

# GRÄSSLIN



Trade Program  
2007 / 2008



DIN-rail time switches	3 - 45
<ul style="list-style-type: none"> <li>DIN-rail time switches</li> <li>Staircase lighting time switches</li> <li>Photo electric switches</li> </ul>	
EIB - Programm	46 - 53
<ul style="list-style-type: none"> <li>EIB bus final products with integrated bus coupler</li> <li>EIB system appliances</li> <li>EIB auxiliary clocks</li> </ul>	
Universal time switches / Time switch moduls	54 - 67
<ul style="list-style-type: none"> <li>Universal time switches for surface-, flush- and DIN-rail mounting</li> <li>Industrial time switch modules</li> </ul>	
Room thermostats	68 - 79
<ul style="list-style-type: none"> <li>Room thermostat clocks</li> <li>Thermostats</li> </ul>	
Plug-in & Tariff time switches, Hour meters	80 - 93
Index	94 - 112
<ul style="list-style-type: none"> <li>Backup devices, Outlet types</li> <li>Alphabetical directory / Overview follow-up types</li> <li>Ordering number directory</li> <li>Pictogram explanation</li> </ul>	

DIN-rail time switches

EIB-Range

Universal time switches  
Time switch modules

Room thermostats

Plug-in & tariff time  
switches, Hour meters

Index



## DIN-rail time switches

Overview:	digital DIN-rail time switches <b>talento plus</b>	4 - 5
	digital DIN-rail time switches <b>talento</b>	22 - 23
	analog DIN-rail time switches <b>talento</b>	30 - 31
	digital DIN-rail time switches <b>talento plus</b>	6 - 17
	digital DIN-rail time switches <b>talento</b>	24 - 27
	analog DIN-rail time switches <b>talento</b>	32 - 35
Accessories:	digital DIN-rail time switches <b>talento plus</b>	18 - 21
	digital DIN-rail time switches <b>talento</b>	28 - 29

## Staircase lighting time switches

Overview:	<b>trealux</b>	36
Ordering data, technical data:	<b>trealux</b>	38 - 39







## Photo electric switches

Overview:	<b>turnus</b>	37
Ordering data, technical data:	<b>turnus</b>	40 - 43

## Assembly accessories

for <b>talento (plus), trealux, turnus</b>	44 - 45
--	---------

Overview digital DIN-rail time switches

						
	talento 371 mini plus	talento 371 plus	talento 372 plus	talento 471 plus	talento 472 plus	talento 671 plus
<b>Channels</b>	1	1	2	1	2	1
<b>Connection voltage</b> (Ord.-No.)						
language set 1 (D, GB, F, I, E, P, CZ, NL):						
230 V/50-60 Hz	03.72.0001.1	03.73.0001.1	03.73.0002.1	03.75.0001.1	03.75.0002.1	03.75.0003.1
100-120 V/50-60 Hz		03.73.0005.1	03.73.0008.1	03.75.0005.1	03.75.0006.1	03.75.0004.1
24 V AC/DC		03.73.0004.1	03.73.0007.1			
12 V AC/DC			03.73.0003.1			
language set 2 (GB, S, N, DK, FIN, L, HI):						
230 V/50-60 Hz	03.72.0003.1	03.73.0011.1	03.73.0012.1	03.75.0007.1	03.75.0008.1	03.75.0009.1
<b>Switching programs</b>	Daily, weekly program	Daily, weekly program		Daily, weekly program		Daily, weekly program
<b>Memory spaces</b>	50	50		50		50
<b>Pulse function</b>				X		X
<b>Cycle function</b>				X		X
<b>Date-dependent switching program</b>	X			X		X
<b>Random switching</b>				X		X
<b>External input</b>				X		X
<b>Count-down timer</b>				X		X
<b>Remote switch function</b>				X		X
<b>Manual switching (fix)</b>	X	X		X		X
<b>IR interface for PC-programming</b>				X		X
<b>IR interface for time synchronisation</b>				X		X
<b>Antenna input</b>						DCF 77 GPS
<b>Autom. summer time / winter time changeover</b>	X	X		X		X
<b>Runnig reserve</b>	3 years	3 years		3 years		3 years
<b>Further technical information</b>	page 10	page 10		page 12		page 12



**Easy to digest: Digital menus from Grässlin**

DIN-rail time switches



**Operation ...**

“Operation” is the pivotal point of our new generation of digital time switches made by Grässlin.

