
TRANBERG SOLUTIONS

Product	Installation in Zone						Series	Page	WebCode
	0	1	2	20	21	22			
Components for Heating Systems									
Capillary Tube Thermostat – Pipe Mounted		•	•				TEF1058	573	T1058I
Capillary Tube Thermostat – Wall Mounted		•	•				TEF1058	571	T1058H
Enclosure Heater with Connection Line 120/240 V AC, T4		•	•				TEF9202	587	T9202A
Enclosure Heater with Connection Line 120 V AC, T4		•	•				TEF9209	601	T9209A
Enclosure Heater with Connection Line 240 V AC, T3		•	•				TEF9207	589	T9207A
Enclosure Heater with Connection Line 240 V AC, T4		•	•				TEF9208	595	T9208A
Enclosure Heater with Junction Box 120 V AC, T4		•	•				TEF9209	603	T9209B
Enclosure Heater with Junction Box 240 V AC, T3		•	•				TEF9207	591	T9207B
Enclosure Heater with Junction Box 240 V AC, T4		•	•				TEF9208	597	T9208B
Enclosure Heater with Junction Box and Thermostat 120 V AC, T4		•	•				TEF9209	605	T9209C
Enclosure Heater with Junction Box and Thermostat 240 V AC, T3		•	•				TEF9207	593	T9207C
Enclosure Heater with Junction Box and Thermostat 240 V AC, T4		•	•				TEF9208	599	T9208C
Junction Box – Pipe Mounted for Heat Tracing		•	•				TEF1058	567	T1058E
Junction Box – Pipe Mounted for Heat Tracing / De-Ice		•	•				TEF1058	569	T1058J
Junction Box – Wall Mounted for Heat Tracing		•	•				TEF1058	563	T1058F
Junction Box – Wall Mounted for Heat Tracing / De-Ice		•	•				TEF1058	565	T1058K
High Voltage Enclosure									
High Voltage Enclosure A-BLOCK SYSTEM		•	•				TEF1060	558	T1060A
High Voltage Enclosure BUS-BAR SYSTEM		•	•				TEF1060	560	T1060B
Lighting									
Helideck Floodlight LED		•	•				TEF9970	583	T9970A
Integrated Helideck Light Control Zone 1 or Non-Ex Versions		•					TEF4600	585	T4600A
Navigation Light Zone 2			•				TEF2870	575	T2870A
Obstruction Light LED		•	•				TEF2460	579	T2460A
Perimeter Light LED		•	•				TEF2460	577	T2460B
Status Light		•	•				TEF9980	581	T9980A

For additional products and information please refer to r-stahl.com

High Voltage Enclosure

Series TEF1060 A-BLOCK SYSTEM

- Compact solutions; flexible design
- Up to 100A; up to 11kV
- CU bar for earthing
- Bottom side entries
- Can be used in Non Ex environments
- Safety cover IP2X
- Hinged door; padlock facility
- ATEX and IECEx approved
- Up to 50 mm² (35 mm² with ferrules)
- Suitable for DC solutions
- Optional: fiber Optical solutions, high voltage and low voltage terminals, Ex safety switch, Ex heater

WebCode **T1060A**

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Dimensions (WxHxD)	Type of terminals 1	Product Type	Art. No.	PS
Enclosure material Rated operational voltage AC	1.4404 stainless steel, AISI 316L, pickled 2.2 kV			
225 mm x 250 mm x 125 mm	6 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063151	259405	70
225 mm x 350 mm x 125 mm	16 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063159	259380	70
250 mm x 250 mm x 125 mm	6 x Phoenix UT 2-conductor, 16 mm², grey	TEF1063153	259399	70
	6 x Phoenix UT 2-conductor, 35 mm², grey	TEF1063154	259398▲	70
	9 x Phoenix UT 2-conductor, 16 mm², grey	TEF1063156	259394	70
Enclosure material Rated operational voltage AC	1.4404 stainless steel, AISI 316L, pickled 3.5 kV			
Dimensions (WxHxD)	Type of terminals 1	Product Type	Art. No.	PS
225 mm x 250 mm x 150 mm	6 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063251	259402	70
	9 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063255	259397	70
225 mm x 350 mm x 150 mm	16 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063259	259379	70
250 mm x 250 mm x 150 mm	6 x Phoenix UT 2-conductor, 16 mm², grey	TEF1063253	259396	70
	6 x Phoenix UT 2-conductor, 35 mm², grey	TEF1063254	259395▲	70
	9 x Phoenix UT 2-conductor, 16 mm², grey	TEF1063256	259393	70

▲ Preferred products – in stock or available at short notice

Selection Table

Enclosure material Rated operational voltage AC	1.4404 stainless steel, AISI 316L, pickled 6.9 kV			
Dimensions (WxHxD)	Type of terminals 1	Product Type	Art. No.	PS
250 mm x 300 mm x 210 mm	6 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063351	259392	70
	6 x Phoenix UT 2-conductor, 16 mm², grey	TEF1063353	259390 ▲	70
	9 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063355	259387	70
300 mm x 300 mm x 210 mm	9 x Phoenix UT 2-conductor, 16 mm², grey	TEF1063356	259383	70
300 mm x 350 mm x 210 mm	16 x Phoenix UT 2-conductor, 6 mm², grey	TEF1063359	259378	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex eb IIC T6/T5/T4 Gb
ATEX gas explosion protection	II 2 G Ex eb IIC T6/T5/T4 Gb
Ambient Conditions	
Ambient temperature	-25 °C ... +40 °C (IIC T6) -25 °C ... +40 °C (IIC T5) -25 °C ... +40 °C (T4)
Mechanical Data	
Degree of protection (IP)	IP66
Silicone-free	Yes

▲ Preferred products – in stock or available at short notice

- Standardized for bottom side entries
- All CU connection bars are tinned
- All products delivered with Tranberg cable glands
- Bright chemical dip surface threated
- Material: AISI316L
- ATEX and IECEx certified
- Up to 11kV
- Optional: lifting lugs (certified to Standard 2.7.1), short circuit devices, Tranberg enclosure heater with thermostat, cable cleats, optical fiber, padlock facility termination, Ex i safety switch, 3-phase or single core plug-in solution, Non-Ex solutions, customizing for top- or side entries, MCT frames, gland plates, Ex enclosure heater

WebCode **T1060B**

The High Voltage solution with tinned copper bus-bars combined with the use of Ex-certified Isolators.

3 different types of bus-bar solutions available:
- Type-R with rectangular bus-bar
- Type-C with rectangular bus-bar assembled in a curved frame system
- Type-G with G-profile bus-bar

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description Enclosure version	High-voltage enclosure with busbars Type C - Solution (Curved Profile CU Bus-Bars)				
Rated operational current	Dimensions (WxHxD)	Type of terminals 1	Product Type	Art. No.	PS
2.1 kA	1500 mm x 1500 mm x 700 mm	3 x C-12H busbar Ø12-2100A-2x100/10	TEF1063425	259349▲	70
500 A	600 mm x 1000 mm x 400 mm	3 x C-6H busbar Ø10-500A	TEF1063416	259361▲	70
	700 mm x 1100 mm x 450 mm	3 x C-6H busbar Ø10-500A	TEF1063420	259355▲	70
	900 mm x 1100 mm x 500 mm	3 x C-6H busbar Ø10-500A	TEF1063424	259351▲	70
950 A	675 mm x 1100 mm x 400 mm	3 x C-8H busbar Ø10-950A-100/10	TEF1063419	259358▲	70
	800 mm x 1100 mm x 450 mm	3 x C-8H busbar Ø10-950A-100/10	TEF1063423	259352▲	70
Product Description Enclosure version	High-voltage enclosure with busbars Type G - Solution (G-Profile CU Bus-Bars)				
Rated operational current	Dimensions (WxHxD)	Type of terminals 1	Product Type	Art. No.	PS
490 A	500 mm x 950 mm x 350 mm	3 x G-4H busbar Ø10-490A	TEF1063443	259372▲	70
	600 mm x 1000 mm x 400 mm	3 x G-4H busbar Ø10-490A	TEF1063445	259365▲	70
	750 mm x 1200 mm x 500 mm	3 x G-4H busbar Ø10-490A	TEF1063447	259357▲	70

Selection Table

Product Description Enclosure version	High-voltage enclosure with busbars Type G - Solution (G-Profile CU Bus-Bars)				
Rated operational current	Dimensions (WxHxD)	Type of terminals 1	Product Type	Art. No.	PS
850 A	550 mm x 950 mm x 350 mm	3 x G-4H busbar Ø10-850A-100/10	TEF1063444	259370 ▲	70
	700 mm x 1000 mm x 400 mm	3 x G-4H busbar Ø10-850A-100/10	TEF1063446	259364 ▲	70
	800 mm x 1200 mm x 500 mm	3 x G-4H busbar Ø10-850A-100/10	TEF1063448	259356 ▲	70
Product Description Enclosure version	High-voltage enclosure with busbars Type R - Solution (Rectangular CU Bus-Bars)				
Rated operational current	Dimensions (WxHxD)	Type of terminals 1	Product Type	Art. No.	PS
250 A	450 mm x 550 mm x 200 mm	3 x R-2H busbar Ø8-250A-30/10	TEF1063401	259377	70
	500 mm x 650 mm x 275 mm	3 x R-2H busbar Ø8-250A-30/10	TEF1063403	259374	70
	625 mm x 900 mm x 300 mm	3 x R-2H busbar Ø8-250A-30/10	TEF1063405	259369	70
430 A	625 mm x 900 mm x 300 mm	3 x R-2H busbar Ø10-432A	TEF1063406	259368 ▲	70
432 A	450 mm x 550 mm x 200 mm	3 x R-2H busbar Ø10-432A	TEF1063402	259376 ▲	70
	500 mm x 650 mm x 275 mm	3 x R-2H busbar Ø10-432A	TEF1063404	259373 ▲	70

Technical Data

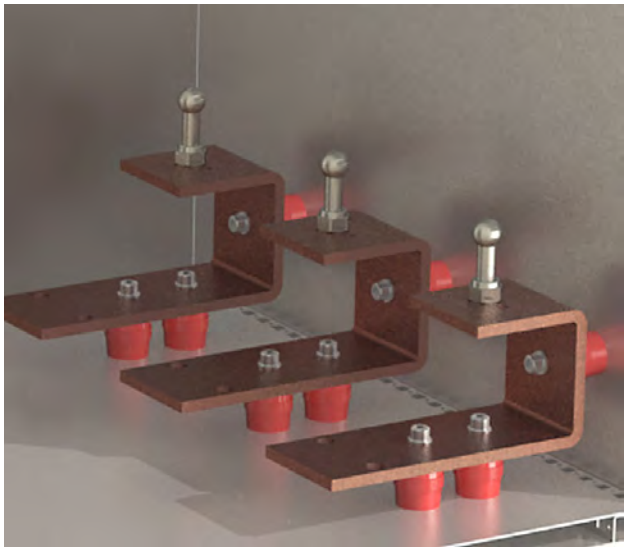
Explosion Protection	
IECEx gas explosion protection	Ex eb IIC T6/T5/T4 Gb
ATEX gas explosion protection	Ⓔx II 2 G Ex eb IIC T6/T5/T4 Gb
Electrical Data	
Rated operational voltage AC	3.5 kV
Ambient Conditions	
Ambient temperature	-20 °C ... +40 °C (IIC T6) -20 °C ... +40 °C (IIC T5) -25 °C ... +40 °C (T4)
Mechanical Data	
Degree of protection (IP)	IP66
Enclosure material	1.4404 stainless steel, AISI 316L, pickled
Silicone-free	Yes

