RUDOLF UHLEN GmbH

Herstellung von Arbeitsschutzartikeln

42781 Haan - Am Höfgen 13
Telefon (02129) 1444
Telefax (02129) 59980
www.aschua-uhlen.de
info@aschua-uhlen.de

Technical datasheet

for Personal Protective Equipment: Electricians face shield arc class 2 (7 kA)

Articleno.: GFKES004	Description: Face shield made of polycarbonate, green, 550x200x2,0mm with chin guard used with safety helmet for the protection against electric arcs class 2 (7 kA).
EN Norms: EN 166 / EN 168 / EN 169 / EN 170 GS-ET-29	CE-Certificate: C7360UHL/R0
Technical features	
Weight: 460g	
• the face shield is made of polycarbonate • the face shield has no open metal parts and can be used for live works up to 1.000V • the visor is 2,0mm thick and fixed to the U-Profile with a plastic screw joint • the face shield has a flange and seals the shield at the top • the face shield is securely attached to the helmet by a wide, adjustable elastic band	• the face shield has a chin guard with Nomex bib for additional protection • electric arc class 2 (7 kA/ 423kJ/m³) in accordance with GS-ET-29 • VLT class 2 (according to ISO 10527) visible light transmittance (D65) < 50% • mechanical stability in accordance with EN 166 = B (medium impact 120 m/s) • the ATPV is 46 Cal/cm²
Used materials:	
Visor: Polycarbonate, green, 2,0mm U-profile: Polycarbonate 2mm Elastic band: Silicone, Para grey ca. 40° Shore, 16mm wide Attaching parts: Polypropylene PP GV 30 Chin guard: Polycarbonate Bib: Nomex	
Fields of use:	
• live works with high voltage up to 1.000 V	• areas is which an electric arc class 2 (7 kA) could occur
Marking: 1000V 2C-2 UHL 1 B 8-2-2 / 166 8-2 B CE 1883 on the front of the visor, upper right side	

Notified body:
ECS GmbH
Obere Bahnstr. 74
73431 Aalen
Notified Body: 1883

Notified body (audit):
DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Alboinstr. 56
12103 Berlin
Notified Body: 0196

General remarks
The elctrician's visor can only be used with a designated elctrician's hard hat. The following hard hat models are recommended:

GFKES004: BOP Energy 3000
GFKES004-3: VOSS INAP PCG
GFKES004-5: 3M G3501

All hard hats are tested in accordance with DIN EN 50365.

When approaching the danger zone the face shield has to be flipped down.

The user has to make sure that the electrician's face shield has a sufficient protection class. The maximal expectable arc flash energy has to be determined. This can be done with the DGUV document BGI 5188.

The operating life of the electrician's face shield depends on the handling at work. The face shield has to be replaced when it shows strong scratches or fractures. Also the elastic band of the plastic carrier has to be checked for fractures or porosity. These parts have to be replaced when necessary. PPE made of plastics has to replaced after 2 years in principle

Warning!
The safety officer should be contacted to ensure an adequate protection at work.

Eye-protection devices against particles with high velocity could transmit the impact energy, if the device is worn together with standard glasses.

If the eye protection device is composed of a number of individual devices – the maximum level of protection depends on the individual device with the lowest protection level.

Notice relating to the mutual compability of the marking (s. DIN EN 166 note d, e and f in table 12).

If protection against mechanical impacts with high velocity in extreme temperatures is needed, the used eye protection device has to be marked with the letter T after the letter for the impact protection, i.e. BT. Otherwise the eye protection device can only be used against impacts with high velocity in room temperature.

Plastic can cause an allergic reaction of the skin of sensitive persons.