Like a mobile phone, programming is self-explanatory:

- 3 text lines for the menus  
= clear display of the selection options
- Flexible button assignment  
= clear choice of input commands
- Simple manual switch function  
= directly accessible without button combinations



**... with a system: IR conductor and GPS**

Matched to a wide range of needs, the talento plus product line presents itself on three levels:

**talento plus STANDARD – MEDIUM – TOP**

The medium class communicates without complicated bus technology via a highly interference-resistant IR optical waveguide. As a result, IR-linked units always run synchronised and all switching commands are carried out simultaneously at precisely the set time.

The talento plus system receives the correct time signal anywhere in the world via GPS and passes it on to all time switches within the system.

An extra feature that, by the way, can also easily be retro-fitted in older systems: One DCF 77 input is sufficient!



**Or why not LAN from the start?**

Via the talento LAN plus module in combination with a talento 8xx/9xx plus, programs can be entered, read and changed remotely.

It's extremely easy to display the status or carry out manual remote switching.

## A la carte ... or our specialties

### ... the annual time switch

Our top-class annual time switch is directed at special requirements and applications: **talento 8xx/9xx plus**.

A modular system design enables an expansion to a maximum of eight channels for the first time. Up to eight different programs can be stored, which control the neighbouring talento CE plus channel expansions via an IR optical waveguide.

This is made possible for a distance of up to 50 m with the talento VM plus amplifier module. A simple two-wire connection is all that's required.

All programs are stored centrally in the annual clock. The channel extensions only indicated the switching state and can be switched „On“ and „Off“ manually on site.

Of course, you will also find all functions of the medium-class talento plus in the annual clock. 800 memory spaces and PC-supported programming cover every need in date-related programming.



### astro: Lighting specialties

The talento 791 plus and 792 plus DCF products are especially well-suited for lighting applications.

Only the longitude and the latitude need to be entered for precise automatic determination of the times for sunrise and sunset.

With an offset time entry the respective switching times can be moved forward or back.

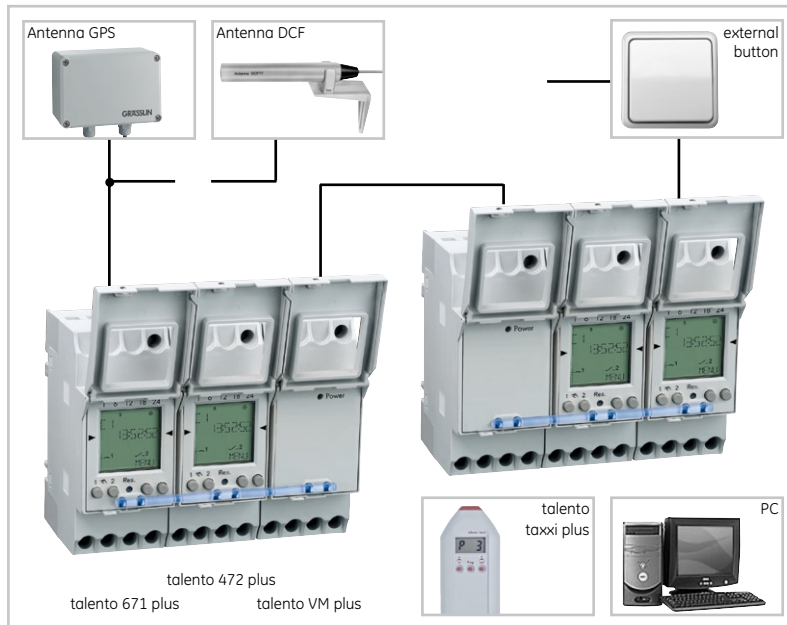
### Our taxi remains

With the taxi program transfer device, it's extremely easy to manually transfer programs written on a PC to the talento plus line.

New switching programs are simply entered in an Excel table with the talento dialog plus software. Update versions of new operating software versions become a thing of the past.

