

Automationssystem 6600
Bedien- und Automationseinheit
TROVIS 6611-2



Originalanleitung



**Einbau- und
Bedienungsanleitung**

EB 6611-2

Firmwareversion 3.53

Ausgabe Oktober 2017



Hinweise zur vorliegenden Einbau- und Bedienungsanleitung

Diese Einbau- und Bedienungsanleitung (EB) leitet zur sicheren Montage und Bedienung an. Die Hinweise und Anweisungen dieser EB sind verbindlich für den Umgang mit SAMSON-Geräten.

- Für die sichere und sachgerechte Anwendung dieser EB vor Gebrauch sorgfältig lesen und für späteres Nachschlagen aufbewahren.
- Bei Fragen, die über den Inhalt dieser EB hinausgehen, After Sales Service von SAMSON kontaktieren (aftersalesservice@samson.de).



Die gerätebezogenen Einbau- und Bedienungsanleitungen liegen den Geräten bei. Die jeweils aktuellsten Dokumente stehen im Internet unter www.samson.de > Produkt-Dokumentation zur Verfügung. Über das Feld [Finde:] ist die Suche nach Dokumentennummern oder Typnummern möglich.

Hinweise und ihre Bedeutung

! GEFÄHR

Gefährliche Situationen, die zum Tod oder zu schweren Verletzungen führen

! HINWEIS

Sachschäden und Fehlfunktionen

! WARNUNG

Situationen, die zum Tod oder zu schweren Verletzungen führen können

i Info

Informative Erläuterungen

💡 Tipp

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1 Sicherheitshinweise und Schutzmaßnahmen

Bestimmungsgemäße Verwendung

Die Bedien- und Automationseinheit TROVIS 6611-2 von SAMSON ist frei programmierbar und dient dem autarken Betrieb und der Verwaltung von sechs I/O-Modulen. Die Darstellung und Visualisierung erfolgt über ein integriertes Farb-Touchdisplay.

Damit die Bedien- und Automationseinheit in gewünschter Form auf die I/O-Module zugreifen kann, müssen die I/O-Module logisch in Form eines Projekts in der Bedien- und Automationseinheit abgebildet werden. Dazu stellt SAMSON vorgefertigte Applikationen zur Verfügung. Alternativ kann die Programmierung eines Projekts über die SAMSON-Software „Graphische Projektierung“ (Logikschaltung, Menüführung, Visualisierung und Inbetriebnahme) erfolgen.

Bedien- und Automationseinheit und I/O-Module sind für genau definierte Bedingungen ausgelegt (z. B. Versorgungsspannung, Umgebungsbedingungen). Daher muss der Betreiber sicherstellen, dass die Bedien- und Automationseinheit nur dort zum Einsatz kommt, wo die Einsatzbedingungen den in den technischen Daten angegebenen Bedingungen entsprechen. Falls der Betreiber die Bedien- und Automationseinheit in anderen Anwendungen oder Umgebungen einsetzen möchte, muss er hierfür Rücksprache mit SAMSON halten.

SAMSON haftet nicht für Schäden, die aus Nichtbeachtung der bestimmungsgemäßen Verwendung resultieren sowie für Schäden, die durch äußere Kräfte oder andere äußere Einwirkungen entstehen.

- ➔ Einsatzgrenzen, -gebiete und -möglichkeiten den technischen Daten entnehmen, vgl. Kap. 3.3.

Die physikalische und logische Projektierung obliegt, sofern nicht anders vereinbart, dem Betreiber.

Vernünftigerweise vorhersehbare Fehlanwendung

Der Bedien- und Automationseinheit ist nicht für die folgenden Einsatzgebiete geeignet:

- Einsatz außerhalb der durch die technischen Daten und durch die bei Auslegung definierten Grenzen

Ferner entsprechen folgende Tätigkeiten nicht der bestimmungsgemäßen Verwendung:

- Verwendung von Ersatzteilen, die von Dritten stammen.
- Ausführung von nicht beschriebenen Instandhaltungs- und Reparaturarbeiten

Qualifikation des Bedienpersonals

- Die Bedien- und Automationseinheit darf nur durch Fachpersonal unter Beachtung anerkannter Regeln der Technik eingebaut, in Betrieb genommen, instand gehalten und repariert werden.
- Projekte dürfen nur von Fachpersonal konfiguriert und parametriert werden.

Fachpersonal im Sinne dieser Einbau- und Bedienungsanleitung sind Personen, die aufgrund ihrer fachlichen Ausbildung, ihrer Kenntnisse und Erfahrungen sowie der Kenntnis der einschlägigen Normen die ihnen übertragenen Arbeiten beurteilen und mögliche Gefahren erkennen können.

Persönliche Schutzausrüstung

Es ist keine Schutzausrüstung erforderlich.

Änderungen und sonstige Modifikationen

Änderungen, Umbauten und sonstige Modifikationen des Produkts sind durch SAMSON nicht autorisiert. Sie erfolgen ausschließlich auf eigene Gefahr und können unter anderem zu Sicherheitsrisiken führen sowie dazu, dass das Produkt nicht mehr den für seine Verwendung erforderlichen Voraussetzungen entspricht.

Schutzeinrichtungen

Zum Schutz vor Fremdzugriff ist die Bedienung der Bedien- und Automationseinheit passwortgeschützt. Jedem Nutzer werden eine Nutzerrolle mit individuellen Berechtigungen und ein eigenes Passwort zugeordnet.