High Voltage Enclosure

Series TEF1063 with BUS-BAR SYSTEM

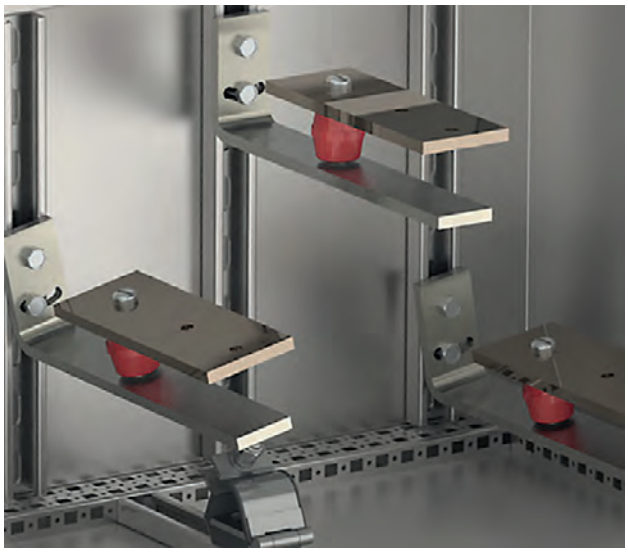
R-Profile

- Designed for one cable in and one cable out each phase
- A cost effective solution
- Designed for 300 mm²
- Available with certified cable cleats
- Withstand short-circuit for even 50 kA



G-Profile

- Compact solutions
- Designed for even 4 cables each phase
- Max. 300 mm²
- Withstand short-circuit for even 50 kA
- Max. current load 960 A



C-Profile (Curved)

- Easy installation
- Adjustable bars to compensate for bending radius
- Can be delivered up to 2100 A
- “Unlimited” numbers of cables

Junction Box – Wall Mounted

Series TEF1058 for Heat Tracing

- High degree of protection, IP66/67, IP67 without breather
- Manufactured in acid proof stainless steel (AISI 316L)
- Stainless steel Type Label spot welded to the cover
- Several earthing alternatives
- Maximum strength and corrosion resistance
- High operational reliability
- Low lifetime maintenance cost
- Recommended for up to 2 heating cables

WebCode T1058F

Tranberg heat trace boxes are represented in most of the oil installations in the North Sea, petrochemical industries and other industries subjected to rough environments.
Tranberg has designed and manufactured heat tracing equipment and heating applications for rough environments for more than 25 years.
Our product range includes a number of different heat tracing junction boxes.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table			
Enclosure material	1.4404 stainless steel, (AISI 316L), electropolished		
Description	Product Type	Art. No.	PS
Junction box with 1 pc. cable gland E204/622 M25/D9 (Ø13 – 17 mm) 1 pc. stopping plug M25 1 pc. breather M25	TEF10581138	259489▲	70
Junction box with 4 pc. Ø25 entries (with temporary plugs) Note: Label Kit not included	TEF10581128	259488▲	70
Enclosure material	1.4404 stainless steel, AISI 316L, pickled		
Description	Product Type	Art. No.	PS
Junction box with 1 pc. cable gland E204/622 M25/D9 (Ø13 – 17 mm) 1 pc. stopping plug M25 1 pc. breather M25	TEF10581118	259487▲	70
Junction box with 4 pc. Ø25 entries (with temporary plugs) Note: Label Kit not included	TEF10581108	259486▲	70

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex eb IIC T5 Gb
ATEX gas explosion protection	II 2 G Ex eb IIC T5 Gb
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C
Mechanical Data	
Degree of protection (IP)	IP66

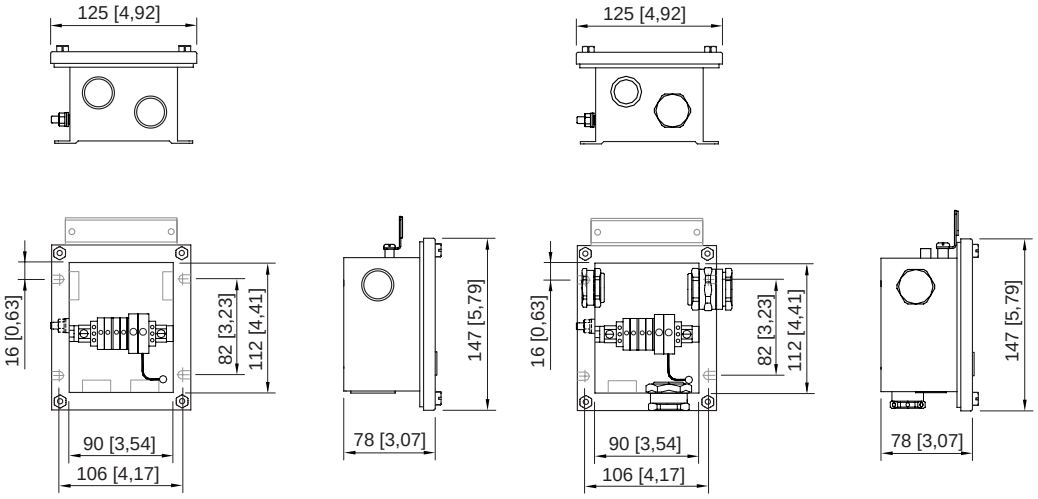
▲ Preferred products – in stock or available at short notice

Junction Box – Wall Mounted

Series TEF1058 for Heat Tracing

Technical Data	
Mechanical Data	
Degree of protection IP (IEC 60529)	IP67
Silicone-free	No
Clamping range max.	4 mm²
Connection cross-section	4 mm²

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



TEF10581108 and TEF10581128

TEF10581118 and TEF10581138

E6

Junction Box – Wall Mounted

Series TEF1058 for Heat Tracing / De-Ice

- High degree of protection, IP66/67, IP67 without breather
- Manufactured in acid proof stainless steel (AISI 316L)
- Stainless steel Type Label spot welded to the cover
- Several earthing alternatives
- Maximum strength and corrosion resistance
- High operational reliability
- Low lifetime maintenance cost
- Recommended for up to 2 heating cables

WebCode T1058K

Tranberg heat trace boxes are represented in most of the oil installations in the North Sea, petrochemical industry and other industries subjected to rough environments.
Tranberg has designed and manufactured heat tracing equipment and heating applications for rough environments for more than 25 years.
Our product range includes a number of different heat tracing junction boxes.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Enclosure material	1.4404 stainless steel, (AISI 316L), electropolished		
Description	Product Type	Art. No.	PS
Junction box with 2 pc. cable glands E204/622 M25/D9 (Ø13 – 17 mm) 2 pc. stopping plugs 1 pc. breather 2 pc. temporary plugs	TEF10581638	259493▲	70
Junction box with 7 pc. Ø25 entries (with temporary plugs) Note: Label Kit not included	TEF10581648	259492▲	70
Enclosure material	1.4404 stainless steel, AISI 316L, pickled		
Description	Product Type	Art. No.	PS
Junction box with 2 pc. cable glands E204/622 M25/D9 (Ø13 – 17 mm) 2 pc. stopping plugs 1 pc. breather 2 pc. temporary plugs	TEF10581618	259491▲	70
Junction box with 7 pc. Ø25 entries (with temporary plugs) Note: Label Kit not included	TEF10581608	259490▲	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex eb IIC T5 Gb
ATEX gas explosion protection	II 2 G Ex eb IIC T5 Gb
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C

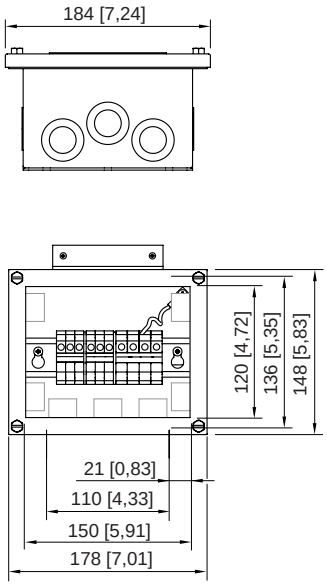
▲ Preferred products – in stock or available at short notice

Junction Box – Wall Mounted

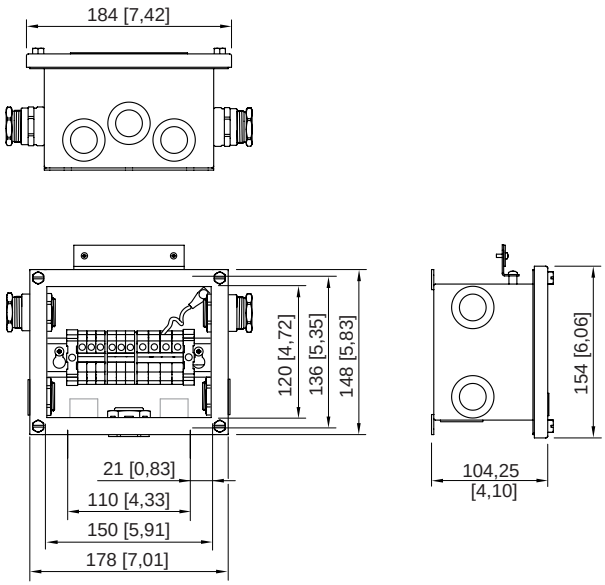
Series TEF1058 for Heat Tracing / De-Ice

Technical Data	
Mechanical Data	
Degree of protection (IP)	IP66
Degree of protection IP (IEC 60529)	IP67
Silicone-free	No
Clamping range max.	6 mm²
Connection cross-section	6 mm²

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



TEF10581618 and TEF10581638



TEF10581608 and TEF10581648

E6

- High degree of protection, IP66/67, IP67 without breather
- Manufactured in acid proof stainless steel (AISI 316L)
- Stainless steel Type Label spot welded to the cover
- Several earthing alternatives
- Maximum strength and corrosion resistance
- High operational reliability
- Low lifetime maintenance cost
- Recommended for up to 2 heating cables

WebCode **T1058E**

Tranberg heat trace boxes are represented in most of the oil installations in the North Sea, petrochemical industry and other industries subjected to rough environments.
Tranberg has designed and manufactured heat tracing equipment and heating applications for rough environments for more than 25 years.
Our product range includes a number of different heat tracing junction boxes.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Description	Product Type	Art. No.	PS
Enclosure material: 1.4404 stainless steel, (AISI 316L), electropolished			
Junction box with 1 pc. cable gland E204/622 M25/D9 (Ø13 – 17 mm) 1 pc. stopping plug M25 1 pc. breather M25	TEF10581136	259481▲	70
Junction box with 4 pc. Ø25 entries Note: Label kit not included	TEF10581126	259480▲	70
Enclosure material: 1.4404 stainless steel, AISI 316L, pickled			
Junction box with 1 pc. cable gland E204/622 M25/D9 (Ø13 – 17 mm) 1 pc. stopping plug M25 1 pc. breather M25	TEF10581116	259479▲	70
Junction box with 4 pc. Ø25 entries Note: Label kit not included	TEF10581106	259478▲	70

Technical Data

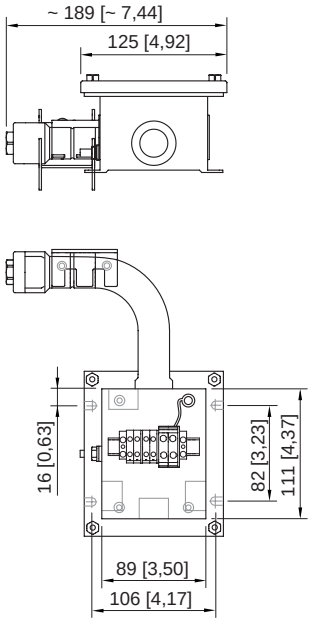
Explosion Protection	
IECEx gas explosion protection	Ex eb IIC T5 Gb
ATEX gas explosion protection	II 2 G Ex eb IIC T5 Gb
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C
Mechanical Data	
Degree of protection (IP)	IP66

Junction Box – Pipe Mounted

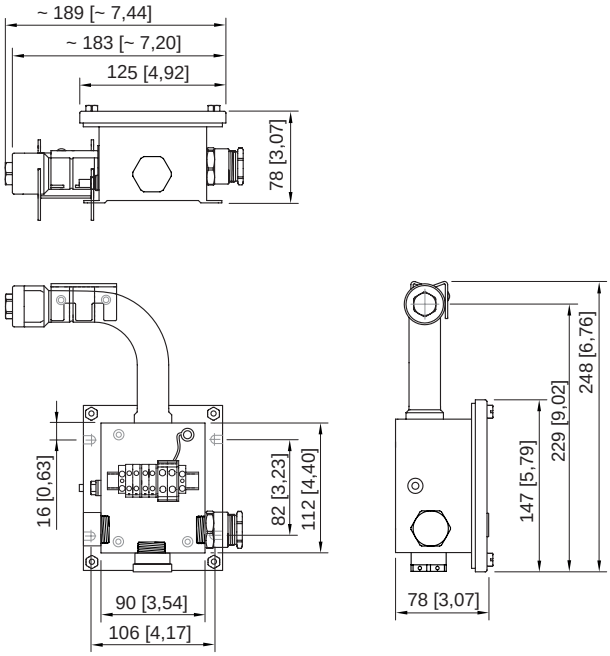
Series TEF1058 for Heat Tracing

Technical Data	
Mechanical Data	
Degree of protection IP (IEC 60529)	IP67
Silicone-free	No
Clamping range max.	4 mm²
Connection cross-section	4 mm²

