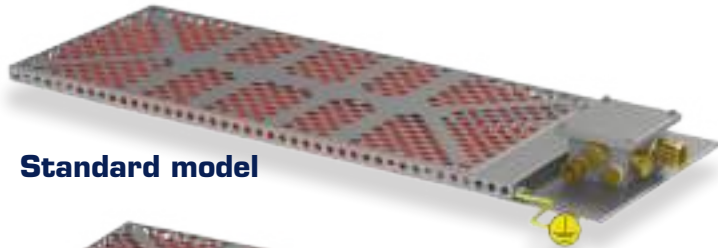
### WITH JUNCTION BOX AND THERMOSTAT

### ZONE 1 , ZONE 2 & SAFE AREA

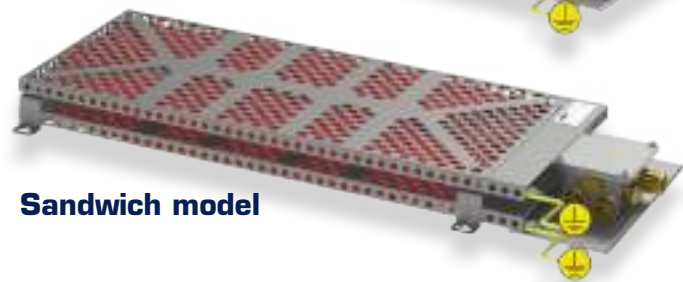
Subject to change without prior notice TPS5067 REV. D 07.07.2017



Globally approved Ex e, self regulating enclosure heater. AISI 316L acid resistant steel housing and junction box. Junction box for electrical connections. Delivered with ambient air thermostat, +5°C or +15°C\*(see page 2) and power output from 100W to 600W at 0°C ambient, still air.



**Standard model**



**Sandwich model**

#### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.

#### FEATURES AND BENEFITS

- Low profile, easy to fit inside cabinets.
- Self regulating heating element. Prevents overheating.
- Rugged AISI 316L, acid steel construction.
- Ambient air thermostat, integrated in heater junction box.
- Low maintenance.

#### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEx:</b>	Ta= -50°C...+50°C Ex II 2 G Ex e IIC T4 Gb Ex e mb IIC T4 Gb
<b>Ex-protection CSA:</b>	AEx e mb II / Ex e mb II
<b>Operational ambient temp.:</b>	-50° C to +50° C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is deenergized)
<b>Nominal voltage:</b>	120V 50/60Hz
<b>Inrush Current:</b>	4 x Nominal current for min. 30 sec.
<b>Material:</b>	AISI 316L / EN 1.4404
<b>Electrical protection:</b>	Connect to max. 16A circuit breaker. Earth leakage protection device or isolation device, depend on type of system of earth according to IEC 364-3, chapter 31, and EN60079-7 Annex D.
<b>Terminals in junction box:</b>	6mm <sup>2</sup> : 2 + 2 pcs 2,5mm <sup>2</sup> : 2 pcs 10mm <sup>2</sup> PE terminals: 3 pcs
<b>Cable glands:</b>	1 pc. TEF E204/622 M25/D2/9mm (Ø11,0-15,0mm), 1 pc. TEF 7302 M25 breather/drain plug & TEF 650 M20/M25 stopping plugs
<b>Thermostat:</b>	1 pc. ambient air sensing thermostat. Switching temp.: +5°C or +15°C. Hysteresis: +5°C / -5°C
<b>IP protection:</b>	For use in enclosures with IP54 or higher.
<b>Output accuracy:</b>	Approx. ±10%

#### APPROVALS AND CERTIFICATES

**IECEx certificate No.:** IECEx NEM 11.0005X

**ATEX certificate No.:** Nemko 11ATEX1098X

**CSA Certificate:** 1370701

CSA Master contract: 216432

# TEF 9209 ENCLOSURE HEATER W/ JUNCTION BOX AND THERMOSTAT

## DESCRIPTION

	*Part No. +5°C(+5/-5°C)	*Part No. +15°C(+5/-5°C)
Enclosure heater with junction box and thermostat, 100W @ 0°C	92097401	92097601
Enclosure heater with junction box and thermostat, 175W @ 0°C	92097402	92097602
Enclosure heater with junction box and thermostat, 300W @ 0°C	92097403	92097603
Enclosure heater with junction box and thermostat, 600W @ 0°C (Sandwich)	92099406	92099606