Warnung vor Restgefahren

Die Bedien- und Automationseinheit hat über die I/O-Module direkten Einfluss auf angesteuerte Anlagenbauteile wie Stellventile und Pumpen. Um Personen- oder Sachschäden vorzubeugen, müssen Betreiber und Bedienpersonal Gefährdungen, die an den Anlagenbauteilen vom Durchflussmedium und Betriebsdruck sowie vom Stelldruck und von beweglichen Teilen ausgehen können, durch geeignete Maßnahmen verhindern. Dazu müssen Betreiber und Bedienpersonal alle Gefahrenhinweise, Warnhinweise und Hinweise der mitgeltenden Dokumente befolgen.

Sorgfaltspflicht des Betreibers

Der Betreiber ist für den einwandfreien Betrieb sowie für die Einhaltung der Sicherheitsvorschriften verantwortlich. Der Betreiber ist verpflichtet, dem Bedienpersonal diese Einbau- und Bedienungsanleitung zur Verfügung zu stellen und das Bedienpersonal in der sachgerechten

Bedienung zu unterweisen. Weiterhin muss der Betreiber sicherstellen, dass das Bedienpersonal oder Dritte nicht gefährdet werden.

Sorgfaltspflicht des Bedienpersonals

Das Bedienpersonal muss mit der vorliegenden Einbau- und Bedienungsanleitung vertraut sein und sich an die darin aufgeführten Gefahrenhinweise, Warnhinweise und Hinweise halten. Darüber hinaus muss das Bedienpersonal mit den geltenden Vorschriften bezüglich Arbeitssicherheit und Unfallverhütung vertraut sein und diese einhalten.

Mitgeltende Normen und Richtlinien

Die Bedien- und Automationseinheit erfüllt die Anforderungen der Richtlinien 2014/30/EU und 2011/65/EU. Die Konformitätserklärung gibt Auskunft über das angewandte Konformitätsbewertungsverfahren. Die entsprechende Konformitätserklärung steht im Anhang dieser EB zur Verfügung.

Die Bedien- und Automationseinheit ist für den Einsatz in Niederspannungsanlagen vorgesehen.

- ➔ Bei Anschluss, Instandhaltung und Reparatur die einschlägigen Sicherheitsvorschriften beachten.

Mitgeltende Dokumente

Folgende Dokumente gelten in Ergänzung zu dieser Einbau- und Bedienungsanleitung:

- ▶ AB 6600: Projektierungsrichtlinien für Schaltschrankbauer
- ▶ T 6620-1 für I/O-Modul TROVIS 6620-1
- ▶ T 6625 für I-Modul TROVIS 6625
- ▶ T 6630 für AO-Modul TROVIS 6630
- ▶ T 6640 für AI-Modul TROVIS 6640
- Technische Dokumentation des eingesetzten Raumleitgeräts

1.1 Hinweise zu möglichen Sachschäden

! HINWEIS

Beschädigung durch eindringendes Wasser!

Die Bedien- und Automationseinheit ist frontseitig gegen gelegentlich senkrecht fallendes Tropfwasser geschützt (IP 41).

- ➔ Tropf-, Spritz- und Strahlwasser vermeiden.

Manipulation der Einstellungen durch Fremdzugriff!

Die Bedien- und Automationseinheit TROVIS 6611-2 unterstützt unterschiedliche Kommunikationsprotokolle wie z. B. einen Web-Server. Dies ermöglicht einen Zugriff aus der Ferne. Zum Schutz vor Fremdzugriff (Vor-Ort-Bedienung und Bedienung aus der Ferne) ist die Bedien- und Automationseinheit passwortgeschützt:

- ➔ Vorgegebenes Administratorpasswort nach Erstinbetriebnahme ändern.
- ➔ Alle Benutzerpasswörter regelmäßig ändern.
- ➔ Zugangsdaten nicht an Unbefugte weitergeben und unzugänglich aufbewahren.

2 Kennzeichnungen am Gerät

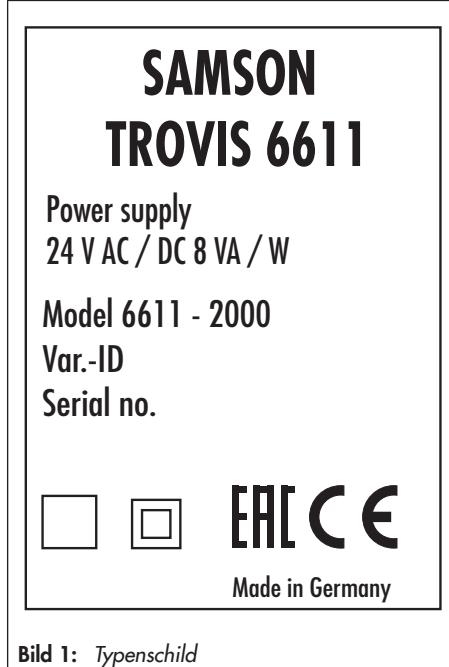


Bild 1: Typenschild

i Info

Bei Auslieferung ist keine Applikation in der Bedien- und Automationseinheit gespeichert. Anlagenspezifische Applikationen können bei SAMSON bestellt werden.

Mengengerüst

Module

- 6x I/O-Module (TROVIS 6620, 6625, 6630 oder 6640) pro TROVIS 6611-2
- 32x TROVIS 6611-2 pro Applikation (GrafPro)

Kabellänge ohne Repeater, Hubs usw.

- Ethernet 100Base-T Typ: LAN
- I/O-Bus 1200 m
- 24 V AC/DC max. 1,5 mm² Litze (Aderendhülsen mit 12 mm Länge)
- Ethernet mind. Cat-5-Kabel. geschirmt (STP)
- I/O-Bus Jy(St) Y 2 x 2 x 0,8 (Aderendhülsen mit 12 mm Länge)

3 Aufbau und Wirkungsweise

TROVIS 6611-2 ist eine frei programmierbare Bedien- und Automationseinheit für den autarken Betrieb und die Verwaltung von sechs I/O-Modulen (bis zu 120 physikalischen Datenpunkten). Die Darstellung und Visualisierung erfolgt über ein integriertes Farb-Touchdisplay. Zum Erstellen eigener Applikationen wird die SAMSON-Software „Grafische Projektierung“ benötigt.