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



TEF10581106 and TEF10581126



TEF10581116 and TEF10581136

E6

Junction Box – Pipe Mounted

Series TEF1058 for Heat Tracing / De-Ice

- High degree of protection, IP66/67, IP67 without breather
- Manufactured in acid proof stainless steel (AISI 316L)
- Stainless steel Type Label spot welded to the cover
- Several earthing alternatives
- Maximum strength and corrosion resistance
- High operational reliability
- Low lifetime maintenance cost
- Recommended for up to 4 heating cables

WebCode T1058J

Tranberg heat trace boxes are represented in most of the oil installations in the North Sea, petrochemical industry and other industries subjected to rough environments.
Tranberg has designed and manufactured heat tracing equipment and heating applications for rough environments for more than 25 years.
Our product range includes a number of different heat tracing junction boxes.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Enclosure material	1.4404 stainless steel, (AISI 316L), electropolished		
Description	Product Type	Art. No.	PS
Junction box with 2 pc. cable glands E204/622 M25/D9 (Ø13 – 17 mm) 2 pc. stopping plugs M25 1 pc. breather M25	TEF10581636	259484▲	70
Junction box with 5 pc. Ø25 entries (with temporary plugs) Note: Label kit not included	TEF10581646	259485▲	70
Enclosure material	1.4404 stainless steel, AISI 316L, pickled		
Description	Product Type	Art. No.	PS
Junction box with 2 pc. cable glands E204/622 M25/D9 (Ø13 – 17 mm) 2 pc. stopping plugs M25 1 pc. breather M25	TEF10581616	259483▲	70
Junction box with 5 pc. Ø25 entries (with temporary plugs) Note: Label kit not included	TEF10581606	259482▲	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex eb IIC T5 Gb
ATEX gas explosion protection	II 2 G Ex eb IIC T5 Gb
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C
Mechanical Data	
Degree of protection (IP)	IP66

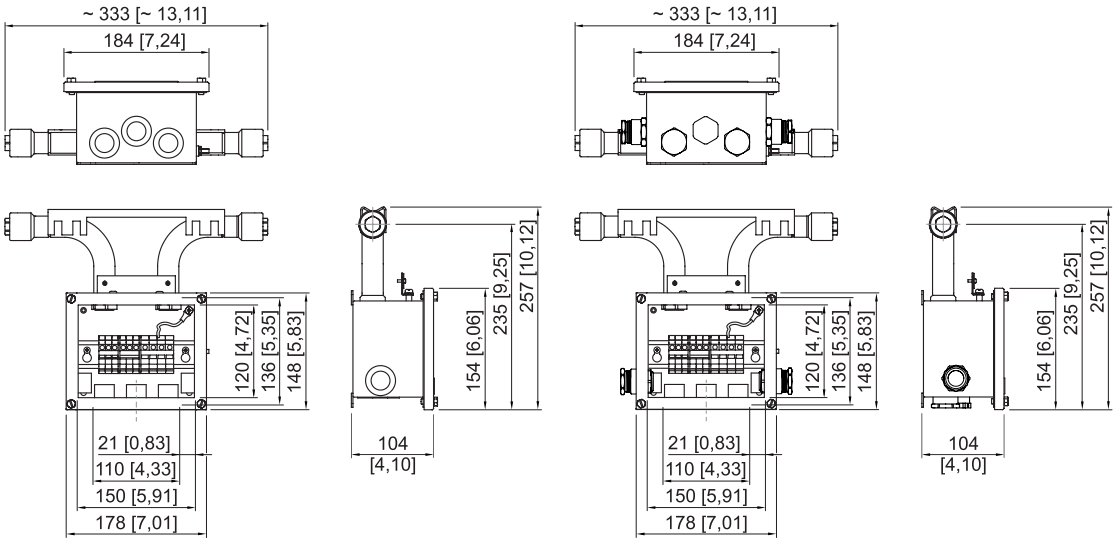
▲ Preferred products – in stock or available at short notice

Junction Box – Pipe Mounted

Series TEF1058 for Heat Tracing / De-Ice

Technical Data	
Mechanical Data	
Silicone-free	No
Clamping range max.	6 mm²
Connection cross-section	6 mm²

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



TEF10581606 and TEF10581646

TEF10581616 and TEF10581636

E6

Capillary Tube Thermostat – Wall Mounted

Series TEF1058

- High degree of protection IP66/67 is standard, IP67 without breather
- Manufactured in acid proof stainless steel (AISI 316L)
- Stainless steel type label spot welded to the cover
- Several earthing alternatives
- Maximum strength and corrosion resistance
- High operational reliability
- Low lifetime maintenance cost
- Recommended for up to 4 heating cables

WebCode T1058H

Tranberg's thermostats are represented in most of the oil installations in the North Sea, petrochemical industry and other industries subjected to rough environments.
Tranberg has designed and manufactured heat tracing equipment and heating applications for rough environments for more than 25 years.
Our product range includes a number of different heat tracing junction boxes.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Temperature controller wall mounting			
Measuring range	Contacts	Product Type	Art. No.	PS
-20 ... 50 °C	1 change-over contact	TEF10582580	259553▲	70
0 ... 120 °C	1 change-over contact	TEF10582581	259554▲	70
0 ... 200 °C	1 change-over contact	TEF10582582	259555▲	70
50 ... 300 °C	1 change-over contact	TEF10582583	259556	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex db eb IIC T6
ATEX gas explosion protection	Ⓔx II 2 G Ex db eb IIC T6
Electrical Data	
Rated operational voltage AC	230 V
Rated operational current	16 A (T6)
Output	
Output max. load AC	L-2 16 (2.5) A cos φ 1 (0.6) L-4 2 (0.4) A cos φ 1 (0.6)
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C
Mechanical Data	
Degree of protection (IP)	IP66 / IP67
Enclosure material	1.4404 stainless steel, Electropolished
Components	
Cable glands	1 x M25 Ø 13 – 17 mm

▲ Preferred products – in stock or available at short notice

Capillary Tube Thermostat – Wall Mounted
Series TEF1058

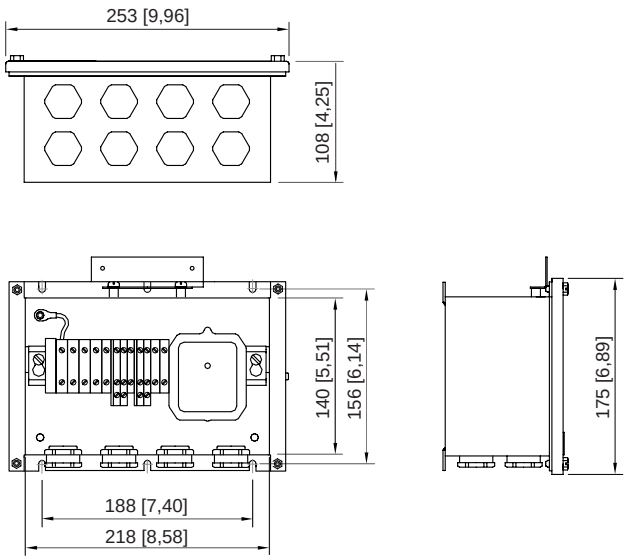
Technical Data

Components	
Stopping plug	8 x M25 x 1.5
Type of terminals 1	3 x Supply 2-conductor, 10 mm², grey
Type of terminals 2	5 x Output terminal 2-conductor, 2.5 mm², grey
Type of terminals PE 1	4 x Phoenix USLKG 2-conductor, 10 mm², green-yellow

Accessories

Figure	Description	Art. No.	PS	Weight kg
Cable gland Ex e				
	E204/622 M25/D1/9 mm (Ø 15 – 20.1 mm), with lock nut	259237	70	–
	E204/622 M25/D9/9 mm (Ø 13 – 17 mm), with lock nut	259253	70	–
Connection kit, wall mounting				
	5x11 / 5x15, M28x1 COLD for all Raychem cables	264288	70	–
	5x11 / 5x15, M28x1 HOT for all Raychem cables	264289	70	–
Termination kit, wall mounting				
	5x15, M28x1, HOT for Raychem cables 8BTV-10BTV-20QTV-XTV-KTV	264297	70	–
	5x15, M28x1, COLD for Raychem cables 8BTV-10BTV-20QTV-XTV-KTV	264298	70	–
	5x11, M28x1, HOT for Raychem cables 3BTV-5BTV-10QTV-15QTV-XTV-KTV-VPL	264293	70	–
	5x11, M28x1, COLD for Raychem cables 3BTV-5BTV-10QTV-15QTV-XTV-KTV-VPL	264295	70	–

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



E6

Capillary Tube Thermostat – Pipe Mounted

Series TEF1058

- High degree of protection IP66/67 is standard, IP67 without breather
- Manufactured in acid proof stainless steel (AISI 316L)
- Stainless steel type label spot welded to the cover
- Several earthing alternatives
- Maximum strength and corrosion resistance
- High operational reliability
- Low lifetime maintenance cost
- Recommended for up to 4 heating cables

WebCode T1058I

Tranberg's thermostats are represented in most of the oil installations in the North Sea, petrochemical industry and other industries subjected to rough environments.
Tranberg has designed and manufactured heat tracing equipment and heating applications for rough environments for more than 25 years.
Our product range includes a number of different heat tracing junction boxes.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Temperature controller for pipe mounting			
Measuring range	Contacts	Product Type	Art. No.	PS
-20 ... 50 °C	1 change-over contact	TEF10582560	259549▲	70
0 ... 120 °C	1 change-over contact	TEF10582561	259550▲	70
0 ... 200 °C	1 change-over contact	TEF10582562	259551▲	70
50 ... 300 °C	1 change-over contact	TEF10582563	259552	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex db eb IIC T6
ATEX gas explosion protection	Ⓔx II 2 G Ex db eb IIC T6
Electrical Data	
Rated operational voltage AC	230 V
Rated operational current	16 A (T6)
Output	
Output max. load AC	L-4 2 (0.4) A cos φ 1 (0.6) L-2 16 (2.5) A cos φ 1 (0.6)
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C
Mechanical Data	
Degree of protection (IP)	IP66 / IP67
Enclosure material	1.4404 stainless steel, Electropolished
Components	
Cable glands	1 x M25 Ø 13 – 17 mm

▲ Preferred products – in stock or available at short notice

Capillary Tube Thermostat – Pipe Mounted
Series TEF1058

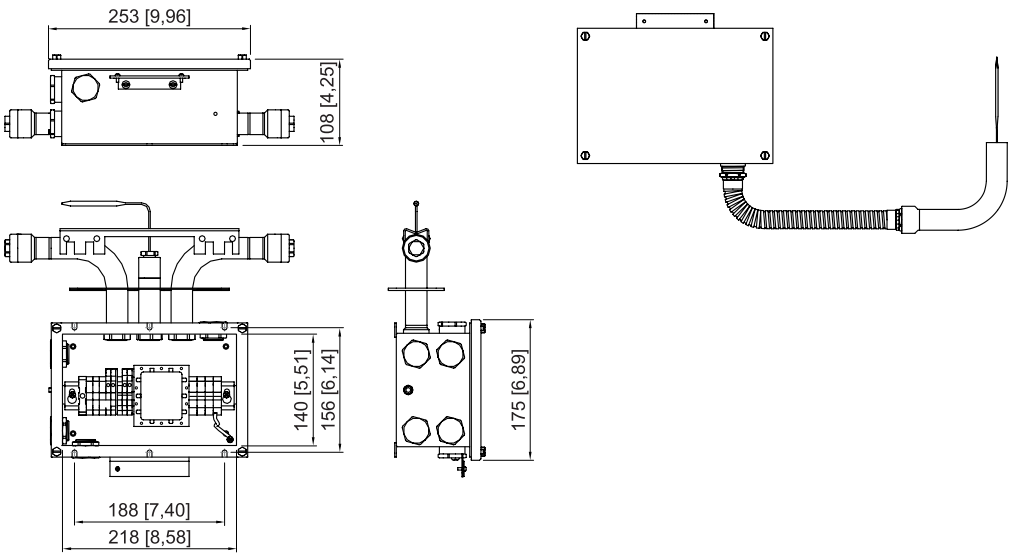
Technical Data

Components	
Stopping plug	6 x M25 x 1.5
Type of terminals 1	3 x Supply 2-conductor, 10 mm², grey
Type of terminals 2	5 x Output terminal 2-conductor, 2.5 mm², grey
Type of terminals PE 1	4 x Phoenix USLKG 2-conductor, 10 mm², green-yellow