**\*Note:**

Ambient Air Thermostat : +5°C : Switches heater ON at approx. +3°C ambient temperature, and OFF at approx. 11°C ambient temperature

Ambient Air Thermostat : +15°C : Switches heater ON at approx. +10°C ambient temperature, and OFF at approx. 20°C ambient temperature

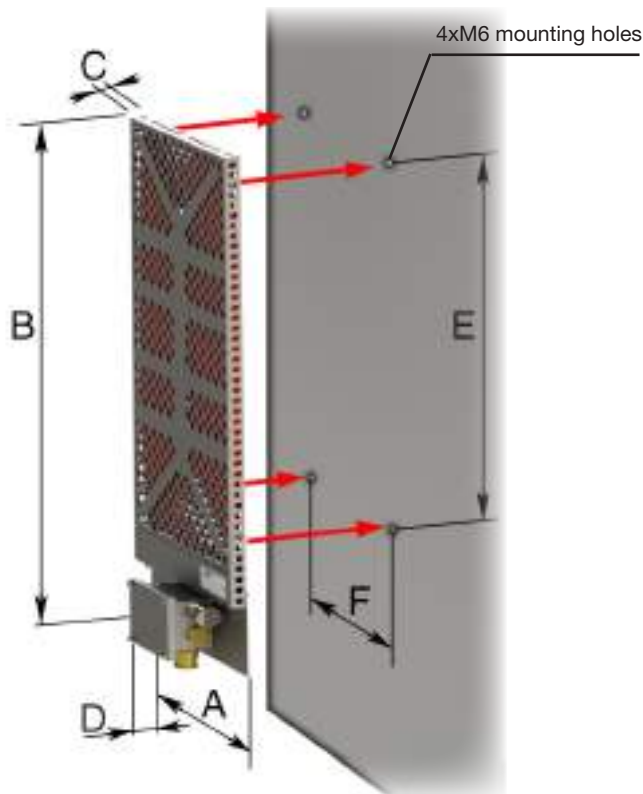
## DIMENSIONS

*Nominal output	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100W	245	684	80	80	440	200	4,92 kg.
175W	280	834	80	80	590	240	6,74 kg.
300W	360	1004	80	80	760	320	9,72 kg.
600W	424	1004	80	80	760	397	18,76 kg.

**\*Note:**

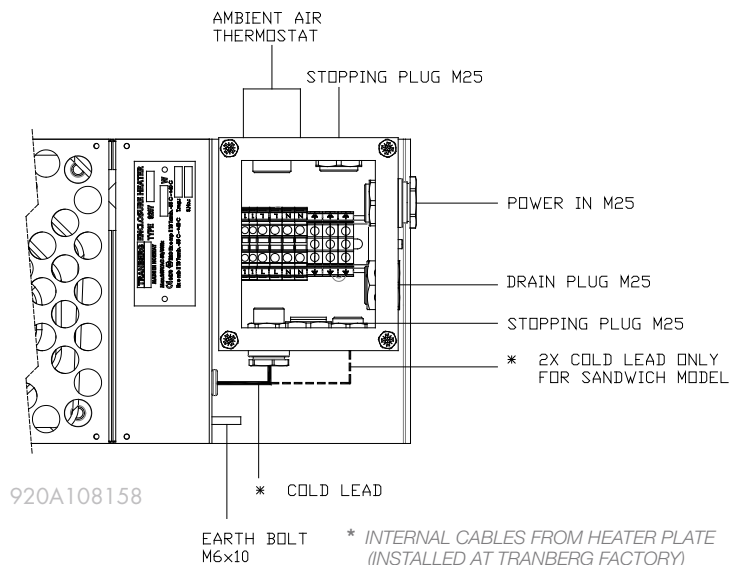
Nominal at still air @0°C

## MOUNTING INSTRUCTIONS



**Note!**

Never install the heater with junction box facing upwards.



**Standard model:**

4xØ6 mounting holes on the rear side of the heater.



**Standard model:**

Use a tool to tighten the 4xM6 screws firmly to secure the heater.



**Sandwich model:**

Insert 4xM6 screws and washers in the mounting brackets as shown. Use a wrench for tightening the screws firmly.



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# ENCLOSURE HEATER

## TEF 9202 COMPOSITE Ex e

### T4 120/240 VAC, WITH FLYING LEAD

## ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS5559 REV. C 07.07.2017



Globally approved Ex e, self regulating enclosure heater. Made of light weight composite material.



## Composite

### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.
- Temperature maintenance.
- Anti-condensation.