3.1 Bedienelemente

3.1.1 Gerät front

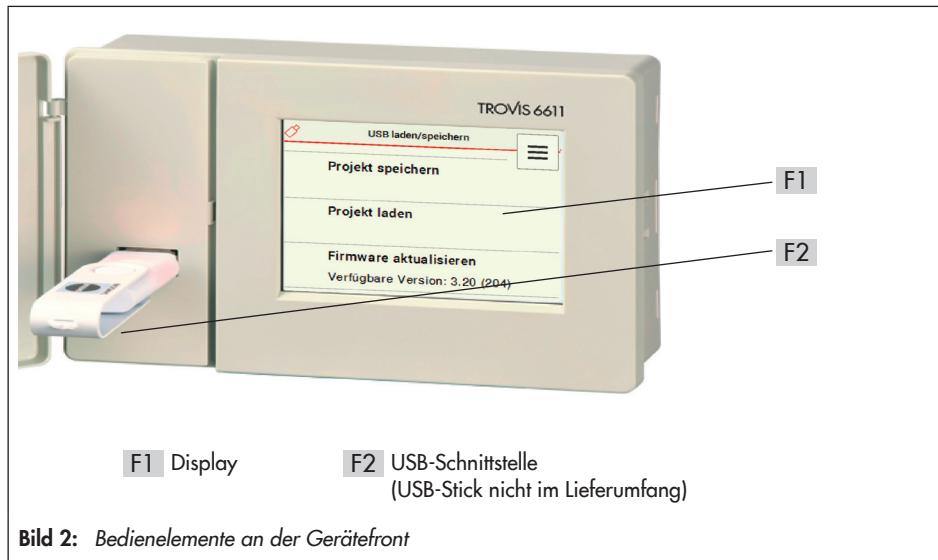


Bild 2: Bedienelemente an der Gerät front

Touch-Display (F1)

Das Touch-Display ist das zentrale Bedienelement.



Über die Menütaste am oberen rechten Rand können verschiedene Ebenen aufgerufen werden. Je nach Ebene können über die angezeigten Tasten verschiedene Funktionen ausgeführt werden (vgl. Bild 3).

USB-Schnittstelle (F2)

Die USB-Schnittstelle ist bei geöffneter Deckelklappe zugänglich. Über sie können Daten von einem USB-Stick in die Bedien- und Automationseinheit oder umgekehrt übertragen werden.

