# Heating Coil

# Specification

**Translation, Original German**

ELMESS THERMO SYSTEM TECHNIK

| | | | | |
|---|---|---|---|---|
| Client | Impexron GmbH | Date | 25.09.2025 | *Rev00* |
| Fabric No. | ---- | Piece | 1 | |
| Order No. / Position | 01-25-2319 1 | Client details | | |
| Article No. | 20470001 | | | |
| Name | Ex-Heating coil | Type | **EHG11/HR-6-T3** | |

| | | | | |
|---|---|---|---|---|
| **1 Degree of Protection IEC/EN 60529** | | IP 66 | | |
| **2 Ex Marking and Type of Protection** | | | | |
| IEC/EN 60079 | | (Ex) II 2G Ex eb IIC T3 Gb | | |
| IEC/EN 60079-31 | | | | |
| EU Type Examination Certificate \| IECEx Certificate | | IBExU 15 ATEX 1019 X | ---- | |
| EU Declaration of Conformity | | ELM 20-003 | | |
| **3 Electrical data and connection** | | | | |
| Power groups | E1 | Complete | | |
| Rated power | | 6 kW | | |
| Rated current | | 8,7 A | | |
| Device protection | | 16 A | | |
| Rated short-time withstand current (1 sec.) | | $I_{CW}$ 0,8 kA | | |
| Rated voltage | | 400 V 3/PE 50/60 Hz | | |
| Specific surface load | | 0,7 W/cm² | | |
| Control circuit temperature monitoring | | max. 10 A; 230 V 1/N/PE 50/60 Hz | | |
| Control circuit additional monitoring devices | | ---- | | |
| Anti condensation heater | E2 | ---- | | |
| Connection diagram | | 16-1610-40 | | |
| Connection cross section power circuit | | 4 mm² | | |
| Connection cross section control circuit | | max. 4 mm² | | |
| Cable entry power circuit / material | | 1x M25x1,5; for cable-ø 9…17 mm / PA | tightening torque: 5 Nm | |
| Cable entry power circuit / material | | ---- | | |
| Cable entry control circuit / material | | 1x M25x1,5; for cable-ø 9…17 mm / PA | tightening torque: 5 Nm | |
| Cable entry anti condensation heater / material | | ---- | | |
| **4 Protection system** | | | | |
| Temperature monitoring | B1 | TL = 160 °C - effective on heating element surface | | |
| Isolation resp. residual current device | | necessary | | |
| Flow monitoring device | B3 | not necessary | | |
| **Additional monitoring devices or sensors** | | | | |
| Temperature monitor, regulators | B2 | TR = 0…200 °C, works adjusting at 150 °C - effective on heating element surface<br>- free adjustable - | | |
| Temperature monitor, regulators | B4 | ---- | | |
| **5 Dimensions** | | | | |
| Dimension sheet / drawing | | 09-420-30 | | |
| Duct dimensions height H | | 320 mm | | |
| Duct dimensions width B | | 320 mm | | |
| Duct dimensions depth T | | 420 mm | | |
| Flange frame width | | 40 mm | | |
| Intern. data: drill / wiring diagramm | | 21-4600-10 | | |
| Sheet covering accord. to drawing | | 09-009-30 | | |
| Flange plate accord. to drawing | | 09-010-30-1 | | |
| **6 Material & Surface** | | | | |
| Heating elements | | 1.4541 | metallic bright | |
| Flow channel | | C-Steel | varnished with | Hammerschlag |
| Flange frame | | C-Steel | varnished with | Hammerschlag |
| Connection enclosure | | C-Steel | varnished with | Hammerschlag |
| **7 Operation data** | | | | |
| Medium / flow rate | | Air | / max. 1800 m³/h i.N. | |
| Temperature in / out | | ---- / max. 50 °C | | |
| chamber temperature | | ~ 9 K | | |
| Ambient temperature / max. housing temperature | | -20 ... +40 °C | / 60 °C | |
| Mounting position | | in aggregate, tank or container; Heater horizontal;<br>cable glands from bottom side; H 180, V 90 | | |
| **8 Design data** | | | | |
| Design code | | ---- | | |
| Allowable operating pressure | | ---- | | |
| Allowable temperature min. / max. | | 0 / +200 °C | | |
| Fluid group / diagram | | ---- | | |
| Category / module | | ---- | | |
| Inspection / material certificate / report | | ---- / EN 10204-2.1 | | |
| **9 Documentation** | | | | |
| Language | | german | / english | / ---- |
| Operation manual | | DH...; EH... | | |
| **10 Remarks** | | The operating point of delivered monitoring device B1 is fixed in place and are protected against tampering of any kind. Manudacturer´s setting, adjusted during the thermal test, must not be changed. | | |
| **11 Internal remarks** | | | | |
| Heating elements: pieces; shape; wiring; type | | 9 DW; YP; NR 367V 8G / 667W / 230V | | |
| Solder / welding filler / heating elements diameter | | A 314 / 1.4332 / 8,5 mm | | |
| In charge / Project team | | Mr. Büthe | | |