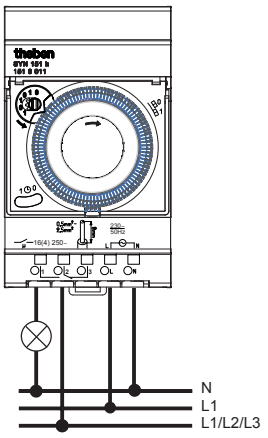
theben

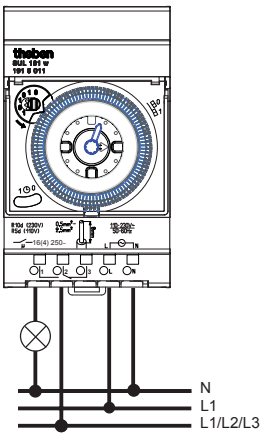
SYN 151 h 151 0 011
SUL 191 w 191 0 011

Analog-Zeitschaltuhr 60 min + 7 d
Analogue time switch 60 min + 7 d
Minuterie analogique 60 min + 7 d
Interruttore orario analogico 60 min + 7 d
Reloj programador analógico 60 min + 7 d
Relógio temporizador analógico 60 min + 7 d
Analoge schakelklok 60 min + 7 d

D GB F I
E P NL



SYN 151 h



SUL 191 w

Service address/Hotline

Service address

Theben AG
Hohenbergstr. 32
72401 Haigerloch
DEUTSCHLAND
Fon +49 (0) 74 74/6 92-0
Fax +49 (0) 74 74/6 92-150

Hotline

Fon +49 (0) 74 74/6 92-369
Fax +49 (0) 74 74/6 92-207
hotline@theben.de
Addresses, telefon numbers etc.
www.theben.de

DEUTSCH

Grundlegende Sicherheitshinweise

⚠ WARNUNG

Lebensgefahr durch elektrischen Schlag oder Brand!
➢ Montage ausschließlich von Elektrofachkraft durchführen lassen!

Bestimmungsgemäße Verwendung

- Die Schaltuhr wird verwendet für Beleuchtungen, Lüftungen, Brunnen, Reklame etc.
- Verwendung nur in geschlossenen, trockenen Räumen
- Montage auf DIN-Hutschiene (nach DIN EN 60715)

Entsorgung

Gerät umweltgerecht entsorgen

Wochentag einstellen

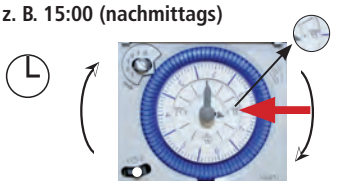
Wochentag (3 = Mittwoch)

(nur SUL 191 w)

Uhrzeit einstellen (nur SUL 191 w)

Uhrzeit z. B. 3:00 (vormittags)

z. B. 15:00 (nachmittags)

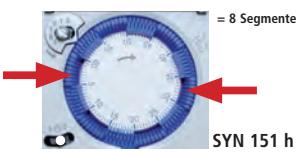


Schaltzeiten einstellen

z. B. Montag–Freitag 10:00–20:00 EIN

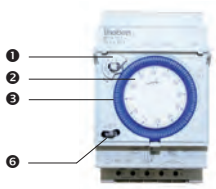
SUL 191 w

z. B. 5 min EIN, 5 min AUS

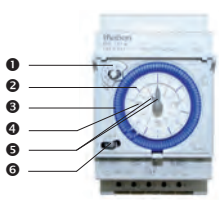


SYN 151 h

Beschreibung



SYN 151 h

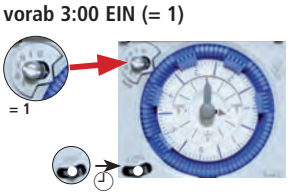


SUL 191 w

❶ Schaltungsvorwahl/Handschaltung
❷ Schaltscheibe für Programmierung
❸ Schaltsegmente
SYN 151 h (1 = 37,5 s)
SUL 191 w (1 = 2 h)
❹ Anzeige Vormittag/Nachmittag (AM/PM) für Uhrzeit
(nur bei SUL 191 w)
❺ Zeiger für Uhrzeit (Stunde und Minute) mit und **gegen** den Uhrzeigersinn drehbar; hierzu kräftig am Minutenzeiger nach links drehen (nur bei SUL 191 w)
❻ Dreistellungsschalter:
Dauer EIN – AUTO – Dauer AUS

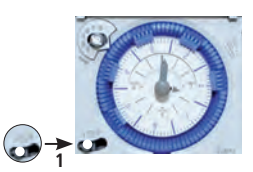
Handschaltung/Schaltungsvorwahl einstellen

vorab 3:00 EIN (= 1)



Die Zeitschaltuhr führt die programmierten Schaltungen aus, d. h. sie kehrt zum Programm zurück.