Accessories

Figure	Description	Art. No.	PS	Weight kg
Cable gland Ex e				
	E204/622 M25/D1/9 mm (Ø 15 – 20.1 mm), with lock nut	259237	70	–
	E204/622 M25/D9/9 mm (Ø 13 – 17 mm), with lock nut	259253	70	–
Connection kit, pipe mounting				
	5x11 / 5x15, M28x1 COLD for all Raychem cables	264286	70	–
	5x11 / 5x15, M28x1 HOT for all Raychem cables	264287	70	–
Termination kit, pipe mounting				
	5x15, M28x1, COLD for Raychem cables 8BTV-10BTV-20QTV-XTV-KTV	264296	70	–
	5x15, M28x1, HOT for Raychem cables 8BTV-10BTV-20QTV-XTV-KTV	264299	70	–
	5x11, M28x1, HOT for Raychem cables 3BTV-5BTV-10QTV-15QTV-XTV-KTV-VPL	264292	70	–
	5x11, M28x1, COLD for Raychem cables 3BTV-5BTV-10QTV-15QTV-XTV-KTV-VPL	264294	70	–

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



E6

- Integrated terminal box, no need for extra connection box
- Access to bulb from top - enabling quick replacement of light source
- Supplied with isolators to be used between the lantern and hull/mast (such as aluminium) to prevent corrosion
- Durable bracket in stainless steel (SS316L) can be used when installing the lantern on 1” or 2” pipes
- Extremely durable to mechanical deterioration; resistant to vibrations
- Small dimensions; designed for use in arctic and tropical waters
- Lens of through-coloured glass – no decolouration throughout the lifetime of the lantern; 20 years warranty on lantern
- The lens can easily be cleaned for paint, bird droppings, pollution and oil

WebCode **T2870A**

Extensively tested in rough environments, navigation lights from Tranberg are the obvious choice by many vessel designers, ship owners and yards throughout the world. Our products and services meet the highest quality standards, perform reliably and efficiently to exceed customers’ expectations and assure market competitiveness.

The design of Tranberg’s navigation lights is based on many years of experience and research in the field of professional Marine lighting. Carefully selected materials are used to ensure maximum performance, low maintenance and long trouble free life.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in			•			

Selection Table					
Power	40.00 W				
Lamp type	Opening angle	Colour of glass	Product Type	Art. No.	PS
1/2 allround light	181 °	White	TEF28705119	242131▲	70
		Green	TEF28706119	242141▲	70
		Red	TEF28707119	242147▲	70
Allround light	360 °	White	TEF28705109	242130▲	70
		Green	TEF28706109	242140▲	70
		Red	TEF28707109	242146▲	70
Masthead	225 °	White	TEF28700019	242123▲	70
Port	112.5 °	Red	TEF28702019	242125▲	70
Starboard	112.5 °	Green	TEF28701019	242124▲	70
Stern	135 °	White	TEF28703019	242126▲	70
Stern cleats	135 °	Yellow	TEF28703319	242128▲	70
Suez stern light	135 °	Red	TEF28703219	242127▲	70

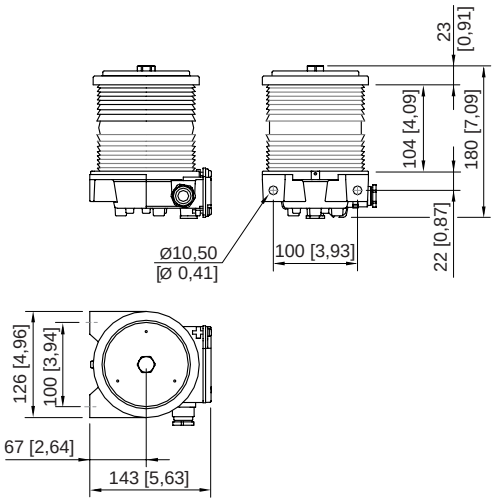
Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex nR IIC T5 Gc
ATEX gas explosion protection	II 3 G Ex nR IIC T5 Gc

▲ Preferred products – in stock or available at short notice

Navigation Light
Series TEF2870 Zone 2

Technical Data	
Electrical Data	
Rated operational voltage AC	24 V
Ambient Conditions	
Ambient temperature	-52 °C ... +50 °C
Lighting Data	
Lamp	P28S lamp base
Mechanical Data	
Enclosure material	Brass
Material dome	Lens made of stained glass
Type of connection cable	Finely stranded Solid
Degree of protection (IP)	IP56
Components	
Drilled holes	1 x M20
Cable glands	1 x M20 Ø 6.5 – 14 mm

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



E6

- Integrated terminal box with
- drain plug/breather
- Low maintenance
- Rugged construction
- Encapsulated electronics. No risk
- of water intrusion to LED's and electronics
- Instant light
- Resistant to vibrations

WebCode **T2460B**

Tranberg luminaires are all designed for use in rough environments. It is the policy of Tranberg to provide products and services that meet the highest standards of quality in the industry and the performance needs and expectations of our customers. The design of Tranberg luminaries is based on many years of experience and extensive research in the field of professional Marine lighting. Carefully selected materials are used to ensure maximum performance, low maintenance and a long trouble free life.

Applications:
- Perimeter lights on helideck. Green (100-254 V AC/ 24V DC) or red/green light (24V DC only)
- Zone 1, Zone 2 and safe area

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

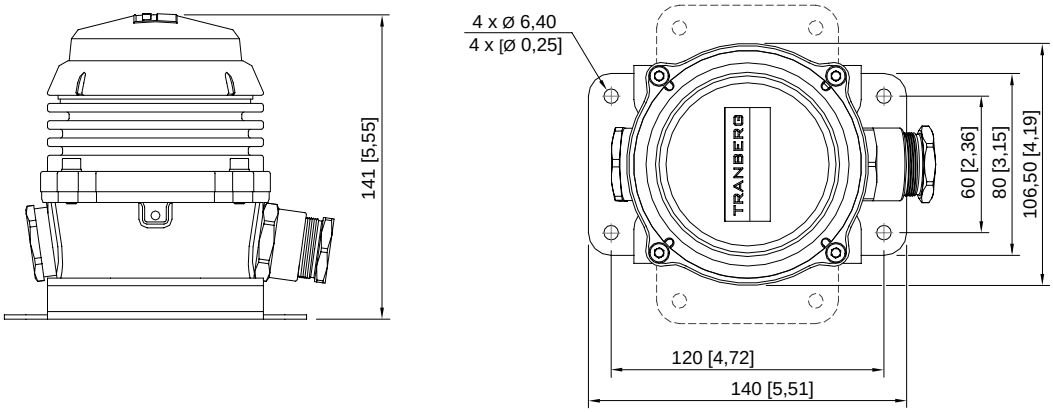
Selection Table				
Rated operational voltage AC	100 – 254 V			
Lamp		Product Type	Art. No.	PS
Green LED		TEF2460150	241034▲	70
Rated operational voltage DC	24 V			
Lamp		Product Type	Art. No.	PS
Green / red LED		TEF2460153	241036▲	70
Green LED		TEF2460152	241035▲	70

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex e mb op is IIC T5 Gb
ATEX gas explosion protection	Ⓔx II 2 G Ex e mb op is IIC T5 Gb
Electrical Data	
Power	4 W
Ambient Conditions	
Ambient temperature	-55 °C ... +55 °C
Lighting Data	
Effective luminous intensity	30 cd

Perimeter Light LED
Series TEF2460

Technical Data	
Mechanical Data	
Degree of protection (IP)	IP66
Enclosure material	Brass, Hot-forged
Connection terminals solid max.	4 mm²
Connection terminals finely-stranded max.	2.5 mm²
Type of connection cable	Finely stranded Solid
Components	
Drilled holes	2 x M25
Cable glands	Can be ordered as accessories
Stopping plug	Can be ordered as accessories

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



E6

Obstruction Light LED
Series TEF2460

- Complies with: ICAO Annex 14 Vol. 1 Ch. 6, Low intensity type A or B
- Integrated terminal box with drain plug/breather
- Maintenance free
- Rugged construction
- Encapsulated electronics. No risk of water intrusion to LED's and electronics
- RED+IR Versions are Night Vision Goggle compatible.
- Instant light
- Resistant to vibrations

WebCode **T2460A**

Tranberg luminaires are all designed for use in rough environments. It is the policy of Tranberg to provide products and services that meet the highest standards of quality in the industry and the performance needs and expectations of our customers. The design of Tranberg luminaries is based on many years of experience and extensive research in the field of professional Marine lighting. Carefully selected materials are used to ensure maximum performance, low maintenance and a long trouble free life.

Applications:
- Obstruction light
- General marking / warning light
- Zone 1, Zone 2 and safe area

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Rated operational voltage AC	100 – 254 V			
Effective luminous intensity	Lamp	Product Type	Art. No.	PS
10 cd	Red LED	TEF2460165	240989▲	70
32 cd	Red LED	TEF2460160	241027▲	70
Rated operational voltage DC	24 V			
Effective luminous intensity	Lamp	Product Type	Art. No.	PS
10 cd	Red LED	TEF2460166	240990▲	70
	Red LED + IR	TEF2460168	241032▲	70
32 cd	Red LED	TEF2460162	240988▲	70
	Red LED + IR	TEF2460167	241031▲	70

Technical Data

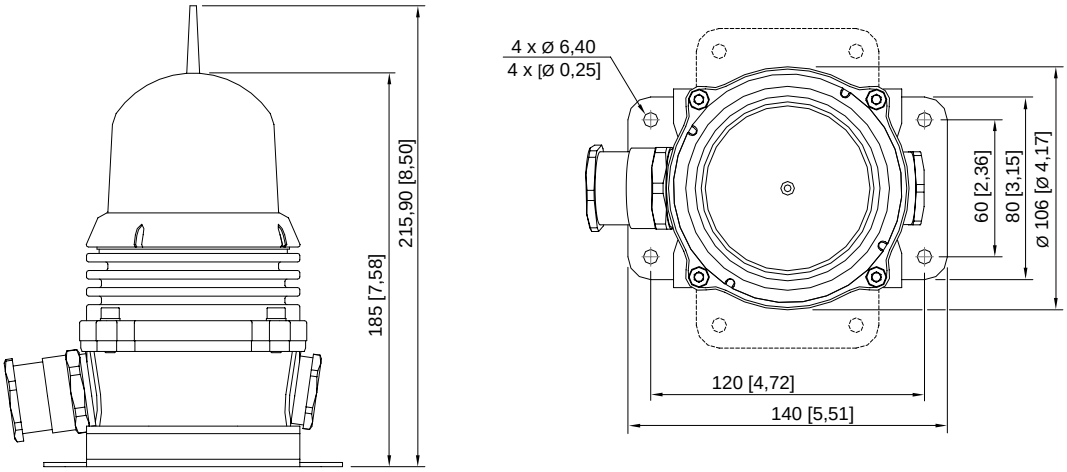
Explosion Protection	
IECEx gas explosion protection	Ex e mb op is IIC T5 Gb
ATEX gas explosion protection	II 2 G Ex e mb op is IIC T5 Gb
Electrical Data	
Power	10 W

▲ Preferred products – in stock or available at short notice

Obstruction Light LED
Series TEF2460

Technical Data	
Ambient Conditions	
Ambient temperature	-55 °C ... +55 °C
Mechanical Data	
Enclosure material	Brass, Hot-forged
Connection terminals solid max.	4 mm²
Connection terminals finely-stranded max.	2.5 mm²
Type of connection cable	Finely stranded Solid
Components	
Drilled holes	2 x M25
Cable glands	Can be ordered as accessories
Stopping plug	Can be ordered as accessories
Notes	Delivered with one cable gland and one stopping plug.