### FEATURES AND BENEFITS

- Light weight composite structure.
- Compact.
- Easy to install.
- Can be supplied with DIN rail module.
- Self regulating heating element. Prevents overheating.
- Low maintenance.
- Corrosion proof.
- Fire resistant retardant UL 94, Classification V-0.
- Low inrush current.

### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEx:</b>	II 2 G Ex e IIC T4 Gb
<b>Operational ambient temp.:</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is de-energized)
<b>Nominal voltage:</b>	120V/240V 50/60Hz
<b>Material:</b>	Composite material
<b>Electrical protection:</b>	Connect to max. 16A circuit breaker. Earth leakage protection device or isolation device, depend on type of system of earth according to IEC 364-3, chapter 31, and EN60079-7 Annex D.
<b>IP protection:</b>	For use in enclosures with IP54 or higher.
<b>Flying lead:</b>	1,5m, 2x2,5mm² + PE

### APPROVALS AND CERTIFICATES

IECEX PRE 17.0016X  
Presafe 17ATEX9667X

# TEF 9202 ENCLOSURE HEATER W/ FLYING LEAD

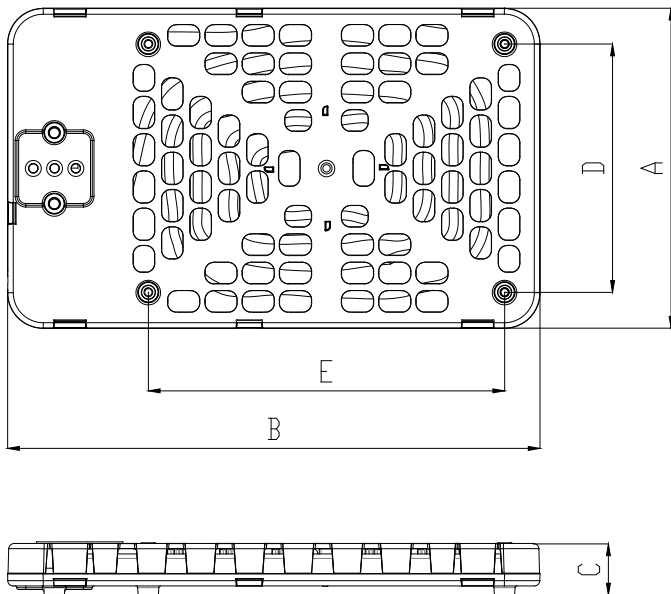
## DESCRIPTION

	Part No.
Enclosure Heater Ex 240V-50W T4 Composite with flying lead @ 0°C	9202010
Enclosure Heater Ex 240V-100W T4 Composite with flying lead @ 0°C	9202011
Enclosure Heater Ex 120V-50W T4 Composite with flying lead @ 0°C	9202050
Enclosure Heater Ex 120V-100W T4 Composite with flying lead @ 0°C	9202051
Optional DIN rail bracket	50520075

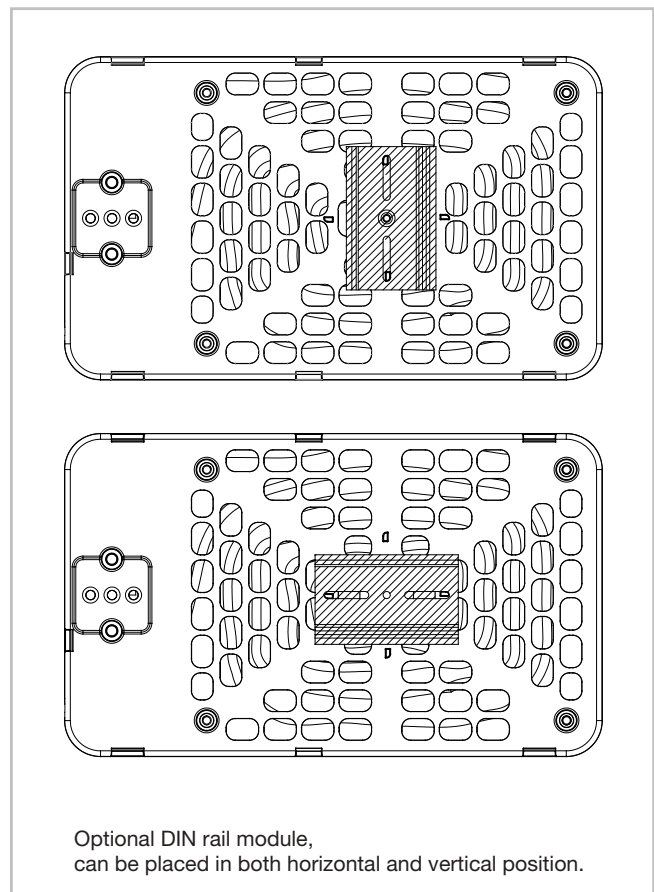
## DIMENSIONS

*Nominal output	Overall dimensions			Mounting dimensions		Weight
	A	B	C	D	E	
50W	180	300	30	140	201	0,56 kg.
100W	180	300	30	140	201	0,76 kg.