The practical feature: One menu for everything

DIN-rail time switches

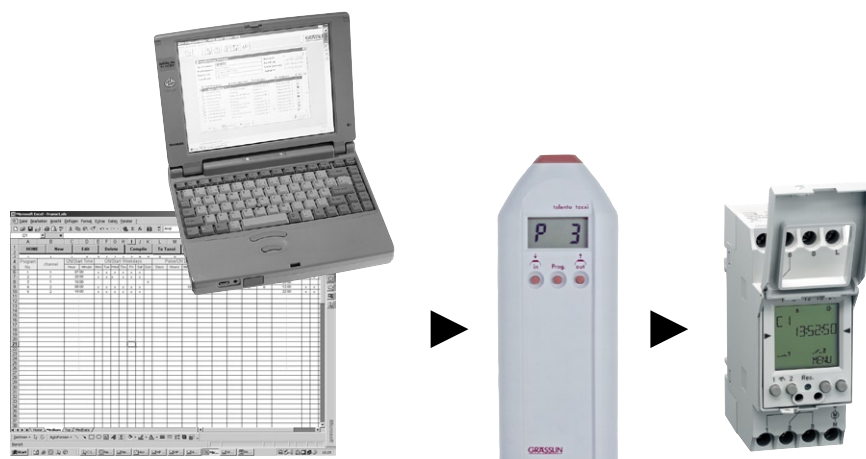
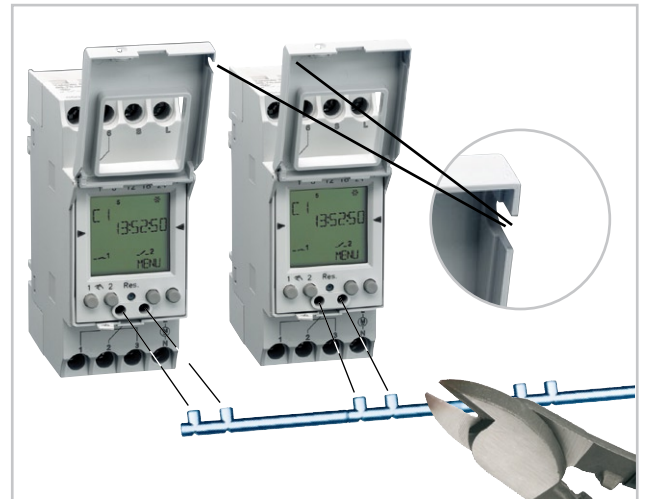


talento plus MEDIUM

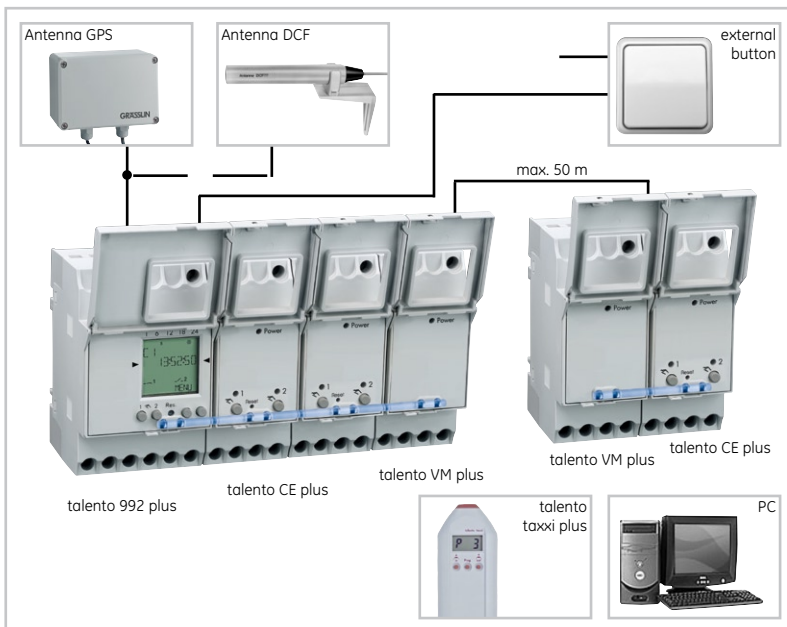
- Simple operation with menu technology
- Illuminated display
- Pulse and cycle function
- Date range
- Random switching
- External input for ON/OFF or Countdown
- DCF or GPS time synchronisation
- IR interface for IR optical waveguide
- Amplifier module for 50 m cable connection for time synchronisation signal
- PC-supported program creation
- Program transfer with talento taxi plus

Installing IR optical waveguide

- Open break-out section on side surfaces of cover
- Shorten IR optical waveguide to desired length
- Fit on IR interface on time switch