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



E6

- Status light as described in CAA UK CAP437, NORMAM-27/DPC and 2009 MODU Code
- Height of light units <25 cm. Allows for on-deck installation
- Automatic monitoring of all light units when in combination with Tranberg control system. No need for redundancy units
- Maintenance free
- Night vision goggle (NVG) compatible
- Low power consumption: Main light, 30 W and Repeater light 2.6 W

WebCode **T9980A**

The TEF9980 Status lights are designed to fulfil the latest requirements of CAA UK CAP 437, as well as operator's needs for products that are cost-effective, reliable, require no maintenance and are applicable for use in all environments.
The TEF 9980 Status light is available as a main light and as a repeater light. Both versions are fully monitored, which eliminates the light units' redundancy need. In combination with Tranberg control system the lights can be set up for automatic test intervals, timeouts for both dim level diagnostics.
A status light system should be installed if a condition can exist on an installation which may be hazardous for the helicopter or its occupants. The system should be a flashing red light (or lights), visible to the pilot from any direction of approach and on any landing heading. The aeronautical meaning of a flashing red light is either "do not land, aerodrome not available for landing" or "move clear of landing area". The system should be automatically initiated at the appropriate hazard level (e.g. impending gas release)

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

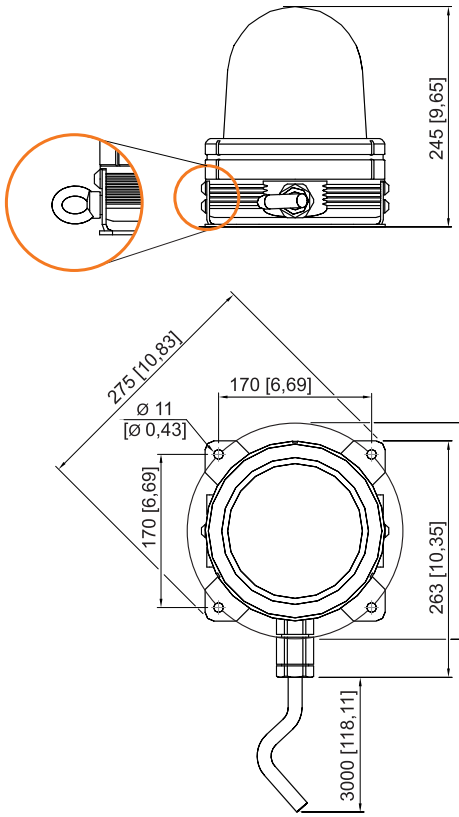
Power		30.00 W				
Product Description	Width	Height	Length	Product Type	Art. No.	PS
Main light for helicopter deck	263 mm	245 mm	200 mm	TEF9980000	262975▲	70
Repeater light for helicopter deck	263 mm	245 mm	200 mm	TEF9980005	262976▲	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex db op is IIB+H2 T5 Gb
ATEX gas explosion protection	II 2 G Ex db op is IIB+H2 T5 Gb
Electrical Data	
Rated operational voltage DC	16 – 32 V
Ambient Conditions	
Ambient temperature	-40 °C ... +55 °C
Lighting Data	
Lamp	Red LED + IR
Mechanical Data	
Degree of protection (IP)	IP66

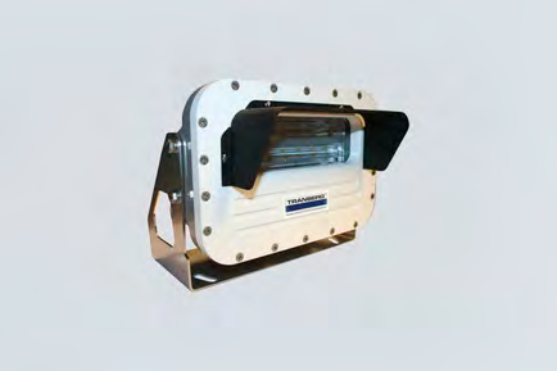
Technical Data	
Mechanical Data	
Degree of protection IP (IEC 60529)	IP67
Enclosure material	Aluminium, powder-coated, Seawater-resistant
Material mounting parts	Stainless steel
Material dome	Glass Temperature-resistant
Conductor length	3 m
Type of connection cable	BFOU 0.6/1.2kV P5/P12
Mounting / Installation	
Connection type	Connection line

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



E6

Helideck Floodlight LED
Series TEF9970



- Floodlight for helideck landing areas
- For use in hazardous areas
- Floodlighting
- Rugged and low profile floodlight made from marine proofed aluminium
- Sealed for life
- Simple to install and maintain
- Light module is maintenance free
- Proven degree of protection
- Resistant to vibrations
- Complies with: ICAO Annex 14 Vol. II; NORSOK C-004 201

WebCode T9970A

Luminaires designed and manufactured by Tranberg are intended for use in rough environments, and to meet applicable international standards. The new LED floodlight TEF 9970 by Tranberg sets a new standard in the industry as it has a wider operating temperature range, along with several new features.
The LED light source provides a hugely longer lifetime expectancy than xenon light bulbs, while the special designed optics ensure an ideal coverage of the helideck surface without giving glare to pilots in the critical landing process. As an option, a dimming functionality may be installed, which reduces light output to 50% when and if required.
The operating voltage span is wide, and absorbs voltage variances and spikes without resulting in flickering or changes in light output. The innovative design is also great news for service and maintenance personnel, as it is a sealed unit which requires noinspection of traditional flame paths. Helideck equipment manufactured by Tranberg is delivered to offshore installations, oil tankers and supply ships, hotels and hospitals landing areas all over the world.

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

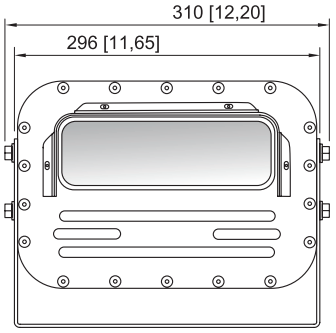
Selection Table			
Product Description	Helideck LED floodlight		
Light distribution	Product Type	Art. No.	PS
Medium-beam	TEF9970200	262996	70
Narrow-beam	TEF9970300	262997	70
Wide beam	TEF9970100	251936	70

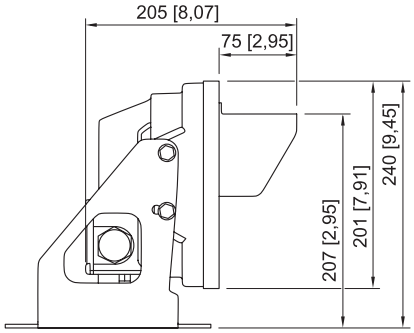
Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex db eb op is IIB+H2 T5/T4 Gb
ATEX gas explosion protection	Ⓔx II 2 G Ex db eb op is IIB+H2 T5/T4 Gb
Electrical Data	
Rated operational voltage AC	100 – 277 V
Rated operational voltage DC	145 – 380 V
Rated operational current	0.7 A (T5)
Frequency range	50 – 60 Hz

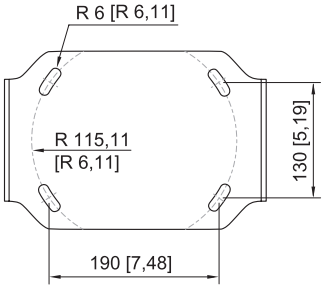
Helideck Floodlight LED
Series TEF9970

Technical Data	
Ambient Conditions	
Ambient temperature	-55 °C ... +40 °C (IIB+H2 T5) -55 °C ... +55 °C (IIB+H2 T4)
Operating temperature	-40 °C ... +55 °C
Lighting Data	
Lamp wattage	45 W
Lamp	LED
Luminaire efficacy	68 lm/W
Luminous flux	3100 lm
Colour temperature	4000 K
Mechanical Data	
Degree of protection IP (IEC 60529)	IP66
Enclosure material	Salt water-resistant, Powder-coated
Lens material	Borosilicate glass
Mounting	With bracket
Mounting / Installation	
Mounting type	1.4404 stainless steel holder
Components	
Drilled holes	2 x M25
Screw connections	2 x M25 Ø 11 – 21.1 mm
Material cable gland	Stainless steel
Stopping plug	Can be ordered as accessories

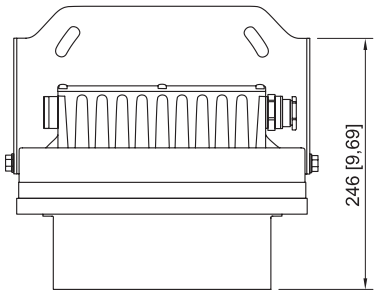
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations







Mounting details



E6

Integrated Helideck Light Control

Series TEF4600 Zone 1 or Non-Ex Versions

- All control gear in one cabinet, simplifying connections, control and monitoring
- Smaller footprint than individual control cabinets for each type of light
- With an absolute minimum of required inspections and low maintenance
- Connection with a supervisory control system through Ethernet, Profibus or similar standards
- Optional touchscreen, allowing local control (Zone 1 panel or Non-Ex)
- Optional remote button and lamp control panel, allowing additional control of lights

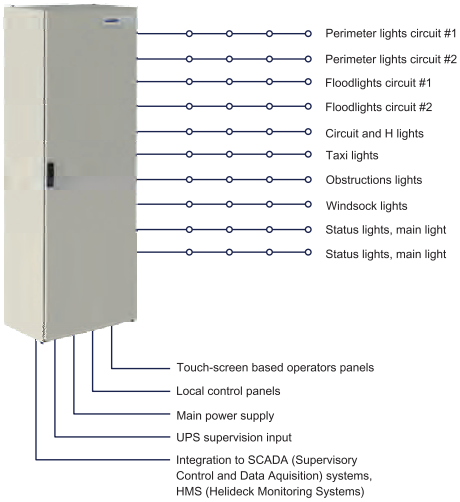
WebCode **T4600A**

The TEF 4600 integrated Helideck Lights Control is a first integrated control system for an easy and safe control and monitoring of all lights installed in a helideck. The control system can be delivered for use in both safe areas and Zone 1 areas.
All types of Tranberg lights can be connected (perimeter lights, floodlights, obstruction lights, illuminated windsocks, Circle & H lights, status lights, etc.).
Central to the system is a touch panel. Using an intuitive user-friendly menu, the user can simply set the lights on or off or dim respective lights when needed. The touch panel can be mounted either in the door of the main panel (safe areas only), in the adjacent room or elsewhere.
R. STAHL's Exicom MT-498 operator panel can be used for Zones 1 and 2. All touch panels come fully loaded with software and configuration options. Regardless of the control panel type, additional remote control panels may be connected. These are push-button panels with integrated illumination, allowing local control of lights, and in full synchronization with the computer screens.