Article list

Electrician's face shield 7kA:

GFKES004 (standard)
GFKES004-2 (anti-fog)
GFKES004-3 (broad form)
GFKES004-5 (round form)

RUDOLF UHLEN GmbH
Herstellung von Arbeitsschutzartikeln

Am Höfgen 13 – 42781 Haan
Telephone: +49 (0)2129/1444 Internet: www.aschua-uhlen.de
Telefax: +49 (0)2129/59980 E-mail: info@aschua-uhlen.de

General manager: Volker Fiedler
Steffen Fiedler
Trade registerno.: HRB 17088 Registercourt Wuppertal

User manual
Electrician's visor for hard hats for live-working up to 1000 V

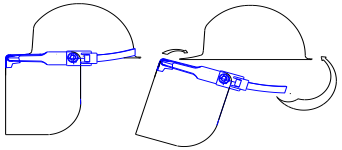
AschuA UHL

Documentno.:
28.05.2022 / R4

Electrician's visor made of PC, 550x200x2,0mm, with chin guard

- The visor is used in combination with a hard hat.
- According to DIN EN 166 no open metal parts are used.
- The visor is made of Polycarbonate, 2,0mm thick and it has optical class 1.
- The visor complies the special mechanical and thermal demands for work places where arc flashes of class 2 (7kA) can occur.
- The face shield has a flange and seals the visor at the top. It cannot fold below the helmet brim (see picture above).
- The U-profile is used for attaching the face-shield to the hard hat and it is made of Polycarbonate 2mm thick.
- The electrician's visor is securely attached to the hard hat by a wide, adjustable elastic band (3mm thick).
- The face shield is attached to the U-profile with an enforced M6 screwed joint made of PP.
- The face shield has a chin guard made of polycarbonate. An additional bib made of Nomex fabric gives protection to chin and throat.

Manual



- The U-profile of the electrician's visor is slid on the brim of the hard hat (s. picture).
- That followed the elastic band is pulled over the back of the hard hat. The visor has now a firm fit on the hard hat.
- The face shield can be lifted and locked in any position by a thread connector.
- The screws cannot loosen unintentionally.

Storage
Personal protective equipment should be stored in dry rooms. Especially components made of plastics should not be exposed to intense solar radiation.

When not using the face shield, it should be stored in an UV-resistant container/bag.

The face shields should not be stored in areas with high temperatures or humid conditions.

When the face shields are moved in a vehicle, they should be fixed, so no deformations or chafes can occur.

Cleaning / Disinfection
The universal-visor carriers and the face-shields can be cleaned with water and standard detergents as well as with mild disinfectants. However, the face shields should be dried with compressed air (at best with a lintless cloth) to avoid scratches.

Safety checks
Before using the face shield the user should do a safety check. Damaged or scratched face shields or other damaged parts have to be replaced.

Damages are: cracks, fractures, holes, deep notches but also burned areas, milky or darkened surfaces.

Maintenance/repairs
Maintenance has to be conducted on a regular basis.

To be checked in particular:

- Firm fit of the electrician's visor on the hard hat. The elastic band should be checked.
- Folding mechanism of the visor. If necessary the screwed joint has to be tightened.
- Attachment of the face shield to the visor.
- The face shield has to be checked for its transparency and other damages.

Repairs can only be done with the original parts of the manufacturer.

Decay time/aging
All used materials are exposed to environmental impacts like UV-radiation, acid rain and various other impacts. Therefore especially the personal protective equipment made of thermoplastic plastics has be replaced after 2 years the latest.

Technical features
Electricians' visor

- **Face shield**
  Polycarbonate 2,0mm
- **U-Profile**
  Polycarbonate 2mm
- **Mounting parts**
  Polypropylen PP GV 20
- **Elastic band**
  Silicone, grey
- **Chin guard**
  Polycarbonate; Nomex

Marking
The face shield is tested in accordance with DIN EN 166, DIN EN 170 and GS-ET-29 (2019).

Mounting device
UHL 166 8-2 B CE 0196

Face shield
2C-2 UHL 1 B 8-2-2 CE -0196-

Explanation of the marking:

UHL	= manufacturer Rudolf Uhlen GmbH
166	= EN Norm
2C-2	= UV-shade
1	= optical class
B	= mechanical impact with medium energy
8-2	= electric arc class 2 (7kA)
CE	= CE sign
-0196-	= notified body
	= sign for electr. arc

Additional marking according to GS-ET-29
2 = the luminous transmittance VLT< D65, which emulates the luminance impression of the human eye (accord. to ISO 10527:2007), is < 50%.

This product is assigned to Light transmittance class 2 (LT Class 2). Additional lighting is required under normal working conditions. In any case, check your ability to detect color in the work environment before using this product.