- Voraussetzungen USB-Stick: 2.0 mit FAT32

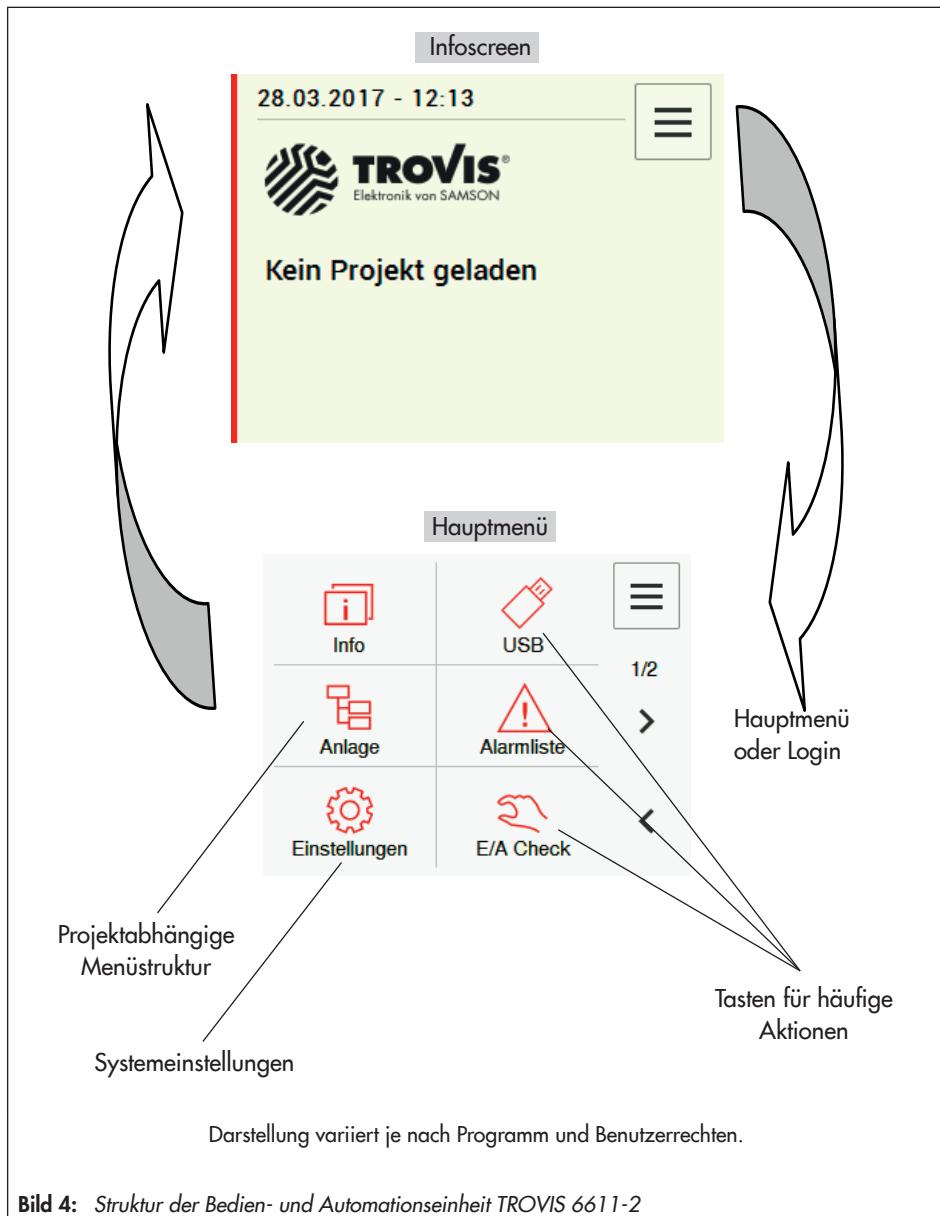


Bild 4: Struktur der Bedien- und Automationseinheit TROVIS 6611-2

3.1.2 Geräte-Rückseite

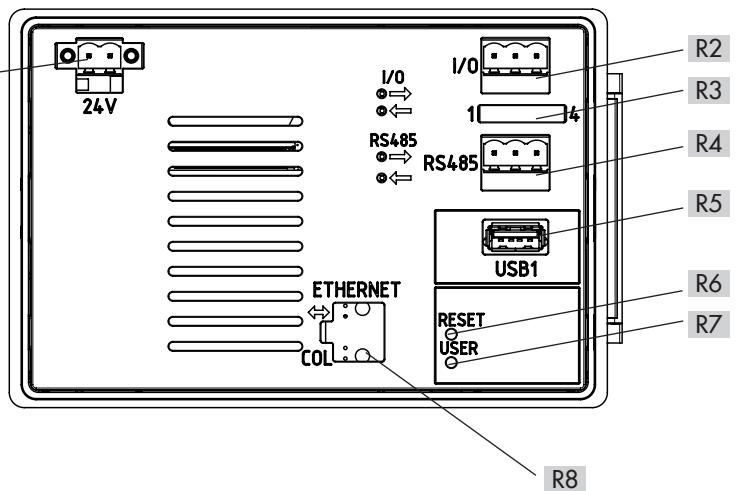


Bild 3: Bedienelemente an der Geräte-Rückseite

R1 **Spannungsversorgung**, vgl. Kapitel 5.2

R2 **Anschluss für I/O-Bus (physikalische Eingänge an Ein-/Ausgangsmodulen)**

Zum Anschluss von physikalischen Ein- oder Ausgängen werden abgesetzte I/O-Module benötigt. Die beiden Anschlussklemmen sind mit IA und IB beschriftet und müssen 1:1 in Linie durch verdrahtet werden.

Maximale Leiterlänge: 1200 m

Je Bedien- und Automationseinheit TROVIS 6611-2 können bis zu sechs I/O-Module angeschlossen werden (z. B. TROVIS 6620, 6625, 6630 oder 6640).

R3 Jumper für RS-485-Konfiguration

Im Auslieferungszustand sind die Jumper nicht gesteckt, erforderliche Belegung vgl. nachfolgende Tabelle.

1	2	3	4
Busabschluss für I/O-Bus	Busvorspannung für Modbus (Jumper 3 muss gesetzt sein)	Busvorspannung für Modbus (Jumper 2 muss gesetzt sein)	Busabschluss für Modbus
Gesetzt = Aktiv	Gesetzt = Aktiv	Gesetzt = Aktiv	Gesetzt = Aktiv
Offen = Nicht aktiv	Offen = Nicht aktiv	Offen = Nicht aktiv	Offen = Nicht aktiv

Jumper 1 setzen, wenn TROVIS 6611-2 am Ende der I/O-Bus-Linie liegt.

Jumper 2 und 3 setzen, um Modbus-Vorspannungen zu aktivieren (wenn TROVIS 6611-2 als Modbus-RTU-Master verwendet wird).

Jumper 4 setzen, wenn TROVIS 6611-2 am Bus-Ende liegt.

R4 Anschluss für Modbus (RS-485 2W)

Die Bedien- und Automationseinheit TROVIS 6611-2 unterstützt das Feldbus-Protokoll „Modbus-RTU“ mit Zweileitertechnik. Für Abschlusswiderstand oder Vorspannung müssen die Jumper entsprechend gesetzt werden. Buseigenschaften, wie z. B. Master- oder Slave-Betrieb, Datenbits, Parität und Stoppbits müssen in der SAMSON-Software „Grafische Projektierung“ eingestellt werden. Die beiden Anschlussklemmen sind mit RA und RB beschriftet und müssen 1:1 in Linie durch verdrahtet werden.

R5 USB-Anschluss

Funktionen:

- Daten laden und sichern
- Speichererweiterung für historische Daten

Voraussetzungen USB-Stick: 2.0 mit FAT32

R6 Reset-Taster für Neustart**R7 User-Taster****R8 Ethernet-Anschluss**

Datenübertragungsrate: 100 Mbit/s

Hostname: Fallback IP-Adresse 172.30.66.11

Der Ethernet-Anschluss lässt sich über die Vor-Ort-Bedienung aktivieren und konfigurieren. Bei Auslieferung sind die Dienste (SSH, FTPES, HTTPS, AVAHI (vgl. Kapitel 5.3.4) deaktiviert. Jedoch bezieht die Bedien- und Automationseinheit TROVIS 6611-2 mit Werkseinstellung die IP-Adressen über DHCP.