Applications:
Deck light control panel; floodlight control panel; helideck control panel; heating system control panel; pump control panel; status panel; general control panel

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•				

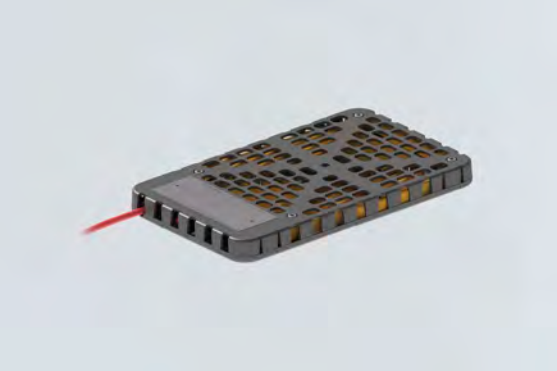
Technical Data	
Explosion Protection	
Application range (zones)	1
Application range (Zone) note	Non-Ex versions available
Notes	Control system and all operator panels are available in both Zone 1 and Non-Ex versions. According to CAA CAP437
Electrical Data	
Power supply	Single 230 V AC power supply, UPS supply and monitoring available
Connections	Ethernet connection to operator panels. Optional hardwired connection to local control panels.
Mechanical Data	
Degree of protection (IP)	IP66 / IP67
Dimensions (WxHxD)	Non-Ex control cabinet: 600 mm x 1800 mm x 300 mm Zone 1 cabinet: Flexible size and shape
Notes	Weight: 1.3 to 2.0 kg (depending on model and configuration)



E6

Enclosure Heater

Series TEF9202 with Connection Line 120/240 V AC, T4



- 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, flame retardant UL94, Classification V-0
- Low inrush current

WebCode T9202A

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Enclosure heater with connection line			
Rated operational voltage AC	Power	Product Type	Art. No.	PS
120 V	50 W	TEF9202050	262778▲	70
	100 W	TEF9202051	262779▲	70
230 V	50 W	TEF9202010	262777▲	70
	100 W	TEF9202011	259713▲	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex e IIC T4 Gb
ATEX gas explosion protection	II 2 G Ex e IIC T4 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP66
Degree of protection note	For use in enclosures
Enclosure material	Composite material
Type of connection cable	2 x 2.5 + PE
Cable length	1.5 m

Accessories

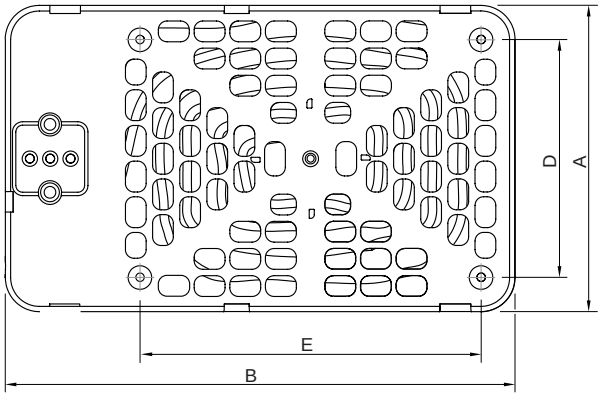
Figure	Description	Art. No.	PS	Weight kg
	DIN rail module	263934	99	–

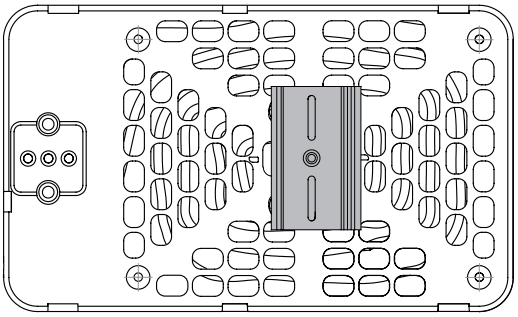
▲ Preferred products – in stock or available at short notice

Enclosure Heater

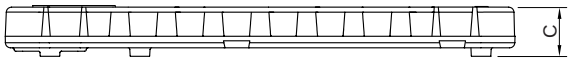
Series TEF9202 with Connection Line 120/240 V AC, T4

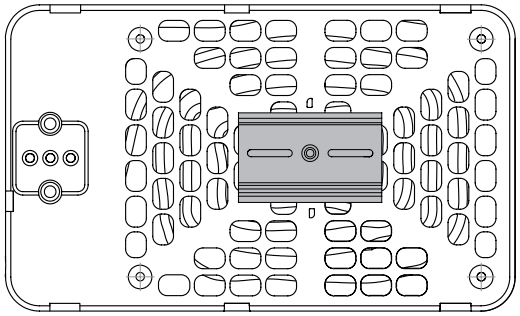
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations





Optional DIN rail module, placed in vertical position





Optional DIN rail module, placed in horizontal position

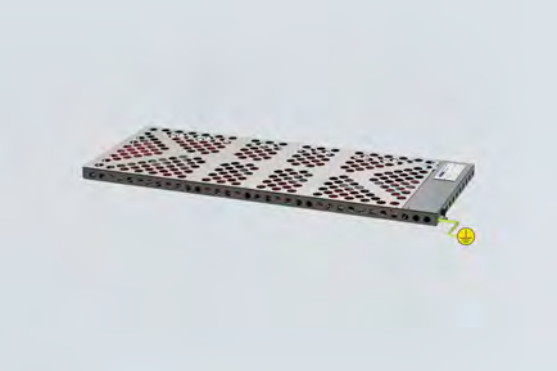
Nominal output [1]	Overall dimensions			Mounting dimensions		Weight
	A	B	C	D	E	
50 W	180	300	30	140	201	0,56 kg
100 W	180	300	30	140	201	0,76 kg

[1] **Note: Nominal output at still air at 0 °C**

E6

Enclosure Heater

Series TEF9207 with Connection Line 240 V AC, T3



- Low profile, easy to fit inside cabinets
- Self-regulating heating element. Prevents overheating
- Rugged AISI 316L, acid steel construction
- Low maintenance
- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control
- Frost protection

WebCode T9207A

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Enclosure heater with connection line				
Power	Type of connection cable	Cable length	Product Type	Art. No.	PS
100 W	2 x 2.5 + PE	1 m	TEF92070001	242179▲	70
200 W	2 x 2.5 + PE	1.5 m	TEF92070002	242180▲	70
300 W	2 x 2.5 + PE	1.5 m	TEF92070003	242181▲	70
500 W	2 x 2.5 + PE	1.5 m	TEF92070005	242182▲	70

Technical Data

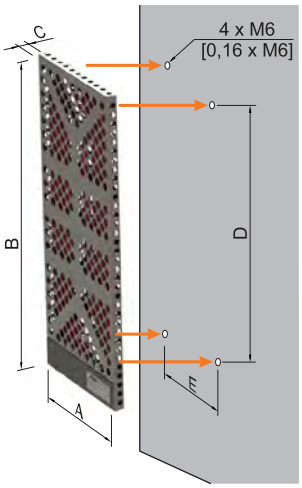
Explosion Protection	
IECEx gas explosion protection	Ex e IIC T3 Gb
ATEX gas explosion protection	II 2 G Ex e IIC T3 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP66
Enclosure material	1.4404 stainless steel

▲ Preferred products – in stock or available at short notice

Enclosure Heater

Series TEF9207 with Connection Line 240 V AC, T3

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

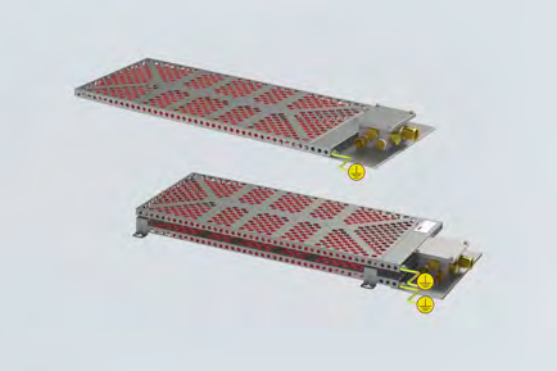


Nominal output [1]	Overall dimensions			Mounting dimensions		Weight	Length connection line
	A	B	C	D	E		
100 W	200	300	30	190	160	1.62 kg	1 m
200 W	240	550	30	440	200	3.44 kg	1.5 m
300 W	280	700	30	590	240	5.42 kg	1.5 m
500 W	360	870	30	760	320	8.02 kg	1.5 m

[1] **Note: Nominal output at still air at 0 °C**

Enclosure Heater

Series TEF9207 with Junction Box 240 V AC, T3



- Low profile, easy to fit inside cabinets
- Self-regulating heating element. Prevents overheating
- Rugged AISI 316L, acid steel construction
- Low maintenance
- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control
- Frost protection

WebCode T9207B

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table			
Product Description	Enclosure heater with junction box		
Power	Product Type	Art. No.	PS
100 W	TEF92071001	220182	70
200 W	TEF92071002	220183 ▲	70
300 W	TEF92071003	220184 ▲	70
500 W	TEF92071005	220186 ▲	70
Product Description Version	Enclosure heater with junction box Sandwich design		
Power	Product Type	Art. No.	PS
400 W	TEF92073004	220185 ▲	70
600 W	TEF92073006	220187	70
1000 W	TEF92073010	220188 ▲	70

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex e IIC T3 Gb
ATEX gas explosion protection	Ⓔx II 2 G Ex e IIC T3 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP66
Enclosure material	1.4404 stainless steel
Connection cross-section solid max.	4 mm²

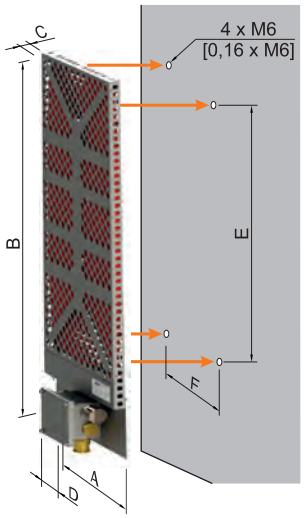
▲ Preferred products – in stock or available at short notice

Enclosure Heater

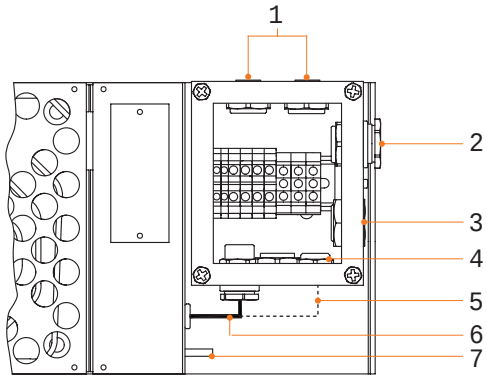
Series TEF9207 with Junction Box 240 V AC, T3

Technical Data	
Mechanical Data	
Connection cross-section finely stranded max.	2.5 mm²
Components	
Cable glands	1 x M25 x 1.5
Stopping plug	3 x M25 x 1.5

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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



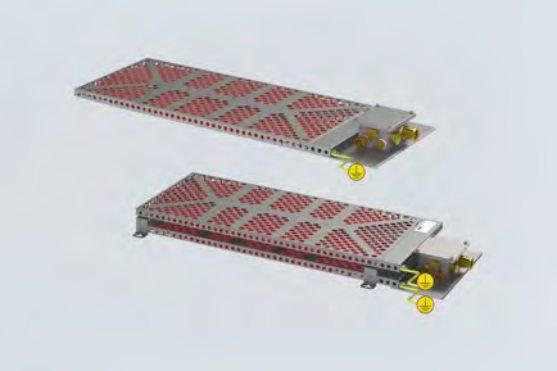
1 Stopping plug M25
2 Power in M25
3 Breather M25
4 Stopping plug M25
5 *) 2x cold lead only (for sandwich design)
6 *) Cold lead
7 Earth bolt M6 x 10
*) internal cables from heater plate (installed at TRANBERG Factory)

Nominal output *)	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100 W	200	430	30	80	190	160	2.92 kg
200 W	240	684	30	80	440	200	4.74 kg
300 W	280	834	30	80	590	240	6.72 kg
400 W	303	684	80	80	440	276	6.44 kg
500 W	360	1004	30	80	760	320	9.32 kg
600 W	343	834	80	80	590	316	11.76 kg
1000 W	424	1004	80	80	760	397	18.50 kg

*) **Note: Nominal output at still air at 0 °C**

Enclosure Heater

Series TEF9207 with Junction Box and Thermostat 240 V AC, T3



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

WebCode T9207C

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Enclosure heater with junction box and temperature control device				
Power	Opening temperature OFF	Opening temperature tolerance	Product Type	Art. No.	PS
100 W	+5 °C	+/- 5°C	TEF92072401	220175	70
	+15 °C	+/- 5°C	TEF92072601	242183▲	70
200 W	+5 °C	+/- 5°C	TEF92072402	220176▲	70
	+15 °C	+/- 5°C	TEF92072602	242184▲	70
300 W	+5 °C	+/- 5°C	TEF92072403	220177▲	70
	+15 °C	+/- 5°C	TEF92072603	242185▲	70
500 W	+5 °C	+/- 5°C	TEF92072405	220179▲	70
	+15 °C	+/- 5°C	TEF92072605	242186▲	70
Product Description Version	Enclosure heater with junction box and temperature control device Sandwich design				
Power	Opening temperature OFF	Opening temperature tolerance	Product Type	Art. No.	PS
400 W	+5 °C	+/- 5°C	TEF92074404	220178▲	70
	+15 °C	+/- 5°C	TEF92074604	242187▲	70
600 W	+5 °C	+/- 5°C	TEF92074406	220180	70
	+15 °C	+/- 5°C	TEF92074606	242188▲	70
1000 W	+5 °C	+/- 5°C	TEF92074410	220181▲	70
	+15 °C	+/- 5°C	TEF92074610	242189▲	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex e IIC T3 Gb
ATEX gas explosion protection	II 2 G Ex e IIC T3 Gb