Artificial lighting can interfere with the tint of the face shield and impair colour perception, especially when using fluorescent or LED lamps as illuminants. It must be ensured that all cable codes used at the workplace can be safely distinguished under actual lighting conditions.

Check your colour perception prior to starting work by performing the following steps:
1. Gather a sampling of cable pieces having the same colour coding as the cables used at your workplace.
2. Ensure that you are in a safe location, but with the same lighting (type and intensity) as anticipated at your workplace.
3. Clean the face shield and check it for damage (do not hesitate to replace the face shield if necessary - refer to the User information).
4. Don the face shield as described in the User information.
5. Quickly sort through the bundled cable samples.
If you have difficulty distinguishing between the various cable codes or are mistaken in sorting them, then the lighting is insufficient and/or the face shield is too dark. This could cause an accident at work, such as electric fault arcing.

The arc flash symbol is a shield with an explosion and a lightning bolt.

The face shield has been tested with the following hard hat types:
Model: G3501
Manufacturer: 3M
Distance visor-face: 50mm
Model: INAP PCG
Manufacturer: Voss-Helme
Distance visor-face: 65mm

TÜVRheinland®
DIN CERTCO
Genau. Richtig.

CE

EU-Baumusterprüfbescheinigung

Inhaber	**Rudolf Uhlen GmbH** **Am Höfgen 13** **42781 Haan** **DEUTSCHLAND**
Registernummer	C7360UHL/R0
Produkt	Elektriker-Gesichtsschutz
Typ, Modell	GFKES004, GFKES004-3, GFKES004-5
Prüfgrundlage(n)	DIN EN 166:2002-04 DIN EN 170:2003-01 GS-ET-29:2019-06 AfPS GS 2019:01 PAK
Prüfberichte/ Prüfzeichen	12961-PZA-23, 12962-PZA-23, 12963-PZA-23
Kennzeichnung des Produktes	Detaillierte Kennzeichnung siehe Anhang
Gültigkeitszeitraum	2024-10-16 bis 2029-10-15
Konformität	DIN CERTCO bestätigt die Übereinstimmung des Baumusters mit den geltenden grundlegenden Gesundheitsschutz- und Sicherheitsanforderungen nach Anhang II der Verordnung (EU) 2016/425 für persönliche Schutzausrüstung. Die Bewertung beruht auf den vom Hersteller oder vom bevollmächtigten Vertreter eingereichten Prüfmustern, den technischen Unterlagen, sowie dem Prüfbericht des Prüflabors. Eventuell vorhandene Vorgängerversionen dieser EU-Baumusterprüfbescheinigung verlieren hiermit ihre Gültigkeit. Weitere Informationen siehe Anhang.

2024-10-16

Dr. Ina Förster
Benannte Stelle 0196

GESELLSCHAFT FÜR KONFORMITÄTSBEWERTUNG MBH
DIN CERTCO

DIN

ANHANG

Zertifikat	C7360UHL/R0 von 2024-10-16
Herstellerkennzeichen	UHL
Kennzeichnung des Produktes	Elektriker-Gesichtsschutzschild: 2-2 UHL 1 B 8-2-2 CE 0196 Tragkörper für Elektriker-Gesichtsschutz: UHL 166 8-2 B CE 0196 Produkt bzw. austauschbare Bestandteile müssen zusätzlich mit dem Symbol IEC 60417-6353 (2016-02) gekennzeichnet sein.
Produktspezifikationen	Grad der mechanischen Festigkeit: Schutz gegen Teilchen hoher Geschwindigkeit B (120 m/s) Optische Klasse: 1 Schutzstufe: 2-2 Schutz gegen Störlichtbogen: 8 Störlichtbogenklasse: 2 Lichttransmissionsklasse: 2 Elektriker-Gesichtsschutzschild Mittendicke: 2,0 mm Material: PC Farbe: Grün Abmessungen: 550 mm x 200 mm Tragkörper für Elektriker-Gesichtsschutz Material: PC, Gummi, PP, Nomex, LDPE Farbe: Grau/blau/farblos Ausführung: Scheibe mit Stofflatz GFKES004: Standardform GFKES004-3: Breite Ausführung GFKES004-5: Runde Ausführung
Weitere Produktinformationen	Nur für Verwendung mit den Sicherheitshelmen G3501 (3M), INAP PCG (Voss-Helme), BOP Energy 3000(Schuberth).
Bestimmungen/Pflichten	Diese EU-Baumusterprüfbescheinigung ist Eigentum von DIN CERTCO und kann zurückgezogen werden, wenn die Bedingungen, die zur ihrer Ausstellung geführt haben, nicht mehr erfüllt sind.