3.2 Zubehör

Zubehör

- Klemmen- und Einbauset (im Lieferumfang enthalten)..... Best.-Nr. 1402-1561
- I/O-Modul TROVIS 6620-1 Var.-ID: 4829008
- I-Modul TROVIS 6625¹⁾ Var.-ID: 2649861
- AO-Modul TROVIS 6630 Var.-ID: 3714719
- AI-Modul TROVIS 6640 Var.-ID: 3714720
- Raumleitgerät abhängig von Applikation auf Anfrage
- Grafische Projektierung TROVIS 6690 (Demo)..... Var.-ID: 3004922
- Grafische Projektierung TROVIS 6690 (1 AS-Version) Var.-ID: 3004921
- Grafische Projektierung TROVIS 6690 (3 AS-Version) Var.-ID: 3004920
- Grafische Projektierung TROVIS 6690 (Vollversion) Var.-ID: 2039168

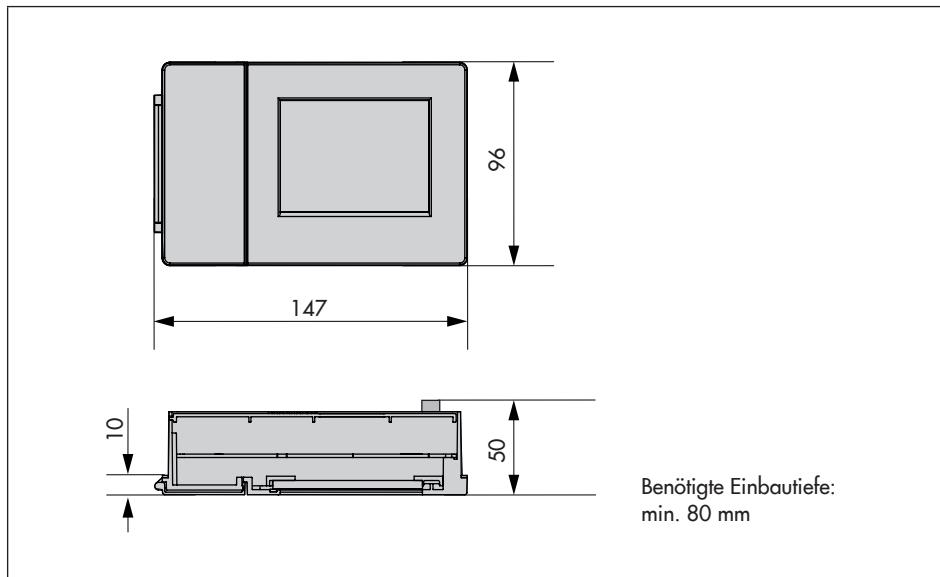
¹⁾ Nur mit Spannungsversorgung 24 V AC (kein DC)

3.3 Technische Daten

Hilfsenergie	
Versorgungsspannung	24 V AC/DC
Leistungsaufnahme	8 VA/W
Anschluss	2 Pin-Steck- und Schraubklemme (orange)
Leitungsquerschnitt	bis 1,5 mm ²
Zulässige Umgebungsbedingungen	
Betriebstemperatur	0 bis 55 °C
Temperatur bei Transport und Lagerung	-20 bis +70 °C
Relative Luftfeuchte	5 bis 95 %, keine Betauung
Elektromagnetische Verträglichkeit	
Störaussendung	entsprechend EN 61000-6-3
Störfestigkeit	entsprechend EN 61000-6-2
Gerätesicherheit	
Schutzart	II entsprechend DIN EN 61140
Überspannungskategorie	II entsprechend DIN EN 60664-1
Verschmutzungsgrad	2 entsprechend DIN EN 60664-1
Schutzart	Mit Tafeleinbaudichtung: IP 41 nach IEC 60529

Display	
Eckdaten	3,5" QVGA, Resistiver Touch
Auflösung	320 x 240 Pixel
Einbau	
Abmessungen	B x H x T inkl. Klemmen 147 x 96 x 50 mm
Montage	Tafeleinbau
Ausschnitt	B x H 138 x 92 mm (empfohlene Einbautiefe min. 80 mm)
Gewicht	ca. 0,4 kg
Schnittstellen	
Serielle Schnittstellen	1x RS-485 Modbus-RTU (3-Pin-Steck- und Schraubklemme) 1x RS-485 I/O-Bus (3-Pin-Steck- und Schraubklemme) für z. B. TROVIS 6620
Ethernet	1x RJ-45 10/100 Mbit, BACnet IP (AMEV-Profile AS-A, AS-B)
USB	2x USB 2.0 A, (FAT32)
Konformität	

3.4 Maße in mm



4 Vorbereitende Maßnahmen

Nach Erhalt der Ware folgende Schritte durchführen:

1. Lieferumfang kontrollieren. Gelieferte Ware mit Lieferschein abgleichen.
2. Lieferung auf Schäden durch Transport prüfen. Transportschäden an SAMSON und Transportunternehmen (vgl. Lieferschein) melden.

4.1 Auspacken

i Info

Verpackung erst direkt vor der Montage und Inbetriebnahme entfernen.

1. Bedien- und Automationseinheit auspacken.
2. Verpackung sachgemäß entsorgen.

4.2 Transportieren

- Bedien- und Automationseinheit vor äußeren Einflüssen wie z. B. Stößen schützen.
- Bedien- und Automationseinheit vor Nässe und Schmutz schützen.
- Die zulässige Transporttemperatur von -20 bis +70 °C einhalten.

4.3 Lagern

! HINWEIS

Beschädigung der Bedien- und Automationseinheit durch unsachgemäße Lagerung!

- Lagerbedingungen einhalten.
- Längere Lagerung vermeiden.
- Bei abweichenden Lagerbedingungen und längerer Lagerung Rücksprache mit SAMSON halten.

i Info

SAMSON empfiehlt, bei längerer Lagerung der Bedien- und Automationseinheit die Lagerbedingungen regelmäßig zu prüfen.