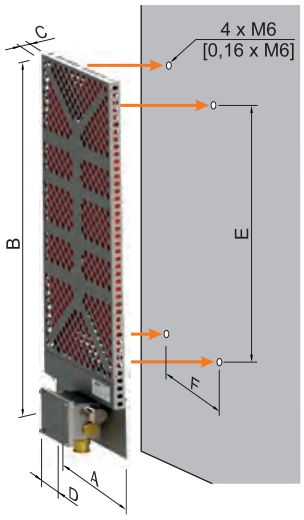
▲ Preferred products – in stock or available at short notice

Enclosure Heater

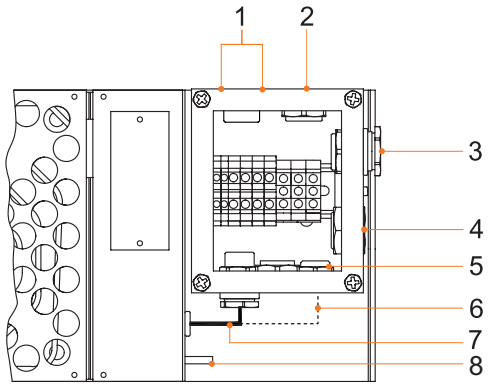
Series TEF9207 with Junction Box and Thermostat 240 V AC, T3

Technical Data	
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP66
Enclosure material	1.4404 stainless steel
Connection cross-section solid max.	4 mm²
Connection cross-section finely stranded max.	2.5 mm²
Components	
Cable glands	1 x M25 x 1.5
Stopping plug	3 x M25 x 1.5

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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



1 Ambient air thermostat
2 Stopping plug M25
3 Power in M25
4 Breather M25
5 Stopping plug M25
6 *) 2x cold lead only (for sandwich design)
7 *) Cold lead
8 Earth bolt

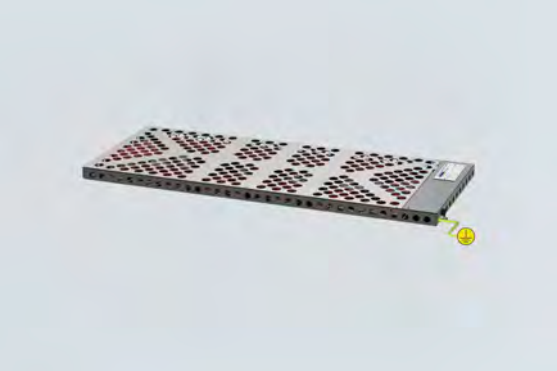
*) internal cables from heater plate (installed at TRANBERG Factory)

Nominal output *)	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100 W	233	430	30	80	190	160	2.92 kg
200 W	245	684	30	80	440	200	4.74 kg
300 W	280	834	30	80	590	240	6.72 kg
400 W	303	684	80	80	440	276	6.44 kg
500 W	360	1004	30	80	760	320	9.32 kg
600 W	343	834	80	80	590	316	11.76 kg
1000 W	424	1004	80	80	760	397	18.50 kg

*) **Note: Nominal output at still air at 0 °C**

Enclosure Heater

Series TEF9208 with Connection Line 240 V AC, T4



- Low profile, easy to fit inside cabinets
- Self-regulating heating element. Prevents overheating
- Rugged AISI 316L, acid steel construction
- Low maintenance
- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control
- Frost protection

WebCode T9208A

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Enclosure heater with connection line				
Power	Type of connection cable	Cable length	Product Type	Art. No.	PS
50 W	2 x 2.5 + PE	1 m	TEF92080000	259557 ▲	70
100 W	2 x 2.5 + PE	1.5 m	TEF92080001	246710 ▲	70
175 W	2 x 2.5 + PE	1.5 m	TEF92080002	246851 ▲	70
300 W	2 x 2.5 + PE	1.5 m	TEF92080003	246852 ▲	70

Technical Data

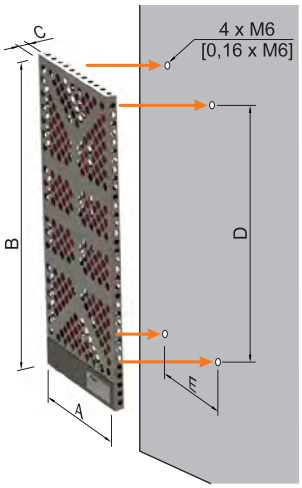
Explosion Protection	
IECEx gas explosion protection	Ex e IIC T4 Gb
ATEX gas explosion protection	II 2 G Ex e IIC T4 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP54
Degree of protection note	For use in enclosures
Enclosure material	1.4404 stainless steel

▲ Preferred products – in stock or available at short notice

Enclosure Heater

Series TEF9208 with Connection Line 240 V AC, T4

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



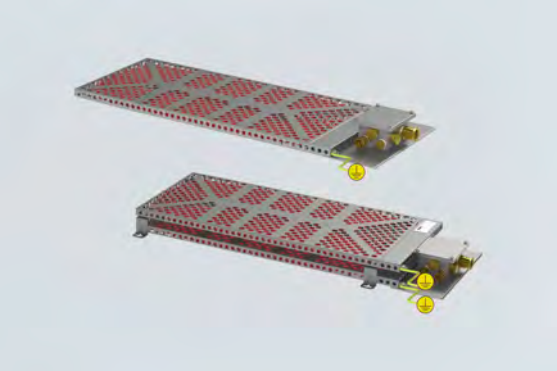
Nominal output [1]	Overall dimensions			Mounting dimensions		Weight	Length connection line
	A	B	C	D	E		
50 W	200	300	30	190	160	2 kg	1 m
100 W	240	550	30	440	200	3 kg	1 m
175 W	280	700	30	590	240	5 kg	1.5 m
300 W	360	870	30	760	320	8 kg	1.5 m

[1] **Note: Nominal output at still air at 0 °C**

E6

Enclosure Heater

Series TEF9208 with Junction Box 240 V AC, T4



- Low profile, easy to fit inside cabinets
- Self-regulating heating element. Prevents overheating
- Rugged AISI 316L, acid steel construction
- Low maintenance
- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control
- Frost protection

WebCode T9208B

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table			
Product Description	Enclosure heater with junction box		
Power	Product Type	Art. No.	PS
100 W	TEF92081001	259561 ▲	70
175 W	TEF92081002	259562 ▲	70
300 W	TEF92081003	259563 ▲	70
Product Description Version	Enclosure heater with junction box Sandwich design		
Power	Product Type	Art. No.	PS
600 W	TEF92083006	259570 ▲	70

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex e IIC T4 Gb
ATEX gas explosion protection	II 2 G Ex e IIC T4 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP54
Degree of protection note	For use in enclosures
Enclosure material	1.4404 stainless steel
Connection cross-section solid max.	4 mm²
Connection cross-section finely stranded max.	2.5 mm²

▲ Preferred products – in stock or available at short notice

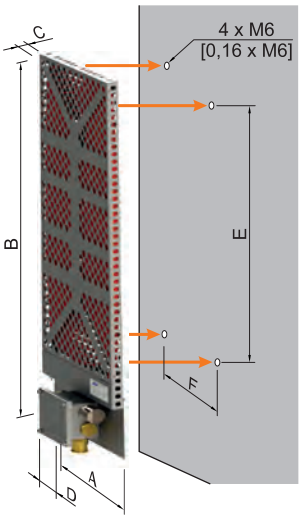
Enclosure Heater

Series TEF9208 with Junction Box 240 V AC, T4

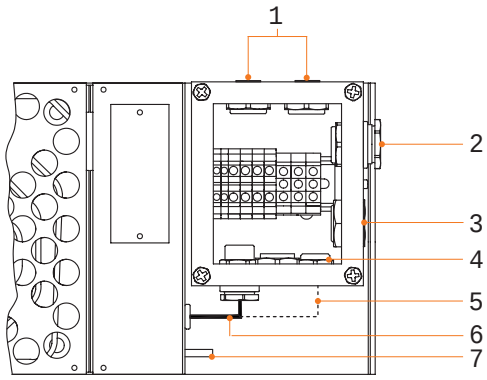
Technical Data

Components	
Cable glands	1 x M25 x 1.5
Stopping plug	3 x M25 x 1.5

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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



1 Stopping plug M25
2 Power in M25
3 Breather M25
4 Stopping plug M25
5 *) 2x cold lead only (for sandwich design)
6 *) Cold lead
7 Earth bolt M6 x 10

*) internal cables from heater plate (installed at TRANBERG Factory)

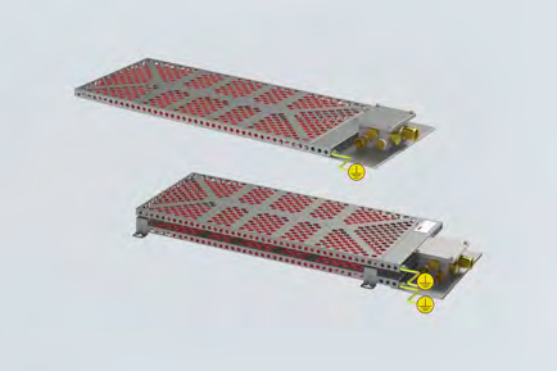
Nominal output *)	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100 W	240	684	30	80	440	200	4.92 kg
175 W	280	834	30	80	590	240	6.74 kg
300 W	360	1004	30	80	760	320	9.72 kg
600 W	424	1004	80	80	760	397	18.76 kg

*) **Note: Nominal output at still air at 0 °C**

E6

Enclosure Heater

Series TEF9208 with Junction Box and Thermostat 240 V AC, T4



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

WebCode T9208C

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Enclosure heater with junction box and temperature control device				
Power	Opening temperature OFF	Opening temperature tolerance	Product Type	Art. No.	PS
100 W	+5 °C	+/- 5°C	TEF92082401	259564 ▲	70
	+15 °C	+/- 5°C	TEF92082601	259567 ▲	70
175 W	+5 °C	+/- 5°C	TEF92082402	259565 ▲	70
	+15 °C	+/- 5°C	TEF92082602	259568 ▲	70
300 W	+5 °C	+/- 5°C	TEF92082403	259566 ▲	70
	+15 °C	+/- 5°C	TEF92082603	259569 ▲	70
Product Description Version	Enclosure heater with junction box and temperature control device Sandwich design				
Power	Opening temperature OFF	Opening temperature tolerance	Product Type	Art. No.	PS
600 W	+5 °C	+/- 5°C	TEF92084406	259571 ▲	70
	+15 °C	+/- 5°C	TEF92084606	259572 ▲	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex e IIC T4 Gb
ATEX gas explosion protection	Ⓔx II 2 G Ex e IIC T4 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP54

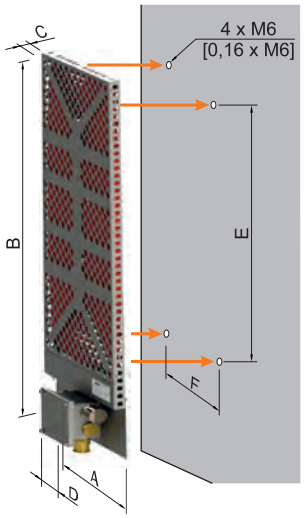
▲ Preferred products – in stock or available at short notice

Enclosure Heater

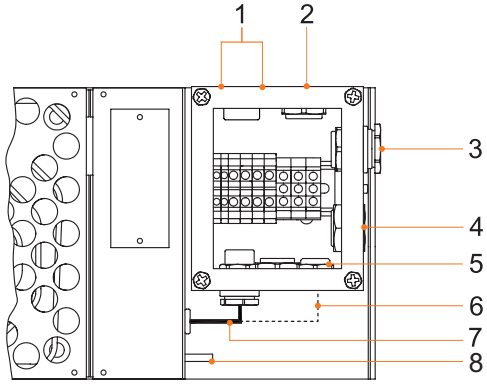
Series TEF9208 with Junction Box and Thermostat 240 V AC, T4