ANHANG

Zertifikat C7360UHL/R0 von 2024-10-16

Die Informationsbroschüre (Gebrauchsanweisung) zum genannten Augenschutzprodukt muss in den Amtssprachen des Bestimmungslandes verfasst sein und unter anderem folgende Angaben zur notifizierten Stelle enthalten:

DIN CERTCO Gesellschaft für
Konformitätsbewertung mbH
Alboinstraße 56
12103 BERLIN
DEUTSCHLAND
Kennnummer der notifizierten Stelle: 0196

Auf dem Produkt muss, soweit möglich, eine Typen-, Chargen- oder Seriennummer oder ein anderes Kennzeichen zur Identifikation angebracht sein.

Auf dem Produkt muss, soweit möglich, der Name und die Postanschrift des Herstellers oder, sofern dieser nicht im Europäischen Wirtschaftsraum ansässig ist, der Name und die Postanschrift eines im Europäischen Wirtschaftsraum ansässigen bevollmächtigten Vertreters oder Einführers angebracht sein.

Auf dem Produkt und dessen Verpackung muss Monat und Jahr der Herstellung und/ oder Monat und Jahr des Verfalls unauslöschlich und eindeutig angebracht sein.

Das Produkt muss mit der Kennnummer der notifizierten Stelle gekennzeichnet werden, welche die Überwachung des Produktes gemäß Anhang VII (Modul C2) oder VIII (Modul D) der Verordnung (EU) 2016/425 durchführt.

Diese EU-Baumusterprüfbescheinigung darf nur in Verbindung mit einem der Konformitätsbewertungsverfahren gemäß der Verordnung (EU) 2016/425 Artikel 19 Buchstabe c verwendet werden.

Jede Änderung am Produkt, den technischen Unterlagen oder dem Qualitätssicherungssystem muss DIN CERTCO schriftlich mitgeteilt werden.

Es gelten die Allgemeinen Geschäftsbedingungen von DIN CERTCO.

RUDOLF UHLEN GmbH

Herstellung von Arbeitsschutzartikeln

42781 Haan - Am Höfgen 13
Telefon (02129) 1444
Fax (02129) 59980
www.aschua-uhlen.de
info@aschua-uhlen.de

Rudolf Uhlen GmbH - Am Höfgen 13 - 42781 Haan

EU DECLARATION OF CONFORMITY (2024.R1)

1. PPE: **GFKES004**

2. Manufacturer: **Rudolf Uhlen GmbH**
   Am Höfgen 13
   42781 Haan

3. This declaration of conformity is issued under the sole responsibility of the manufacturer: Rudolf Uhlen GmbH.

4. Object of the declaration:
   Electricians Face Shield, made of PC, green, 550x200x2,0mm, with chin guard, DIN EN 166 and GS-ET-29 (7kA)

5. The object of the declaration described in point 4 is in conformity with the relevant Union harmonisation legislation: guideline 2001/95/EG and regulation (EU) 2016/425

6. References to the relevant harmonised standards used, including the date of the standard, or references to the other technical specifications, including the date of the specification, in relation to which conformity is declared: EN 166:2001, EN 170:2002 and GS-ET 29:2011-05

7. The notified body DIN CERTCO Gesellschaft für Konformitätsbewertung mbH, Alboinstr. 56, 12103 Berlin (0196) performed the EU type-examination (Module B) and issued the EU type-examination certificate **C7360UHL/R0** ausgestellt.

8. The PPE is subject to the conformity assessment procedure based on internal production control plus supervised product checks at random intervals (Module C2) under surveillance of the notified body DIN CERTCO Gesellschaft für Konformitätsbewertung mbH, Alboinstr. 56, 12103 Berlin (0196).

9. Additional Information:
   Signed for and on behalf of:
   Rudolf Uhlen GmbH

Haan, October 16, 2024:

Steffen Fiedler
-General Manager-