## The special feature: Menu guidance á la Grässlin

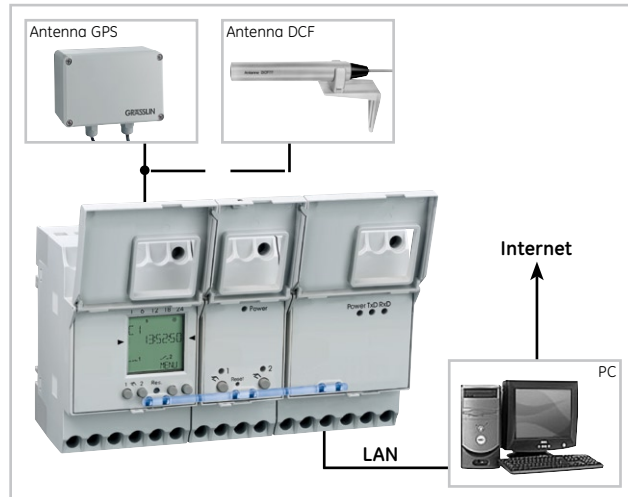


### talento plus TOP (available mid 2008)

- Date-dependent switching programs
- Illuminated display
- Can be expanded to 8 channels
- Channel expansion can also be positioned in different distributors
- Multi-year holiday programming
- Switching program transfer from PC via LAN
- Remote display of switching status on PC
- Large memory capacity (800 memory spaces)
- Plus all properties of Medium class

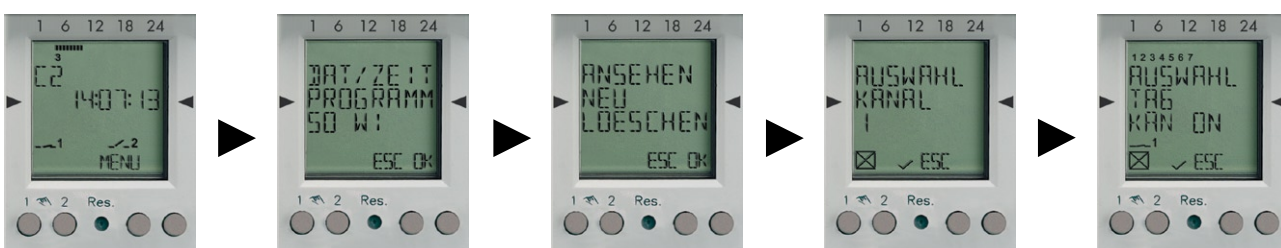
### The extras

- LAN module for connection to LAN network
- GPS antenna for worldwide time synchronisation
- talento taxi plus for simple program transfer from PC to time switch



### The menu technology

- 15 languages available in 2 variants
- Clear layout with 3-line menu text
- Flexibly assigned operating buttons (softkeys)
- Operation as easy as telephoning



## Digital DIN-rail time switches

DIN-rail time switches

- Daily and weekly program
- 50 Memory spaces
- Automatic summer time /winter time changeover
- 3 years running reserve
- Manual switch: FIX ON / FIX OFF
- Free weekday block formation
- Non-volatile memory (EEPROM)



	Voltage	EAN-Code	Ord.-No.
		4010940	
7 x 24 h	+ 3a Lithium removable		MEMORY 50
DATE			± 1 h AUTO
			language set 1 D, GB, F, I, E, P, CZ, NL
			language set 2 GB, S, N, DK, FIN, L, H

### talento 371 mini plus

	Voltage	EAN-Code	Ord.-No.	language
	230 V/50-60 Hz	034078	03.72.0001.1	set 1
	230 V/50-60 Hz	036218	03.72.0003.1	set 2



7 x 24 h	+ 3a Lithium		MEMORY 50	± 1 h AUTO	language set 1 D, GB, F, I, E, P, CZ, NL
					language set 2 GB, S, N, DK, FIN, L, H

### talento 371 plus

	Voltage	EAN-Code	Ord.-No.	language
	230 V/50-60 Hz	033910	03.73.0001.1	set 1
	110-120 V/50-60 Hz	033972	03.73.0005.1	set 1
	24 V AC/DC	033989	03.73.0004.1	set 1
	230 V/50-60 Hz	036164	03.73.0011.1	set 2

### talento 372 plus

	Voltage	EAN-Code	Ord.-No.	language
	230 V/50-60 Hz	033927	03.73.0002.1	set 1
	110-120 V/50-60 Hz	034016	03.73.0008.1	set 1
	24 V AC/DC	034023	03.73.0007.1	set 1
	12 V AC/DC	033996	03.73.0003.1	set 1
	230 V/50-60 Hz	036171	03.73.0012.1	set 2