Lagerbedingungen

- Bedien- und Automationseinheit vor Nässe, Schmutz und anderen äußeren Einflüssen (z. B. Stößen) schützen.
- Sicherstellen, dass die umgebende Luft frei von Säuren oder anderen korrosiven und aggressiven Medien ist.
- Die zulässige Lagertemperatur von -20 bis +70 °C einhalten.
- Keine Gegenstände auf die Bedien- und Automationseinheit legen.

5 Montage und Inbetriebnahme

5.1 Einbau

Die Bedien- und Automationseinheit ist vorrangig für den Schaltafeleinbau konzipiert.

Tafelausschnitt (B x H): 138 x 92 mm

Benötigte Einbautiefe: min. 80 mm

→ Tafelausschnitt anfertigen.

- Bedien- und Automationseinheit von vorne durch den Tafelausschnitt hindurchstecken.
- Mitgelieferte Schraubschienen seitlich in die Laufschienen schieben: **Die Klemmen an den Schraubschienen müssen in Richtung Schalttafel zeigen.**
- Schraubschienen mit den mitgelieferten Schrauben befestigen: **Die Spitze der Schrauben müssen in Richtung Schalttafel zeigen.**
- Elektrischen Anschluss entsprechend Kapitel 5.2 vornehmen.

5.2 Elektrischer Anschluss

! HINWEIS

Fehlfunktion durch fehlerhaften elektrischen Anschluss!

- Beim Verlegen der elektrischen Leitungen die VDE-Vorschriften und die Bestimmungen der örtlichen EVU beachten.
- Stromversorgung (Transformator oder Schaltnetzteil) nicht erden.
- Elektrischen Anschluss durch eine Fachkraft durchführen lassen.

Überspannungsschutz

- Werden Signalleitungen außerhalb von Gebäuden oder über größere Distanz verlegt, geeignete Überspannungsschutzmaßnahmen treffen! Bei Busleitungen sind solche Maßnahmen unverzichtbar.
- Für Signalleitungen, die außerhalb von Gebäuden verlegt sind, stromtragfähigen

und beidseitig geerdeten Schirm verwenden.

- Überspannungsableiter am Eintritt des Schaltschranks installieren.

Elektrischer Anschluss

Die Anschlussklemmen sind verpolungssicher ausgeführt:



- Bedien- und Automationseinheit an die Spannungsversorgung (24 V) anschließen.

5.3 Inbetriebnahme

5.3.1 Bediener anmelden

- Im Menü (Taste) den Menüpunkt „Anmelden“ wählen.
- Benutzername und Passwort „admin“ eingeben.

! HINWEIS

Sicherheitsmängel durch allgemein zugängliches Passwort!

Administrator-Passwort (Benutzer: admin) nach dem ersten Anmelden ändern.

5.3.2 Projekt laden

- USB-Stick mit gespeichertem Projekt in die frontseitige USB-Schnittstelle stecken.
- In das Hauptmenü wechseln (Taste).
- Unter „USB“ den Menüpunkt „Projekt laden“ und das gewünschte Projekt wählen.

❶ HINWEIS

Mithilfe des Menüs „USB“ können weitere Aktionen durchgeführt werden:

- Projekt sichern
- Firmware aktualisieren

5.3.3 Systemzeit einstellen

- ➔ In das Hauptmenü wechseln (Taste ).
- ➔ Unter „Einstellungen“ den Menüpunkt „Datum und Uhrzeit“ wählen.
- ➔ Datum und Uhrzeit ändern.
- ➔ Im Menü (Taste ) den Menüpunkt „Übernehmen“ wählen und Änderungen speichern.

5.3.4 Netzwerk einstellen

Die Bedien- und Automationseinheit verfügt über einen integrierten Web-Server (TROVIS MOBILE). Auf diesen kann einfach per IP-Adresse über Netzwerk und Browser zugegriffen werden. Voraussetzung ist derselbe Adressbereich des Endgeräts (Smartphone, Laptop, Tablett, PC o. Ä.) und aktiver HTTP-Dienst.

TROVIS MOBILE ist für moderne Browser wie z. B. Mozilla Firefox ab V.45 und höher optimiert. Bei einem Zugriff über das Internet muss ein Forwarding per Router z. B. per VPN-Dienst bauseits eingerichtet werden.

❷ Info

In der Werkseinstellung steht die LAN-Einstellung auf DHCP und erwartet daher, dass der Bedien- und Automationseinheit

TROVIS 6611-2 eine IP-Adresse, zum Beispiel von einem Router, zugewiesen wird. Die IP-Adresse wird nicht zugewiesen, wenn z. B. eine direkte Verbindung per Netzwerkkabel zwischen TROVIS 6611-2 und einem Laptop hergestellt wird. Für diesen Fall muss DHCP daher zwingend ausgeschaltet werden, damit die eingestellte statische IP-Adresse verwendet wird.

Die aktuell verwendete und aktive IP-Adresse ist unter [Hauptmenü > Geräteinformationen > Netzwerk: eth0] ersichtlich. Diese kann unabhängig von der Benutzerrolle eingesehen werden.