Permanentschaltung 1 – ◴ – 0 einstellen



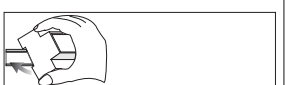
Programm wird nicht ausgeführt.
1 = Dauer EIN
0 = Dauer AUS

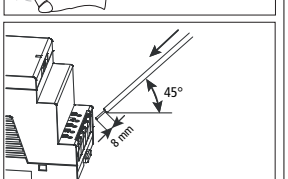
Anschluss/Montage

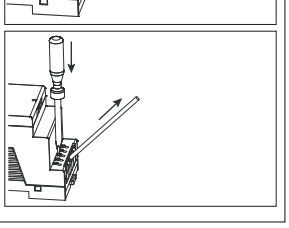
⚠ WARNUNG

Lebensgefahr durch elektrischen Schlag!
➢ Montage ausschließlich durch Elektrofachkraft!
➢ Spannung freischalten!
➢ Benachbarte, unter Spannung stehende Teile abdecken oder abschranken.
➢ Gegen Wiedereinschalten sichern!
➢ Spannungsfreiheit prüfen!
➢ Erden und kurzschließen!

nur bei SUL 191 w
➢ Quarzwerk startet bei angelegter Spannung erst nach einigen Minuten.
➢ Die volle Gangreserve wird nach 5 Tagen erreicht.







Technische Daten

	SYN 151 h	SUL 191 w
Betriebsspannung:	230 V~, +10 %/-15 % 50 Hz	110–230 V~, 50–60 Hz
Eigenverbrauch:	max. 1 VA	max. 2,5 VA
Schaltkontakt:	potenzialfrei (nicht für SELV/PELV)	potenzialfrei (nicht für SELV/PELV)
Kontakt:	Wechsler	Wechsler
Öffnungsweite:	<3 mm (μ)	<3 mm (μ)
Kontaktwerkstoff:	Ag	Ag
Schaltleistung:	10 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6	16 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6
Glühlampenlast:	1100 W	1100 W
Leuchtstofflampenlast:	parallelkompensiert 2 x 40 W (4,7μF)	parallelkompensiert 2 x 40 W (4,7μF)
Zulässige Umgebungstemperatur:	–20 °C ... +55 °C	–20 °C ... +55 °C
Schutzklasse:	II nach EN 60730-1 bei bestimmungsgemäßer Montage	II nach EN 60730-1 bei bestimmungsgemäßer Montage
Schutzart:	IP 20 nach EN 60529	IP 20 nach EN 60529
Ganggenauigkeit:	netzsynchron	≤ ±1 s/Tag bei +20 °C
Gangreserve:	– –	R 200 h (230 V), R 100 h (110 V)
Verschmutzungsgrad:	2	2
Typ:	1 BRTU	1 BSTU

ENGLISH

Basic safety instructions

⚠ WARNING

Danger of death through electric shock or fire!

➢ Installation should only be carried out by a qualified electrician!

Designated use

- The time switch can be used for lighting, ventilation, fountains, advertising hoardings etc.
- Only for use in closed, dry rooms
- Installation on DIN top hat rail (in accordance with DIN EN 60715)

Disposal

Dispose of device in environmentally sound manner

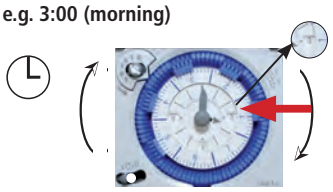
Set day of the week

day (3 = wednesday)

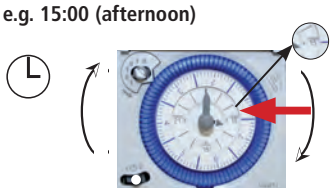
(only SUL 191 w)

Set time (only SUL 191 w)

e.g. 3:00 (morning)



e.g. 15:00 (afternoon)

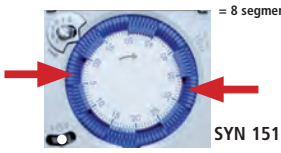


Set switching times

e.g. mon–fr 10:00–20:00 ON

SUL 191 w

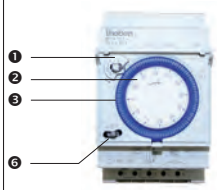
e.g. 5 min ON, 5 min OFF



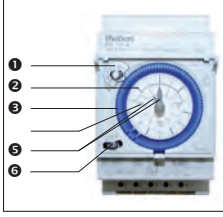
= 8 segments

SYN 151 h

Description



SYN 151 h

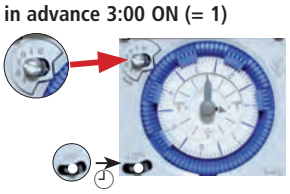


SUL 191 w

❶ Switching pre-selection/manual setting
❷ Program timing disc
❸ Switching segments
SYN 151 h (1 = 37,5 s)
SUL 191 w (1 = 2 h)
❹ Morning/afternoon (AM/PM) time display (for SUL 191 w only)
❺ Hand for setting time (hours and minutes) can be adjusted **anti-clockwise** and clockwise; turn minute hand firmly to left (for SUL 191 w only)
❻ Three way switch: Permanent ON – AUTO – Permanent OFF

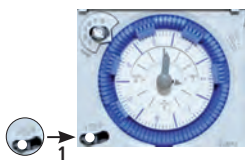
Set manual operation/ switching pre-selection

in advance 3:00 ON (= 1)



The time switch operates the set switching times, i.e. it returns to program.

