

# CERTIFICATE

Issued to:  
Applicant:  
**eltherm production GmbH**  
Ernst-Heinkel-Str. 6 - 10  
57299 Burbach, Germany

Licensee:  
**eltherm production GmbH**  
Ernst-Heinkel-Str. 6 - 10  
57299 Burbach, Germany

Product : Trace Heating System  
Trade name(s) : eltherm  
Type(s)/model(s) : ELP/PFA-10-120-\*\*, ELP/PFA-10-208-\*\*, ELP/PFA-10-240-\*\*,  
ELP/PFA-15-120-\*\*, ELP/PFA-15-240-\*\*, ELP/PFA-15-600-\*\*,  
ELP/PFA-20-120-\*\*, ELP/PFA-20-240-\*\*, ELP/PFA-20-600-\*\*,  
ELP/PFA-25-120-\*\*, ELP/PFA-25-240-\*\*, ELP/PFA-30-120-\*\*,  
ELP/PFA-30-208-\*\*, ELP/PFA-30-240-\*\*, ELP/PFA-40-480-\*\* and  
ELP/PFA-6-120-\*\*

The product and any acceptable variation thereof as specified in the Annex to this certificate and the documents referred to therein.

DEKRA hereby declares that the above-mentioned product has been certified based on:

- an evaluation according to the standard(s) CAN/CSA C22.2 No. 60079-30-1:2017, CSA C22.2 No. 130:2016, CSA C22.2 No. 60079-0:2019 (R2024), UL 60079-0:2019 Rev. 2024-07-19 and UL 60079-30-1:2017
- an inspection of the factory location according to DEKRA's North American Certification Scheme
- a DEKRA certification agreement with the number 6070605

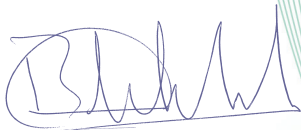
DEKRA hereby grants the right to use the DEKRA certification mark as shown below.

The DEKRA certification mark may be applied to the product as specified in this certificate for the duration and under the conditions of the DEKRA certification agreement.

This certificate is issued on 15 September 2025 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 40-144991

DEKRA Certification B.V.



B.T.M. Holtus  
Managing Director



Svetlana Vasylieva  
Certification Manager

© Integral publication of this certificate is allowed

DEKRA CERTIFICATION B.V.  
IS NRTL RECOGNIZED BY  
OSHA AND ACCREDITED BY  
THE STANDARD COUNCIL  
OF CANADA



**SPECIFICATION OF THE CERTIFIED PRODUCT****Product data**

Product	: Trace Heating System
Trade name(s)	: eltherm
Type(s)/model(s)	: ELP/PFA-10-120-**, ELP/PFA-10-208-**, ELP/PFA-10-240-**, ELP/PFA-15-120-**, ELP/PFA-15-240-**, ELP/PFA-15-600-**, ELP/PFA-20-120-**, ELP/PFA-20-240-**, ELP/PFA-20-600-**, ELP/PFA-25-120-**, ELP/PFA-25-240-**, ELP/PFA-30-120-**, ELP/PFA-30-208-**, ELP/PFA-30-240-**, ELP/PFA-40-480-** and ELP/PFA-6-120-**
Marking USA / Canada (Zones)	: Zone 1, AEx/Ex 60079-30-1 eb IIC T6...T2 Gb
Marking USA / Canada (Zones)	: Zone 21, AEx/Ex 60079-30-1 tb IIIC T85 °C...T300 °C Db
Marking USA / Canada (Divisions)	: Class I, Division 1 and 2, Groups A, B, C and D; T6...T2B
Marking USA / Canada (Divisions)	: Class II, Groups E and F; T6...T3B
Marking USA / Canada (Divisions)	: Class II, Group G; T6...T3
Marking USA / Canada (Divisions)	: Class III; T6...T2B
Usage rating (Canada)	: -WS usage rating
Ambient temperature range	: -25 °C to +40 °C (Class I, Div. 1 & 2, USA)
Ambient temperature range	: -50 °C to +40 °C (Class I, Div. 1 & 2, CAN)
Ambient temperature range	: -60 °C to +70 °C (All other applications)