\*Note:  
Nominal at still air @ 0°C



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# ENCLOSURE HEATER

## TEF 9202 COMPOSITE Ex e

### T3 240 VAC, IP66, WITH FLYING LEAD

## ZONE 1 , ZONE 2 & SAFE AREA

Subject to change without prior notice TPS6334 REV. A 28.01.2019



Globally approved Ex e, self regulating enclosure heater. Made of light weight composite material.



## Composite

### APPLICATION

- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control.
- Frost protection.
- Temperature maintenance.
- Anti-condensation.

### FEATURES AND BENEFITS

- Light weight composite structure.
- Compact.
- Easy to install.
- Can be supplied with DIN rail module.
- Self regulating heating element.
- Low maintenance.
- Corrosion proof.
- Fire retardant UL 94, Classification V-0.

### TECHNICAL DATA

<b>Ex-protection ATEX &amp; IECEx:</b>	II 2 G Ex eb IIC T3 Gb
<b>Operational ambient temp.:</b>	-50°C to +50°C
<b>Max. withstand ambient temp.:</b>	+50°C (Heater is energized) +80°C (Heater is de-energized)
<b>Nominal voltage:</b>	240VAC 50/60Hz
<b>Inrush current:</b>	Approx. 2A
<b>Material:</b>	Composite material
<b>Electrical protection:</b>	The heaters with permanently connected unterminated flying lead cable need an appropriate protection of the free end of the cable (for example terminated in an Ex e junction box).  The supply circuit shall include an electrical protection device in conformity with EN 60079-30-1.
<b>IP protection:</b>	IP66
<b>Flying lead:</b>	1,5m, 2x2,5mm <sup>2</sup> + PE

### APPROVALS AND CERTIFICATES

IECEx PRE 18.0037X  
Presafe 18ATEX12634X

# TEF 9202 ENCLOSURE HEATER W/ FLYING LEAD, T3

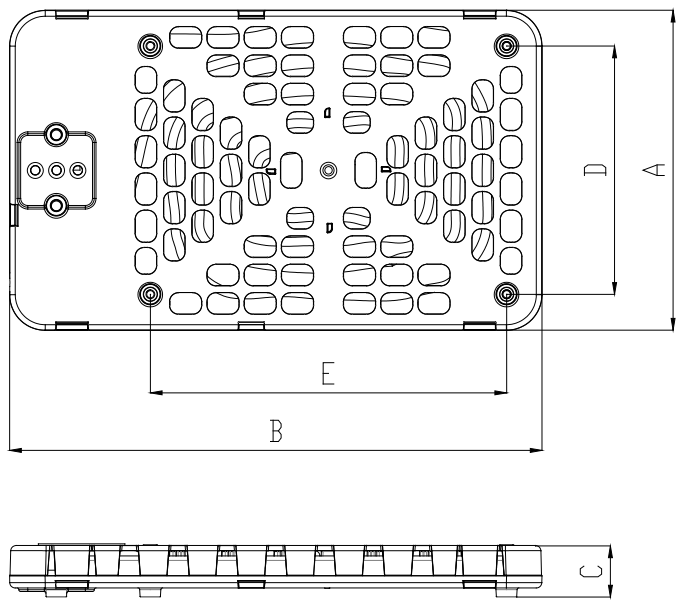
## DESCRIPTION

	Part No.
Enclosure Heater Ex 240V-50W T3 Composite with flying lead @ 0°C	9202210
Enclosure Heater Ex 240V-100W T3 Composite with flying lead @ 0°C	9202211
Optional DIN rail bracket	50520075

## DIMENSIONS

*Nominal output	Overall dimensions			Mounting dimensions		Weight
	A	B	C	D	E	
50W	180	300	30	140	201	0,56 kg.
100W	180	300	30	140	201	0,76 kg.

\*Note:  
Nominal at still air @ 0°C



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