Set 1 – ◴ – 0 permanent switching



1

Program is not operated.
1 = Permanent ON
0 = Permanent OFF

Connection, technical data see on the back side

FRANÇAIS

Consignes de sécurité fondamentales

⚠ AVERTISSEMENT

Danger de mort, risque d´électrocution et d´incendie !

➢ Le montage doit être effectué exclusivement par un électricien spécialisé!

Utilisation conforme à l´usage prévu

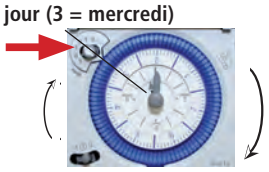
- L´horloge programmable peut être utilisée pour l´éclairage, la ventilation, les fontaines et les enseignes publicitaires
- Utilisation uniquement dans les locaux fermés et secs
- Montage sur un rail DIN (selon DIN EN 60715)

Élimination

Procéder à l´élimination de l´appareil selon les directives de protection de l´environnement

Réglage de jour

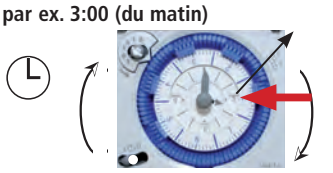
jour (3 = mercredi)



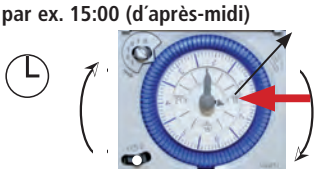
(uniquement pour SUL 191 w)

Réglage de l´heure (seulem. SUL 191 w)

par ex. 3:00 (du matin)



par ex. 15:00 (d´après-midi)

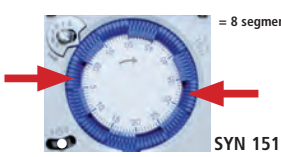


Réglage des horaires de commutation

par ex. lu–ven 10:00–20:00 MARCHE

SUL 191 w

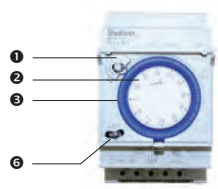
par ex. 5 min MARCHE, 5 min ARRÊT



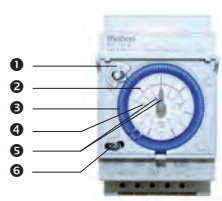
= 8 segments

SYN 151 h

Description



SYN 151 h

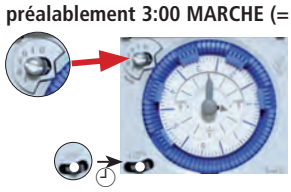


SUL 191 w

❶ Connexion manuelle/présélection de la connexion
❷ Disque de réglage pour la programmation
❸ Segments de commutation
SYN 151 h (1 = 37,5 s)
SUL 191 w (1 = 2 h)
❹ Affichage Matin/Après-midi (AM/PM) de l´heure (seulement SUL 191 w)
❺ Aiguille des heures (heures et minutes) tournant dans les sens horaire et **anti-horaires** ; à cet effet, tourner l´aiguille avec force vers la gauche (seulem. SUL 191 w)
❻ Interrupteur à trois positions : MARCHE permanente – AUTO – ARRÊT permanent

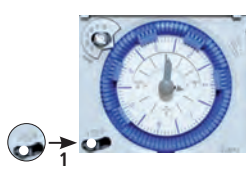
Réglage de la connexion manuelle/présélection de la commutation

préalablement 3:00 MARCHE (= 1)



La minuterie exécute les communications programmées, c´est-à-dire elle retourne dans le programme.

Régler la connexion permanente 1 – ◴ – 0



1

Le programme n´est pas exécutée.
1 = MARCHE permanente
0 = ARRÊT permanant

Raccordement, caractéristiques techniques voir au verso

ITALIANO

Indicazioni di sicurezza fondamentali

⚠ AVVERTENZA

Pericolo di morte per scosse elettriche!

➢ Il montaggio deve essere eseguito esclusivamente da un elettroinstallatore specializzato!

Uso conforme

- Il timer è destinato a scopi di illuminazione, ventilazione, fontane, pubblicità, ecc.
- Utilizzo solo in ambienti chiusi e asciutti
- Montaggio sui guide omega DIN (secondo DIN EN 60715)

Smaltimento

Smatire l´apparecchio rispettando le normative in materia di tutela ambientale.

Impostazione di giorno

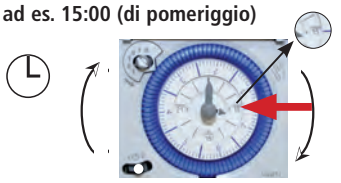
giorno de la sett. (3 = mercoledi)

(solo SUL 191 w)

Impostazione dell´ora (solo SUL 191 w)

ad es. 3:00 (di mattina)

ad es. 15:00 (di pomeriggio)