**Product data – type ELP/PFA-10-120-\*\***

Voltage rating	: 120 Vac
Power output rating	: 10 W/m

**Product data – type ELP/PFA-10-208-\*\***

Voltage rating	: 208 Vac
Power output rating	: 10 W/m

**Product data – type ELP/PFA-10-240-\*\***

Voltage rating 1	: 240 Vac
Power output rating 1	: 10 W/m
Voltage rating 2	: 277 Vac
Power output rating 2	: 13 W/m

**Product data – type ELP/PFA-15-120-\*\***

Voltage rating	: 120 Vac
Power output rating	: 15 W/m

**Product data – type ELP/PFA-15-240-\*\***

Voltage rating 1	: 240 Vac
Power output rating 1	: 15 W/m
Voltage rating 2	: 277 Vac
Power output rating 2	: 20 W/m

**Product data – type ELP/PFA-15-600-\*\***

Voltage rating	: 600 Vac
Power output rating	: 15 W/m

**Product data – type ELP/PFA-20-120-\*\***

Voltage rating : 120 Vac  
Power output rating : 20 W/m

**Product data – type ELP/PFA-20-240-\*\***

Voltage rating 1 : 240 Vac  
Power output rating 1 : 20 W/m  
Voltage rating 2 : 277 Vac  
Power output rating 2 : 27 W/m

**Product data – type ELP/PFA-20-600-\*\***

Voltage rating : 600 Vac  
Power output rating : 20 W/m

**Product data – type ELP/PFA-25-120-\*\***

Voltage rating : 120 Vac  
Power output rating : 25 W/m

**Product data – type ELP/PFA-25-240-\*\***

Voltage rating : 240 Vac  
Power output rating : 25 W/m

**Product data – type ELP/PFA-30-120-\*\***

Voltage rating : 120 Vac  
Power output rating : 30 W/m

**Product data – type ELP/PFA-30-208-\*\***

Voltage rating : 208 Vac  
Power output rating : 30 W/m

**Product data – type ELP/PFA-30-240-\*\***

Voltage rating 1 : 240 Vac  
Power output rating 1 : 30 W/m  
Voltage rating 2 : 277 Vac  
Power output rating 2 : 40 W/m

**Product data – type ELP/PFA-40-480-\*\***

Voltage rating : 480 Vac  
Power output rating : 40 W/m

**Product data – type ELP/PFA-6-120-\*\***

Voltage rating : 120 Vac  
Power output rating : 6 W/m

**TESTS****Test requirements**

CAN/CSA C22.2 No. 60079-30-1:2017

CSA C22.2 No. 130:2016  
CSA C22.2 No. 60079-0:2019 (R2024)  
UL 60079-0:2019 Rev. 2024-07-19  
UL 60079-30-1:2017

**Test result**

The test results are documented in DEKRA test file 3837173.50.

**Conclusion**

The examination has confirmed that all requirements were met.

**Factory location**

eltherm production GmbH  
Ernst-Heinkel-Str. 6 - 10  
57299 Burbach, Germany

### Standards electrical safety

The equipment has been additionally assessed in accordance with IEEE 515-17.

### Description

The ELP/PFA-\*\*-\*\*\*-\*\* trace heating systems have the following properties:

Ambient temperature range	Class I, Div 1 & 2 (USA) Class I, Div 1 & 2 (Canada) All other applications	-25 °C ... +40 °C -50 °C ... +40 °C -60 °C ... +70 °C
Maximum continuous operating / maintain temperature:	all types	+200 °C
Maximum intermittent exposure temperature:	all types	+250 °C
Maximum withstand temperature:	all types	+250 °C
Bus wire size:	all types	1.5 mm <sup>2</sup>
Minimum installation temperature:	all types	-60 °C
Minimum bending radius:	all types	25 mm at -60 °C
Usage rating (Canada):	all types	-WS

The ELP/PFA-\*\*-\*\*\*-\*\* trace heating systems can consist of the following components:

Component	System ELP/PFA-Ex Class I, Zone 1/21	System ELP/PFA-D1 Class I, Div. 1/2	System ELP/PFA-CII Class II/III, Div 1	System ELP/PFA-NA Unclassified
ELP/PFA trace heater	+	+	+	+
ELVB-SRAP-3/4" ST pwr kit				+
ELVB-SRAP-Ex M20 BR pwr kit	+		+	(+)
ELVB-SRAP-Ex 1/2" BR pwr kit	+		+	(+)
EL-HAZELECT-ELP Div 1 pwr kit		+	(+)	(+)
EL-ECP end termination kit	+	+	+	+
Notes: "+" : suitable, preferred "(+)" : suitable, optional				

**Type designation**

**EL P / PFA - 20 - 120 - Ex**  
**I II III IV V VI**

Designation	Explanation	Value	Explanation
I	Base model	EL	eltherm production GmbH Burbach
II	Heater type	P	Parallel zonal heater
III	Overjacket/insulation material	PFA	Fluoropolymer
IV	Power output rating <sup>1</sup>	6	6 W/m
		10	10 W/m
		15	15 W/m
		20	20 W/m
		25	25 W/m
		30	30 W/m
		40	40 W/m
V	Nominal Voltage rating <sup>1</sup>	120	120 Vac
		208	208 Vac
		240	240 Vac
		480	480 Vac
		600	600 Vac
VI	Classification	Ex	Class/Zone version
		NA	NEC/CEC version, unclassified
		CII	NEC/CEC version, classified except Class I, Div 1, 2
		D1	NEC/CEC version, Class I, Div 1, 2
Notes: <sup>1</sup> See table under "Electrical data" section for power output and voltage combinations.			

## Thermal data

### Temperature class and maximum surface temperature "T"

#### Systems approach, stabilized design verification method

The temperature class or maximum surface temperature "T" obtained through stabilized design is based on the energy balance of heat loss and heat production of the system at a certain ambient and process temperature.

#### Conditions for systems approach, stabilized design verification method

The design parameters which determine the maximum workpiece temperature, heat production of the ELP/PFA trace heaters and the heat loss through thermal insulation shall be provided as a record of system documentation for each stabilized designed system. The parameters in the systems documentation shall be checked during commissioning of the system.

The trace heating system documentation shall be kept by the owner of the system and be available at all times for as long as the system is in use.

## Electrical data

Maximum rating overcurrent protection: 40 A

The ELP/PFA trace heaters can have the following possible voltage / power output combinations:

Type designation	Zone length [m]	Heater diameter [mm]	Voltage 1 [V]	Power 1 [W/m]	Voltage 2 [V]	Power 2 [W/m]
ELP/PFA-6-120 (25-240)	1	0.14	120	6	240	25
ELP/PFA-10-120 (30-208)	1	0.14	120	10	208	30
ELP/PFA-15-120	1	0.14	120	15		
ELP/PFA-20-120	1	0.15	120	20		
ELP/PFA-25-120	1	0.15	120	25		
ELP/PFA-30-120	1	0.18	120	30		
ELP/PFA-10-208	1	0.11	208	10		
ELP/PFA-10-240	1	0.11	240	10	277	13
ELP/PFA-15-240	1	0.11	240	15	277	20
ELP/PFA-20-240	1	0.11	240	20	277	27
ELP/PFA-30-240	1	0.14	240	30	277	40
ELP/PFA-40-480	2	0.14	480	40		
ELP/PFA-15-600	2.5	0.11	600	15		
ELP/PFA-20-600	2.5	0.11	600	20		

**Specific Conditions of Use:**

The trace heating system is suitable for the following ambient temperature ranges:

- -25 °C to +40 °C for Class I, Division 1 & 2 (USA) applications
- -50 °C to +40 °C for Class I, Division 1 & 2 (Canada) applications
- -60 °C to +70 °C for all other applications

All electrical connections must be made to a suitable junction box approved for use in the applicable area designation. The use of applicable eltherm power connection and termination kits is required.

The cable glands included in the ELVB-SRAP-Ex power connection kits, when installed into devices which are not subject to overloading (Class II), should not be used where the surface temperature exceeds +165 °C.

**Certificate history**

Project : 383717300    initial certificate