- ➔ In das Hauptmenü wechseln (Taste ).
- ➔ Unter „Einstellungen“ den Menüpunkt „Netzwerkeinstellungen“ wählen.
- ➔ Parameter „LAN-Schnittstelle“ auf „Ein“ stellen.
- ➔ Im Menü (Taste ) den Menüpunkt „Ebene zurück“ wählen und Ebene verlassen.
- ➔ Unter „LAN-Einstellungen“ alle weiteren Parameter einstellen:
 - DHCP: EIN (= WE)
 - IP-Adresse: 172.30.66.11 (= WE)
 - Netzwerkmaske: 255.255.0.0 (= WE)
 - Hostname: TROVIS-6111-2-xxx (xxx = gerätespezifische MAC-Adresse)
 - DNS-Server
 - NTP-Server
- ➔ Ggf. unter „Netzwerk“ den Menüpunkt „Dienste“ wählen und Nutzungsoptionen einstellen:

- FTPS für die Nutzung mit GrafPro aktivieren (WE = AUS)
- HTTPS für die Nutzung des integrierten Web-Servers TROVIS-MOBILE aktivieren (WE = AUS)
- SSH für den Konsolenzugriff durch den Benutzerrolle „root“

! HINWEIS

Beeinträchtigung der Gerätefunktion und Garantieverlust durch unsachgemäße Verwendung der Benutzerrolle „root“!

- SSH nur zur Problembehandlung oder für administrative Eingriffe durch geschultes Personal aktivieren.
- SSH nicht dauerhaft aktivieren.
- Zugang durch Vergabe eines root-Passworts schützen.

- ➔ Im Menü (Taste ) den Menüpunkt „Übernehmen“ wählen und Änderungen speichern.

5.3.5 Module zuweisen

- ➔ In das Hauptmenü wechseln (Taste ).
- ➔ Unter „Einstellungen“ den Menüpunkt „Modulzuweisung“ wählen.
Es werden die logischen Module aufgelistet.
- ➔ Nacheinander für jedes logische Modul ein physikalisches Modul wählen.
- ➔ Bei einem ausgewählten physikalischen Modul blinken die LEDs. Auswahl mit den Haken oben rechts bestätigen oder Auswahlvorgang wiederholen, bis das

richtige physikalische Modul gewählt wurde.

- ➔ Im Menü (Taste ) den Menüpunkt „Übernehmen“ wählen und Änderungen speichern.

i Info

SAMSON empfiehlt nach dem Zuweisen des Moduls den Wiederherstellungspunkt zu setzen (Menüpunkt „Anlage wiederherstellen“ unter „Einstellungen“). So sind die Einstellungen ausfallsicher.

5.3.6 Touchdisplay kalibrieren

- ➔ In das Hauptmenü wechseln (Taste ).
- ➔ Unter „Einstellungen“ den Menüpunkt „Touch-Kalibrierung“ und „Touch-Kalibrierung starten“ wählen.
- ➔ Mit einer spitzen Eingabehilfe nacheinander die angezeigten „x“ anklicken.

5.4 Kurzprüfungen durchführen

Die Funktionsfähigkeit der Bedien- und Automationseinheit lässt sich über das Menü „E/A Check“ prüfen. Hier können alle eingebundenen Module und somit die physikalischen Ein- und Ausgänge eingesehen werden.

- ➔ Menü „E/A Check“ nach Wechsel in das Hauptmenü (Taste ) öffnen.
- ➔ Ausgänge nacheinander von Hand schalten und Funktion prüfen.

Montage und Inbetriebnahme

	Benutzer	Projekt laden	Systemzeit einstellen	Netzwerk einstellen	Module zuweisen	Touchdisplay kalibrieren	Anlage vor Ort bedienen	Bedien- und Automations-einheit zurücksetzen	Neue Benutzer anlegen	Firmware aktualisieren
Default-Nutzer	NEIN	NEIN	NEIN	NEIN	NEIN	NEIN	JA	NEIN	NEIN	NEIN
User	NEIN	JA	NEIN	NEIN	NEIN	NEIN	JA	NEIN	NEIN	NEIN
Service	JA	JA	JA	JA	JA	JA	JA	JA	NEIN	NEIN
Admin	JA	JA	JA	JA	JA	JA	JA	JA	JA	JA

Bild 5: Benutzerrollen



The screenshot shows the 'Benutzereinstellung' (User Configuration) screen of the TROVIS MOBILE application. At the top, there is a logo and a search bar. Below the search bar, a user named 'admin' is listed with the role 'admin, de, Set2'. Following this are three other users: 'user' (user, de, Set2), 'service' (service, de, Set2), and 'user2' (user, de, Set2). Each user entry includes a small profile icon and a right-pointing arrow. At the bottom of the list is a button labeled 'Neuer Benutzer' (New User) with a plus sign icon.

Bild 6: TROVIS MOBILE

6 Betrieb

6.1 Benutzer verwalten

Die Benutzerverwaltung erfolgt über den Web-Server TROVIS MOBILE (vgl. Kapitel 5.3.4 und Bild 6).

Den Benutzern können vier unterschiedliche Benutzerrollen zugewiesen werden, vgl. Bild 5.

6.2 Anlage bedienen

Die Anlagenbedienung erfolgt im Menü „Anlage“. Sie ist projektabhängig.

- Menü „Anlage“ nach Wechsel in das Hauptmenü (Taste ☰) öffnen.

6.3 Bedien- und Automations- einheit zurücksetzen

Zurücksetzen auf Erstinbetriebnahme

Durch das Zurücksetzen auf Erstinbetriebnahme werden alle Anlagenparameter auf den Auslieferungszustand des Projekts eingestellt.

- Reset-Taster auf der Geräte-Rückseite drücken.

Anlage wiederherstellen

In den Einstellungen kann unter dem Menüpunkt „Anlage wiederherstellen“ ein Wiederherstellungspunkt durch Speichern der Anlage gesetzt werden. Wurde dieser einmal gesetzt, lassen sich jederzeit die Einstellungen dieses Zeitpunkts wieder laden.