Impostazione dei tempi di communicazione

ad es. lun–ven 10:00–20:00 ON

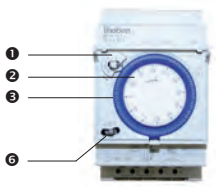
SUL 191 w

ad es. 5 min ON, 5 min OFF

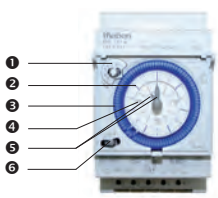
= 8 segmenti

SYN 151 h

Descrizione



SYN 151 h

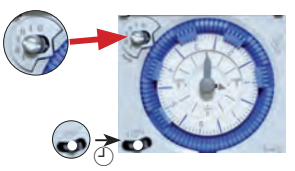


SUL 191 w

❶ Preselezione della commutazione/ Commutazione manuale
❷ Disco di regolazione per la programmazione
❸ Segmenti SYN 151 h (1 = 37,5 s) SUL 191 w (1 = 2 h)
❹ Indicazione mattina/pomeriggio (AM/PM) per l´ora (solo SUL 191 w)
❺ Lancette dell´ora (ore e minuti) ruotabili in senso orario e **antiorario**; a questo scopo ruotare energicamente la lancetta dei minuti verso sinistra (solo SUL 191 w)
❻ Interruttore a tre posizioni: Permanente ON – AUTO – Permanente OFF

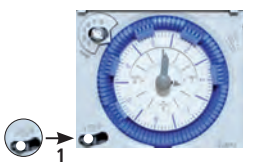
Impostazione della commutazione manuale/preselezione della commutazione

prima 3:00 ON (= 1)



L´interruttore orario esegue le commutazioni programmate, ovvero torna nuovamente al programma.

Impostazione della commutazione permanente 1 – ◴ – 0



Il programma non viene eseguito.
1 = Permanente ON
0 = Permanente OFF

Collegamento, dati tecnici vedi il verso

ESPAÑOL

Indicaciones básicas de seguridad

⚠ADVERTENCIA

¡Pelogro de muerte por descarga eléctrica o quemaduras!

➢ ¡El montaje debe ser llevado a cabo exclusivamente por un electricista profesional!

Uso adecuado

- El reloj conmutador se utiliza en iluminación, ventilación, fuentes, publicidad, etc.
- Utilizar exclusivamente en lugares cerrados y secos
- Montaje en riel de perfil de sombrero DIN (según DIN EN 60715)

Eliminación

Desechar el aparato de forma respetuosa con el medio ambiente

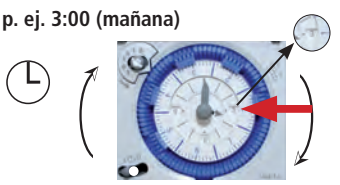
Ajustar día

día de la semana (3 = miércoles)

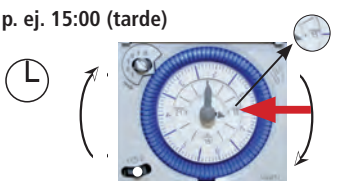
(solo SUL 191 w)

Ajustar hora (solo SUL 191 w)

p. ej. 3:00 (mañana)



p. ej. 15:00 (tarde)



Ajustar las conmutaciones

p. ej. lun–vier 10:00–20:00 ON

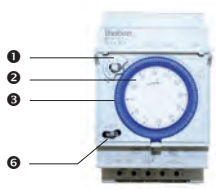
SUL 191 w

p. ej. 5 min ON, 5 min OFF

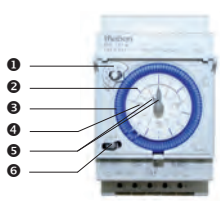
= 8 segmentos

SYN 151 h

Descripción



SYN 151 h

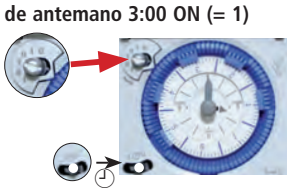


SUL 191 w

❶ Preselección de conexión/conmutación manual
❷ Disco de conexión para la programación
❸ Segmentos de conmutación SYN 151 h (1 = 37,5 s) SUL 191 w (1 = 2 h)
❹ Indicación Mañana/Tarde (AM/PM) para la hora (solo SUL 191 w)
❺ Puntero giratorio para la hora (horas y minutos) en sentido y en **dirección contraria** a las agujas del reloj; para ello girar fuerte el puntero de los minutos hacia la izquierda (solo SUL 191 w)
❻ Conmutador de tres posiciones: Duración ON – AUTO – Duración OFF

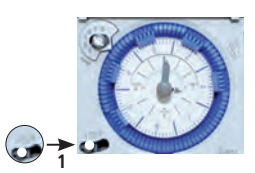
Ajustar la preselección ce conmutación manual/preselección de conexión

de antemano 3:00 ON (= 1)



El reloj programador realiza las conexiones programadas, es decir que regresa al programa.

Ajustar conexión permanente 1 – ◴ – 0



No se ha ejecutado el programa.
1 = Duración ON
0 = Duración OFF

Conexión, datos técnicos véase el revés

PORTUGUÊS

Indicações base de segurança

⚠ ATENÇÃO

Perigo de morte por choque eléctrico ou incêndio!

➢ A montagem deve ser efectuada exclusivamente por um electricista especializado!