Technical Data	
Mechanical Data	
Degree of protection note	For use in enclosures
Enclosure material	1.4404 stainless steel
Connection cross-section solid max.	4 mm²
Connection cross-section finely stranded max.	2.5 mm²
Components	
Cable glands	1 x M25 x 1.5
Stopping plug	3 x M25 x 1.5

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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



1 Ambient air thermostat
2 Stopping plug M25
3 Power in M25
4 Breather M25
5 Stopping plug M25
6 *) 2x cold lead only (for sandwich design)
7 *) Cold lead
8 Earth bolt

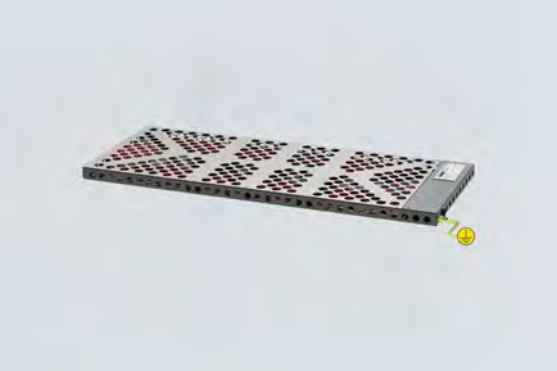
*) internal cables from heater plate (installed at TRANBERG Factory)

Nominal output *)	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100 W	245	684	30	80	440	200	4.92 kg
175 W	280	834	30	80	590	240	6.74 kg
300 W	360	1004	30	80	760	320	9.72 kg
600 W	424	1004	80	80	760	397	18.76 kg

*) **Note: Nominal output at still air at 0 °C**

Enclosure Heater

Series TEF9209 with Connection Line 120 V AC, T4



- Low profile, easy to fit inside cabinets
- Self-regulating heating element. Prevents overheating
- Rugged AISI 316L, acid steel construction
- Low maintenance
- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control
- Frost protection

WebCode T9209A

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Enclosure heater with connection line				
Power	Type of connection cable	Cable length	Product Type	Art. No.	PS
50 W	2 x 2.5 + PE	1 m	TEF92095000	262980▲	70
100 W	2 x 2.5 + PE	1.5 m	TEF92095001	262981▲	70
175 W	2 x 2.5 + PE	1.5 m	TEF92095002	262982▲	70
300 W	2 x 2.5 + PE	1.5 m	TEF92095003	262983▲	70

Technical Data

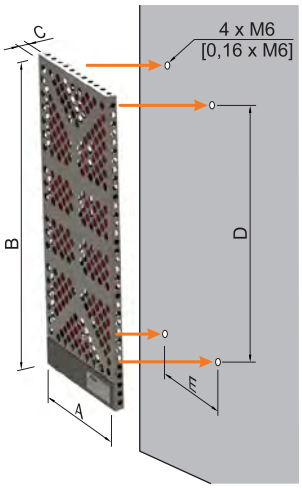
Explosion Protection	
IECEx gas explosion protection	Ex e IIC T4 Gb
ATEX gas explosion protection	II 2 G Ex e IIC T4 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP66
Degree of protection note	For use in enclosures
Enclosure material	1.4404 stainless steel

▲ Preferred products – in stock or available at short notice

Enclosure Heater

Series TEF9209 with Connection Line 120 V AC, T4

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

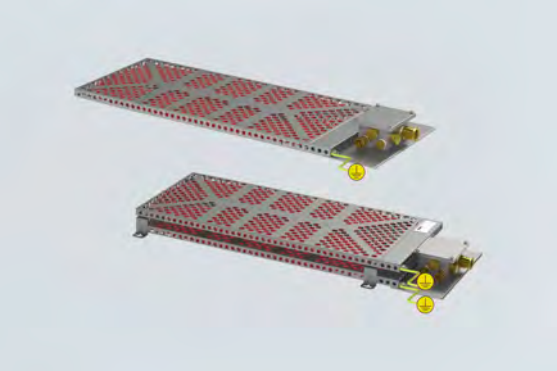


Nominal output [1]	Overall dimensions			Mounting dimensions		Weight	Length connection line
	A	B	C	D	E		
50 W	200	300	30	190	160	2 kg	1 m
100 W	240	550	30	440	200	3 kg	1 m
175 W	280	700	30	590	240	5 kg	1.5 m
300 W	360	870	30	760	320	8 kg	1.5 m

[1] **Note: Nominal output at still air at 0 °C**

Enclosure Heater

Series TEF9209 with Junction Box 120 V AC, T4



- Low profile, easy to fit inside cabinets
- Self-regulating heating element. Prevents overheating
- Rugged AISI 316L, acid steel construction
- Low maintenance
- For use inside equipment enclosures and cabinets to prevent condensation and provide climatic control
- Frost protection

WebCode T9209B

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table			
Product Description	Enclosure heater with junction box		
Power	Product Type	Art. No.	PS
100 W	TEF92096001	262984 ▲	70
175 W	TEF92096002	262985 ▲	70
300 W	TEF92096003	262986 ▲	70
Product Description Version	Enclosure heater with junction box Sandwich design		
Power	Product Type	Art. No.	PS
600 W	TEF92098006	262987 ▲	70

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex e IIC T4 Gb
ATEX gas explosion protection	II 2 G Ex e IIC T4 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP66
Degree of protection note	For use in enclosures
Enclosure material	1.4404 stainless steel
Connection cross-section solid max.	4 mm²
Connection cross-section finely stranded max.	2.5 mm²

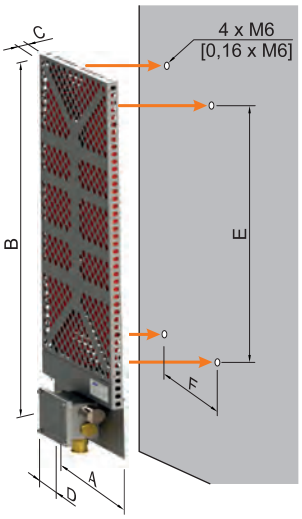
▲ Preferred products – in stock or available at short notice

Enclosure Heater

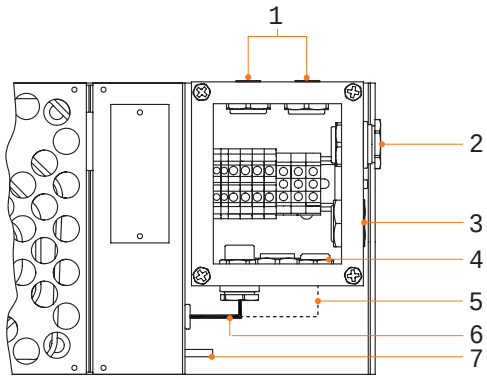
Series TEF9209 with Junction Box 120 V AC, T4

Technical Data	
Components	
Cable glands	1 x M25 x 1.5
Stopping plug	3 x M25 x 1.5

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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



1 Stopping plug M25
2 Power in M25
3 Breather M25
4 Stopping plug M25
5 *) 2x cold lead only (for sandwich design)
6 *) Cold lead
7 Earth bolt M6 x 10
*) internal cables from heater plate (installed at TRANBERG Factory)

Nominal output *)	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100 W	240	684	30	80	440	200	4.92 kg
175 W	280	834	30	80	590	240	6.74 kg
300 W	360	1004	30	80	760	320	9.72 kg
600 W	424	1004	80	80	760	397	18.76 kg

*) **Note: Nominal output at still air at 0 °C**

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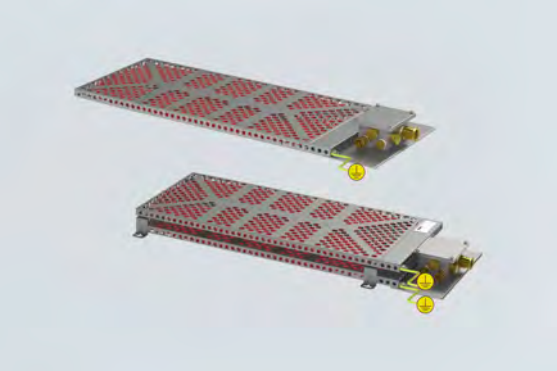
Enclosure Heater

Series TEF9209 with Junction Box and Thermostat 120 V AC, T4



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

WebCode T9209C

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

	ATEX / IECEx					
Zone	0	1	2	20	21	22
Installation in		•	•			

Selection Table

Product Description	Enclosure heater with junction box and temperature control device				
Power	Opening temperature OFF	Opening temperature tolerance	Product Type	Art. No.	PS
100 W	+5 °C	+/- 5°C	TEF92097401	262988 ▲	70
	+15 °C	+/- 5°C	TEF92097601	262992 ▲	70
175 W	+5 °C	+/- 5°C	TEF92097402	262989 ▲	70
	+15 °C	+/- 5°C	TEF92097602	262993 ▲	70
300 W	+5 °C	+/- 5°C	TEF92097403	262990 ▲	70
	+15 °C	+/- 5°C	TEF92097603	262994 ▲	70
Product Description Version	Enclosure heater with junction box and temperature control device Sandwich design				
Power	Opening temperature OFF	Opening temperature tolerance	Product Type	Art. No.	PS
600 W	+5 °C	+/- 5°C	TEF92099406	262991 ▲	70
	+15 °C	+/- 5°C	TEF92099606	262995 ▲	70

Technical Data

Explosion Protection	
IECEx gas explosion protection	Ex e IIC T4 Gb
ATEX gas explosion protection	Ⓔx II 2 G Ex e IIC T4 Gb
Electrical Data	
Frequency range	50 – 60 Hz
Ambient Conditions	
Ambient temperature	-50 °C ... +50 °C (Under voltage)
Storage temperature	-50 °C ... +80 °C
Mechanical Data	
Degree of protection (IP)	IP66

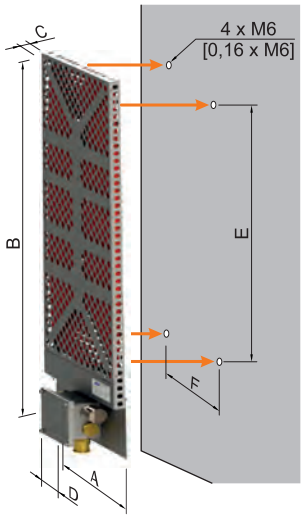
▲ Preferred products – in stock or available at short notice

Enclosure Heater

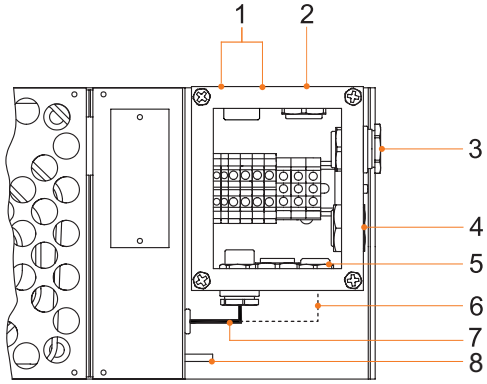
Series TEF9209 with Junction Box and Thermostat 120 V AC, T4

Technical Data	
Mechanical Data	
Degree of protection note	For use in enclosures
Enclosure material	1.4404 stainless steel
Connection cross-section solid max.	4 mm²
Connection cross-section finely stranded max.	2.5 mm²
Components	
Cable glands	1 x M25 x 1.5
Stopping plug	3 x M25 x 1.5

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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



1 Ambient air thermostat
2 Stopping plug M25
3 Power in M25
4 Breather M25
5 Stopping plug M25
6 *) 2x cold lead only (for sandwich design)
7 *) Cold lead
8 Earth bolt
*) internal cables from heater plate (installed at TRANBERG Factory)

Nominal output *)	Overall dimensions				Mounting dimensions		Weight
	A	B	C	D	E	F	
100 W	245	684	80	80	440	200	4.92 kg
175 W	280	834	80	80	590	240	6.74 kg
300 W	360	1004	80	80	760	320	9.72 kg
600 W	424	1004	80	80	760	397	18.76 kg

*) **Note: Nominal output at still air at 0 °C**