- In das Hauptmenü wechseln (Taste ☰).
- Unter „Einstellungen“ den Menüpunkt „Anlage wiederherstellen“ wählen.

Zurücksetzen auf Werkseinstellung

Durch das Zurücksetzen auf Werkseinstellung (WE) werden alle bei der Inbetriebnahme vorgenommenen Einstellungen (Projekt, Systemzeit, Netzwerk, Modulzuweisung) gelöscht.

- Daten vor dem Zurücksetzen auf Werkseinstellung auf einem USB-Stick sichern.
- Reset- und User-Taster auf der Geräte-Rückseite gleichzeitig drücken und User-Taste halten, bis die Anzeige das Rücksetzen auf Werkseinstellung meldet.

6.4 WLAN-Hotspot einrichten

Mit externer Hardware (z. B. PC, Laptop, Smartphone, Tablet) ist es möglich, sich per WLAN auf die Bedien- und Automationseinheit TROVIS 6611-2 zu schalten. Die freigegebenen Dienste der Bedien- und Automationseinheit (z. B. Web-Server, GrafPro-Verbindung) können mit einem eingerichteten WLAN-Hotspot erreicht werden. Dies geht nur mit gesteckten WLAN-Stick¹⁾, in Senderreichweite des WLANs und, wenn sich die besagten Endgeräte mit dem WLAN des Sticks ordnungsgemäß verbunden haben.

¹⁾ WLAN-Sticks müssen zulässige Chips mit passenden Treibern unterstützen, z. B. Edimax EW-7811Un.

7 Instandhaltung

i Info

Die Bedien- und Automationseinheit wurde von SAMSON vor Auslieferung geprüft.

- Mit der Durchführung nicht beschriebener Instandhaltungs- und Reparaturarbeiten ohne Zustimmung des After Sales Service von SAMSON erlischt die Produktgewährleistung.
- Als Ersatzteile nur Originalteile von SAMSON verwenden, die der Ursprungsspezifikation entsprechen.

7.1 Firmware aktualisieren

Einige Änderungen an Applikationen oder Funktionen erfordern ein Firmware-Update an der Bedien- und Automationseinheit. Dies erfolgt über einen gültigen USB-Stick¹⁾ mit der gewünschten Firmwareversion.

¹⁾ USB-Stick muss als FAT32 formatiert sein, mit „TROVIS 6611“ benannt sein und die entsprechende Ordnerstruktur vorweisen.

Dieser Vorgang erfordert Administratorrechte.

- USB-Stick mit gespeicherter Firmware in die frontseitige USB-Schnittstelle stecken.
- In das Hauptmenü wechseln (Taste ).
- Unter „USB“ den Menüpunkt „Firmware aktualisieren“ und das gewünschte Projekt wählen.

7.2 Für den Rückversand vorbereiten

Defekte Bedien- und Automationseinheiten können zur Reparatur an SAMSON gesendet werden.

Beim Rückversand an SAMSON wie folgt vorgehen:

1. Bedien- und Automationseinheit außer Betrieb nehmen.
2. Bedien- und Automationseinheit an die nächstgelegene SAMSON-Niederlassung senden. Eine Auflistung der SAMSON-Niederlassungen steht unter
► www.samson.de > Kontakt zur Verfügung.

8 Störungen

- Fehler erkennen und beheben, vgl. Tabelle 1

i Info

Bei Störungen, die nicht in der Tabelle aufgeführt sind, hilft Ihnen der After Sales Service von SAMSON weiter.

Tabelle 1: Fehlerbehebung

Fehler	Mögliche Ursache	Abhilfe
Display bleibt dunkel.	Keine oder falsche Versorgungsspannung.	Versorgungsspannung und Anschlüsse prüfen, vgl. Kapitel 5.2.
Anzeigen im Display schlecht oder nicht lesbar.	Nicht oder falsch eingestellter Anzeigebereich des Displays.	Display neu kalibrieren, vgl. Kapitel 5.3.6.
Anlagenbauteile führen nicht die gewünschten Aktionen aus.	Falsches Projekt geladen oder Projekt gelöscht.	Projekt neu laden, vgl. Kapitel 5.3.2.
	Module falsch/nicht zugewiesen.	Kurzprüfungen durchführen (vgl. Kapitel 5.4) und ggf. Module neu zuweisen, vgl. Kapitel 5.3.5.
Web-Server TROVIS MOBILE kann nicht genutzt werden.	Netzwerkeinstellungen sind fehlerhaft.	Einstellungen prüfen und ggf. neu einstellen (vgl. Kapitel 5.3.4).

9 Außerbetriebnahme und Demontage

9.1 Außer Betrieb nehmen

1. Bedien- und Automationseinheit von der Versorgungsspannung trennen.
2. Bedien- und Automationseinheit ausbauen, dazu Schrauben an der seitlichen Laufschiene lösen.

9.2 Entsorgen

- Bei der Entsorgung lokale, nationale und internationale Vorschriften beachten.
- Alte Bauteile, Schmiermittel und Gefahrenstoffe nicht dem Hausmüll zuführen.

10 Anhang

10.1 Service

Für Instandhaltungs- und Reparaturarbeiten sowie bei Auftreten von Funktionsstörungen oder Defekten kann der After Sales Service von SAMSON zur Unterstützung hinzugezogen werden.

E-Mail

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Die Adressen der SAMSON AG und deren Tochtergesellschaften sowie von Vertretungen und Servicestellen stehen im Internet unter www.samson.de oder in einem SAMSON-Produktkatalog zur Verfügung.

Notwendige Angaben

Bei Rückfragen und zur Fehlerdiagnose folgende Informationen angeben:

- Auftrags- und Positionsnummer
- Typ, Seriennummer, Firmwareversion, Geräteausführung

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