Utilização correcta

- O temporizador é utilizado para iluminações, ventilações, fontes, publicidades, etc.
- Utilização apenas em espaços secos e fechados
- Montagem em carris de fixação DIN (em conformidade com DIN EN 60715)

Eliminação

Eliminar o aparelho de forma ecológica

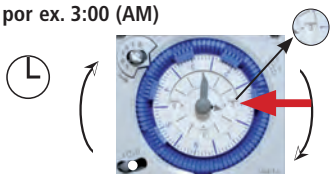
Ajustar a día de semana

dia (3 = quarta-feira)

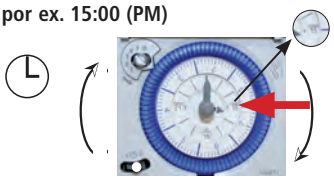
(apenas com SUL 191 w)

Ajustar a hora (apenas com SUL 191 w)

por ex. 3:00 (AM)



por ex. 15:00 (PM)

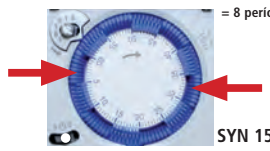


Ajustar temporizador

por ex. segunda-feira–sexta-feira 10:00–20:00 LIGADO

SUL 191 w

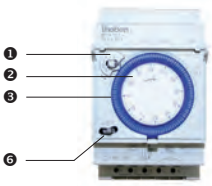
por ex. 5 min LIGADO, 5 min DESLIGADO



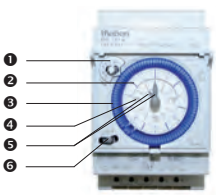
= 8 períodos

SYN 151 h

Descrição



SYN 151 h

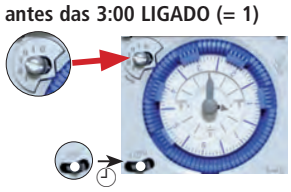


SUL 191 w

❶ Pré-selecção de conexão/ comutação manual
❷ Disco selector para programação
❸ Períodos de comutação
SYN 151 h (1 = 37,5 s)
SUL 191 w (1 = 2 h)
❹ Indicação dia/noite (AM/PM) para relógio (solo con SUL 191 w)
❺ Ponteiro do relógio (horas e minutos) rotativo no sentido dos ponteiros do relógio e no sentido oposto; para isso, rodar o ponteiro dos minutos com força para a esquerda (solo con SUL 191 w)
❻ Interruptor de três posições: LIGADO permanentemente – AUTO – DESLIGADO permanentemente

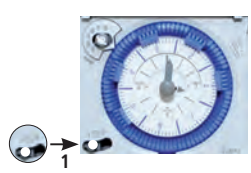
Ajustar comutação manual/ pré-selecção de conexão

antes das 3:00 LIGADO (= 1)



O temporizador executa as comutações programadas, ou seja, retrocede ao programa.

Ajustar conexão permanente 1 – ◴ – 0



O programa não é executado.
1 = Permanentemente LIGADO
0 = Permanentemente DESLIGADO

Ligação, dados técnicos ver reverso

NEDERLANDS

Fundamentele veiligheidsvoorschriften

⚠ WAARSCHUWING

Levensgevaar door elektrische schokken of brand!

Montage uitsluitend door een elektromonteur laten uitvoeren!

Bedoeld gebruik

- De schakelklok worth gebruikt voor verlichtingen, ventilatoren, fonteinen, reclame etc.
- Alleen in gesloten, droge ruimtes gebruiken
- Montage op DIN-hoedrail (volgens DIN EN 60715)

Afvoer

Voer het apparaat op milieuvriendelijke wijze af

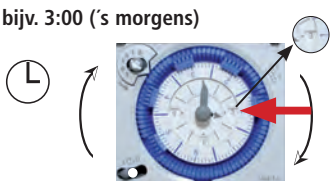
Weekdag instellen

weekdag (3 = woensdag)

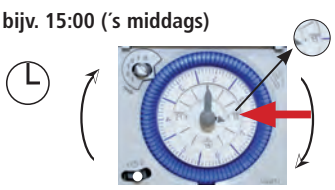
(alleen bij SUL 191 w)

Tijd instellen (alleen bij SUL 191 w)

bijv. 3:00 (´s morgens)



bijv. 15:00 (´s middags)

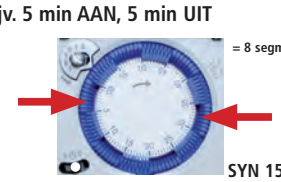


Schakeltijden instellen

bijv. maandag–vrijdag 10:00–20:00 AAN

SUL 191 w

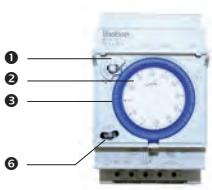
bijv. 5 min AAN, 5 min UIT



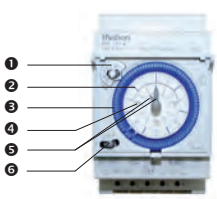
= 8 segmenten

SYN 151 h

Beschrijving



SYN 151 h

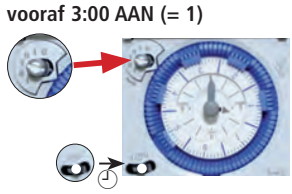


SUL 191 w

❶ Schakelvoorselektie/handmatige schakeling
❷ Schakelschijf voor Programmering
❸ Schakelsegmenten
SYN 151 h (1 = 37,5 s)
SUL 191 w (1 = 2 h)
❹ Weergave ochtend/middag (AM/PM) voor tijd
(alleen bij SUL 191 w)
❺ Wijzer voor tijd (uur en minuut) linksom en rechtsom draaibaar; daarvoor de minutenwijzer krachtig naar links draaien
(alleen bij SUL 191 w)
❻ Driestandenschakelaar: Continu AAN – AUTO – Continu UIT

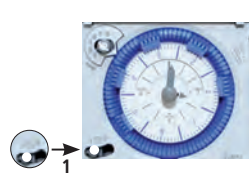
Handmatige schakeling/ schakelvoorselectie instellen

vooraf 3:00 AAN (= 1)



De schakelklok voert de geprogrammeerde schakelingen uit, d.w.z. zij keert terug naar het programma.

Permanente schakeling 1 – ◴ – 0 instellen



Programma wordt niet uitgevoerd.
1 = continu AAN
0 = continu UIT

Aansluiting, technische gegevens zie achterkant

ENGLISH

Connection/installation

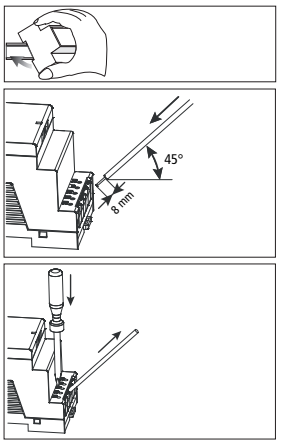
⚠ WARNING

Warning, danger of death through electric shock!

- Must be installed by qualified electrician!
- Disconnect power source!
- Cover or shield any adjacent live components.
- Ensure device cannot be switched on!
- Check power supply is connected!
- Earth and bypass!

for SUL 191 w only

- Quarz movement only starts in a few minutes after power is switched on.
- Full power reserve is achieved after approx. 5 days.



Technical Data

	SYN 151 h	SUL 191 w
Operating voltage:	230 V~, +10 %/-15 % 50 Hz	110–230 V~, 50–60 Hz
Power consumption:	max. 1 VA	max. 2,5 VA
Switching contact:	floating (not for SELV/PELV)	potenzialfrei (not for SELV/PELV)
Contact:	two-way switch	two-way switch
Gap:	<3 mm (µ)	<3 mm (µ)
Contact material:	Ag	Ag
Switching capacity:	10 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6	16 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6
Incandescent lamp load:	1100 W	1100 W
Fluorescent lamp load:	parallel-corrected 2 x 40 W (4,7µF)	parallel-corrected 2 x 40 W (4,7µF)
Perm. ambient temperature:	–20 °C ... +55 °C	–20 °C ... +55 °C
Protection class:	II in acc. with EN 60730-1 for designated installation	II in acc. with EN 60730-1 for designated installation
Protection rating:	IP 20 in accordance with EN 60529	IP 20 in acc. with EN 60529
Time accuracy:	synchronised with mains	≤ ±1 s/s day at +20 °C
Power reserve:	– –	R 200 h (230 V), R 100 h (110 V)
Pollution degree:	2	2
Type:	1 BRTU	1 BSTU

FRANÇAIS

Raccordement/Montage

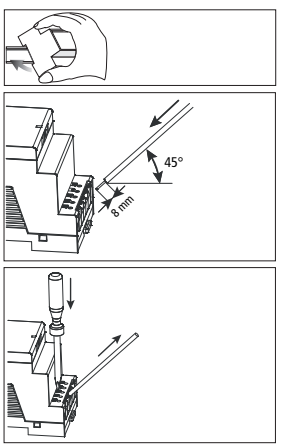
⚠ AVERTISSEMENT

Danger de mort, risque d´électrocution!

- Le montage doit être effectué exclusivement par un électricien spécialisé !
- Couper la tension !
- Recouvrir ou protéger les pièces sous tension à proximité.
- Protéger contre toute remise en marche !
- Vérifier l´absence de tension !
- Mettre à la terre et court-circuiter !

uniquement pour SUL 191 w

- Le mécanisme à quartz ne démarre que quelques minutes après l´application de la tension.
- La pleine réserve de marche est atteinte à après env. 5 jours.



Caractéristiques techniques

	SYN 151 h	SUL 191 w
Tension de service :	230 V~, +10 %/-15 % 50 Hz	110–230 V~, 50–60 Hz
Consommation propre :	max. 1 VA	max. 2,5 VA
Contact de commutation :	libre de potentiel (pas pour SELV/PELV)	libre de potentiel (pas pour SELV/PELV)
Contact :	inverseur	inverseur
Ouverture :	<3 mm (µ)	<3 mm (µ)
Matériau de contact :	Ag	Ag
Puissance de commutation :	10 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6	16 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6
Charge de lampe à incandescence :	1100 W	1100 W
Charge du tube fluorescent :	compensées en parallèle 2 x 40 W (4,7µF)	compensées en parallèle 2 x 40 W (4,7µF)
Témperature amb. autorisée :	–20 °C ... +55 °C	–20 °C ... +55 °C
Classe de protection :	II selon la norme EN 60730-1 en cas de montage conforme	II selon EN 60730-1 en cas de montage conforme
Degré de protection :	IP 20 selon EN 60529	IP 20 selon EN 60529
Précision de marche :	synchro. avec le réseau	≤ ±1 s/jour à +20 °C
Réserve de marche :	– –	R 200 h (230 V), R 100 h (110 V)
Degré de pollution :	2	2
Type :	1 BRTU	1 BSTU

ITALIANO

Collegamento/Montaggio

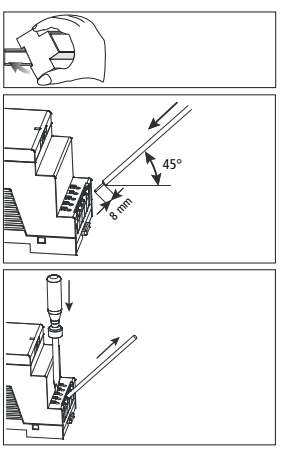
⚠ AVVERTENZA

Pericolo di morte per scosse elettriche!

- Il montaggio deve essere eseguito esclusivamente da un elettroinstallatore specializzato!
- Disattivare la tensione!
- Coprire o incapsulare i componenti limitrofi che si trovano sotto tensione.
- Proteggere contro eventuali reinserzioni!
- Verificare l´assenza di tensione!
- Eseguire la messa a terra e cortocircuitare!

solo per SUL 191 w

- Il meccanismo al quarzo si avvia solo dopo alcuni minuti in presenza di tensione.
- La piena riserva di carica si raggiunge dopo 5 giorni.



Dati tecnici

	SYN 151 h	SUL 191 w
Tensione d´esercizio:	230 V~, +10 %/-15 % 50 Hz	110–230 V~, 50–60 Hz
Autoconsumo:	max. 1 VA	max. 2,5 VA
Contatto di comm.:	a potenziale zero (non per SELV/PELV)	a potenziale zero (non per SELV/PELV)
Contatto:	contatto di commutazione	contatto di commutazione
Ampiezza di apertura:	<3 mm (µ)	<3 mm (µ)
Materiale contatto:	Ag	Ag
Potenza di commutazione:	10 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6	16 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6
Carico lampade a incandescenza:	1100 W	1100 W
Carico lampade fluorescenti:	compensate in parallelo 2 x 40 W (4,7µF)	compensate in parallelo 2 x 40 W (4,7µF)
Temperatura amb. ammessa:	–20 °C ... +55 °C	–20 °C ... +55 °C
Classe di protezione:	II secondo EN 60730-1 con montaggio conforme	II nach EN 60730-1 con montaggio conforme
Tipo do protezione:	IP 20 secondo EN 60529	IP 20 secondo EN 60529
Precisione di riserva:	sincronia di rete	≤ ±1 sec/giorno con +20 °C
Riserva di carica:	– –	R 200 h (230 V), R 100 h (110 V)
Gradi di inquinamento:	2	2
Tipo:	1 BRTU	1 BSTU

ESPAÑOL

Conexión/Montaje

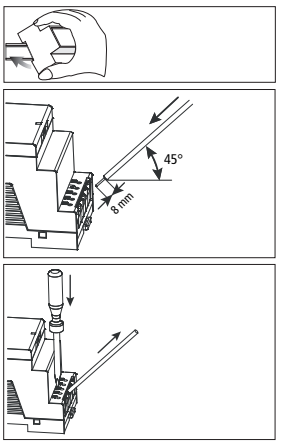
⚠ ADVERTENCIA

¡Peligro de muerte por descarga eléctrica!

- El montaje debe ser llevado a cabo exclusivamente por un electricista profesional!
- ¡Desconectar la tensión!
- Cubrir o delimitar piezas adyacentes que se encuentren bajo tensión.
- ¡Asegurar contra una reconexión!
- ¡Comprobar que no haya tensión!
- ¡Conectar a tierra y cortocircuitar!

solo con SUL 191 w

- El trabajo de cuarzo no empieza con la tensión creada hasta pasados algunos minutos.
- Se alcanza la reserva plena de marcha en approx. 5 días.



Datos técnicos

	SYN 151 h	SUL 191 w
Tensión de régimen:	230 V~, +10 %/-15 % 50 Hz	110–230 V~, 50–60 Hz
Consumo propio:	máx. 1 VA	máx. 2,5 VA
Contacto de conm.:	de potencial libre (no para SELV/PELV)	de potencial libre (no para SELV/PELV)
Contacto:	contacto inversor	contacto inversor
Amplitud de la apertura:	<3 mm (µ)	<3 mm (µ)
Material de contacto:	Ag	Ag
Potencia de conexión:	10 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6	16 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6
Carga de lámpara de incandescencia:	1100 W	1100 W
Carga de lámpara fluorescente:	compensadas en paralelo 2 x 40 W (4,7µF)	compensadas en paralelo 2 x 40 W (4,7µF)
Temperatura amb. permitida:	–20 °C ... +55 °C	–20 °C ... +55 °C
Clase de protección:	II según EN 60730-1 para montaje conforme a lo establecido	II nach EN 60730-1 para montaje conforme a lo establecido
Grado de protección:	IP 20 según EN 60529	IP 20 según EN 60529
Exactitud de marcha:	sincrónico de red	≤ ±1 s/día con +20 °C
Reserva de marcha:	– –	R 200 h (230 V), R 100 h (110 V)
Nivel de contaminación:	2	2
Tipo:	1 BRTU	1 BSTU

PORTUGUÊS

Ligação/montagem

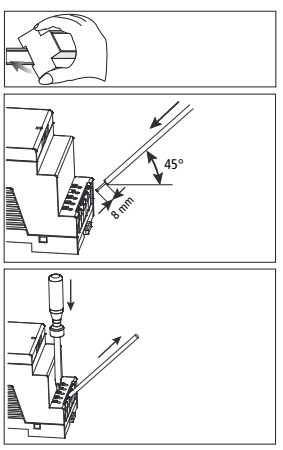
⚠ ATENÇÃO

Perigo de morte por choque eléctrico!

- A montagem deve ser efectuada exclusivamente por um electricista!
- Desligar a tensão!
- Cobrir ou isolar peças adjacentes sob tensão.
- Proteger contra reactivação!
- Verificar quanto à ausência de tensão!
- Ligar à terra e curto-circuitar!

apenas com SUL 191 w

- O mecanismo de quartzo só é iniciado com a tensão ligado após alguns minutos.
- A reserva total de energia é atingida aprox. 5 dias.



Dados técnicos

	SYN 151 h	SUL 191 w
Tensão de serviço:	230 V~, +10 %/-15 % 50 Hz	110–230 V~, 50–60 Hz
Consumo próprio:	máx. 1 VA	máx. 2,5 VA
Contacto de comutação:	sem potencial (não se aplica à SELV/PELV)	sem potencial (não se aplica à SELV/PELV)
Contacto:	inversor	inversor
Amplitude de abertura:	<3 mm (µ)	<3 mm (µ)
Material do contacto:	Ag	Ag
Capacidade de comut.:	10 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6	16 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6
Carga das lâmpadas incandescentes:	1100 W	1100 W
Carga das lâmpadas fluorescentes:	compensadas em paralelo 2 x 40 W (4,7µF)	compensadas em paralelo 2 x 40 W (4,7µF)
Temperatura amb. permitida:	–20 °C ... +55 °C	–20 °C ... +55 °C
Classe de protecção:	II conforme EN 60730-1 em caso de montagem correcta	II conforme EN 60730-1 em caso de montagem correcta
Tipo de protecção:	IP 20 conforme EN 60529	IP 20 conforme EN 60529
Precisão:	sincronização em rede	≤ ±1 s/dia a +20 °C
Reserva de energia:	– –	R 200 h (230 V), R 100 h (110 V)
Grau de sujidade:	2	2
Tipo:	1 BRTU	1 BSTU

NEDERLANDS

Aansluiting/montage

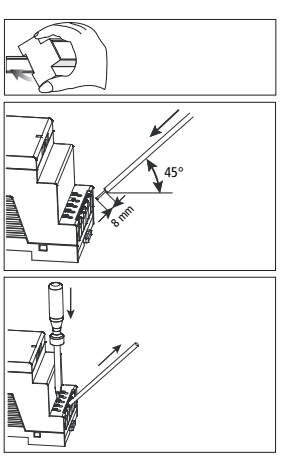
⚠ WAARSCHUWING

Levensgevaar door elektrische schokken!

- Montage uitsluitend door een elektromonteur laten uitvoeren!
- Spanning vrijschakelen!
- Nabijgelegen, onder spanning staande delen afdekken of afschermen.
- Tegen opnieuw inschakelen beveiligen!
- Controleren of het apparaat spanningloos is!
- Aarden en kortsluiten!

alleen bij SUL 191 w

- Kwartswerk start bij aangesloten spanning pas na enkele minuten.
- De volledige gangreserve wordt na ongeveer in 5 dagen bereikt.



Technische gegevens

	SYN 151 h	SUL 191 w
Werkspanning:	230 V~, +10 %/-15 % 50 Hz	110–230 V~, 50–60 Hz
Eigen verbruik:	max. 1 VA	max. 2,5 VA
Schakelcontact:	potentiaalvrij (niet voor SELV/PELV)	potentiaalvrij (niet voor SELV/PELV)
Contact:	wisselcontact	wisselcontact
Openingswijdte:	<3 mm (µ)	<3 mm (µ)
Contactmateriaal:	Ag	Ag
Schakelvermogen:	10 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6	16 A, 250 V~, cos φ = 1 4 A, 250 V~, cos φ = 0,6
Gloeilampbelasting:	1100 W	1100 W
tl-lampbelasting:	parallel gecompenseerd 2 x 40 W (4,7µF)	parallel gecompenseerd 2 x 40 W (4,7µF)
Toegestane omgevingstemperatuur:	–20 °C ... +55 °C	–20 °C ... +55 °C
Beschermingsklasse:	II volgens EN 60730-1 bij voorgeschrevens montage	II volgens EN 60730-1 bij voorgeschrevens montage
Beschermingsgraad:	IP 20 volgens EN 60529	IP 20 volgens EN 60529
Nauwkeurigheid:	netsynchroon	≤ ±1 s/dag bij +20 °C
Gangreserve:	– –	R 200 h (230 V), R 100 h (110 V)
Vervuilingsgraad:	2	2
Type:	1 BRTU	1 BSTU