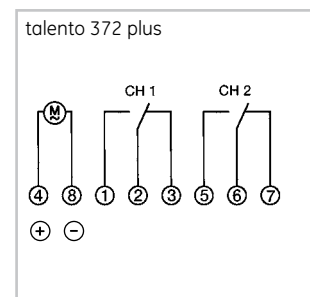
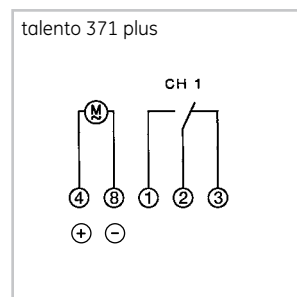
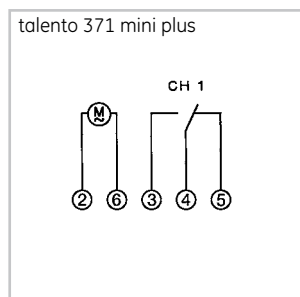
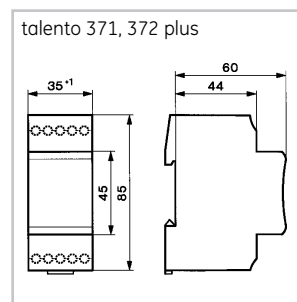
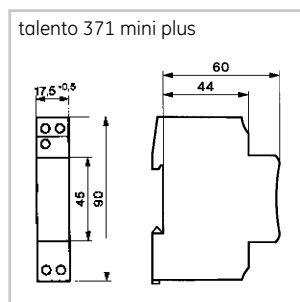
Assembly accessories see page 44

## Technical Data

	talento 371 mini plus	talento 371 plus	talento 372 plus
Dimensions H x W x D (mm)	45 x 17,5 x 60	45 x 35 x 60	45 x 35 x 60
Distributor cut-out (mm)	46 x 18	46 x 36	46 x 36
Weight (g) approx.	100	170	170
Connection voltage	230 V/50-60 Hz	230 V/50-60 Hz 110-120 V/50-60 Hz 24 V AC/DC	230 V/50-60 Hz 110-120 V/50-60 Hz 24 V AC/DC 12 V AC/DC
Power consumption at 230 V~ (AC)	5 VA	5 VA	5 VA
AC switching capacity			
- ohmic load (VDE, IEC)	16 A/250 V AC	16 A/250 V AC	16 A/250 V AC
- inductive load cos. φ 0.6	8 A/250 V AC	8 A/250 V AC	8 A/250 V AC
- Incandescent lamp load	1000 W	1000 W	1000 W
DC switching capacity			
24 VDC/50 VDC/220 VDC	800 mA/300 mA/150 mA	800 mA/300 mA/150 mA	800 mA/300 mA/150 mA
Switching output	potential-free	potential-free	potential-free
Switch contacts	1 changeover contact	1 changeover contact	2 changeover contact
Ambient temperature	-25°C *) ... +55°C	-25°C *) ... +55°C	-25°C *) ... +55°C
Protection class	II	II	II
Accuracy	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C
Power reserve	3 years from factory at +20°C	3 years from factory at +20°C	3 years from factory at +20°C
Shortest switching time	1 min	1 min	1 min
Programmable every	min	min	min
Memory spaces	50	50	50
Manual switch	automatic/preselection Fix ON/Fix OFF	automatic/preselection Fix ON/Fix OFF	automatic/preselection Fix ON/Fix OFF
Block formation of weekdays	free assignment	free assignment	free assignment
Holiday program/date range	yes	-	-
Random generator	-	-	-
Switching state display	yes	yes	yes
Pulse switching commands	-	-	-
Cycle switching commands	-	-	-
Summer/winter time changeover	automatic / freely selectable / off	automatic / freely selectable / off	automatic / freely selectable / off
External output	-	-	-
- Override	-	-	-
- Countdown	-	-	-
DCF 77 input	-	-	-
Max. Terminal capacity	2,5 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Connection type	captive ± screw terminals	captive ± screw terminals	captive ± screw terminals
Sealable	yes	yes	yes

\*) at limited display function

Dimensional drawings /  
circuit diagrams:



Digital DIN-rail time switches

DIN-rail time switches

- Daily and weekly program
- 50 Memory spaces
- Synchronisation time/date through optical wave guides
- Automatic summer time /winter time changeover
- 3 years running reserve
- Manual switch: FIX ON / FIX OFF
- Free weekday block formation
- Non-volatile memory (EEPROM)
- Pulse and cycle function
- Random switching
- External input
- PC-supported program creation
- Date-dependent switching programs



Voltage		EAN-Code	Ord.-No.
		4010940	
7 x 24 h	3a Lithium	FIX ON/OFF	MEMORY 50
External input for Countdown or Override	DATE	sec./min./days	± 1h AUTO
IR			RND ?
			language set 1 D, GB, F, I, E, P, CZ, NL
			language set 2 GB, S, N, DK, FIN, L, H

talento 471 plus

language

<input type="checkbox"/> 1x16 (8) A <input type="checkbox"/> 250V~	230 V/50-60 Hz	033941	03.75.0001.1	set 1
	110-120 V/50-60 Hz	034054	03.75.0005.1	set 1
	230 V/50-60 Hz	036188	03.75.0007.1	set 2

talento 472 plus

language

<input type="checkbox"/> 1x16 (8) A <input type="checkbox"/> 250V~	230 V/50-60 Hz	033958	03.75.0002.1	set 1
	110-120 V/50-60 Hz	034061	03.75.0006.1	set 1
	230 V/50-60 Hz	036195	03.75.0008.1	set 2



7 x 24 h	3a Lithium	FIX ON/OFF	← IR	RND ?	language set 1 D, GB, F, I, E, P, CZ, NL
MEMORY 50	DATE	sec./min./days	Master		language set 2 GB, S, N, DK, FIN, L, H
± 1h AUTO	External input for Countdown or Override	DCF 77 GPS	IR		

- IR interface included

talento 671 plus DCF

language

<input type="checkbox"/> 1x16 (8) A <input type="checkbox"/> 250V~	230 V/50-60 Hz	033965	03.75.0003.1	set 1
	110-120 V/50-60 Hz	034047	03.75.0004.1	set 1
	230 V/50-60 Hz	036201	03.75.0009.1	set 2

Amplifier module talento VM plus  
 Optical waveguide  
 Radio antenna DCF77 and GPS  
 Software talento dialog plus } see page 18 - 21

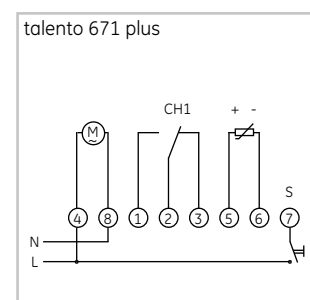
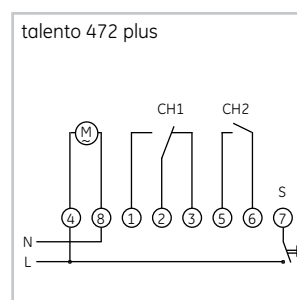
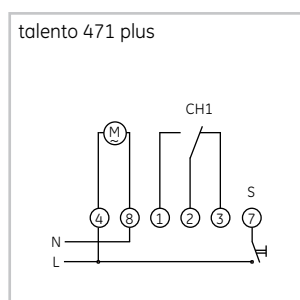
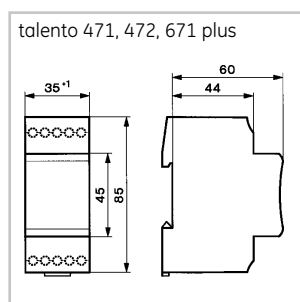
Assembly accessories see page 44

## Technical Data

	talento 471 plus	talento 472 plus	talento 671 plus
Dimensions H x W x D (mm)	45 x 35 x 60	45 x 35 x 60	45 x 35 x 60
Distributor cut-out (mm)	46 x 36	46 x 36	46 x 36
Weight (g) approx.	170	170	220
Connection voltage	230 V/50-60 Hz 110-120 V/50-60 Hz	230 V/50-60 Hz 110-120 V/50-60 Hz 5 VA	230 V/50-60 Hz 110-120 V/50-60 Hz 5 VA
Power consumption at 230 V~ (AC)	5 VA	5 VA	5 VA
AC switching capacity			
- ohmic load (VDE, IEC)	16 A/250 V AC	16 A/250 V AC	16 A/250 V AC
- inductive load cos. φ 0.6	8 A/250 V AC	8 A/250 V AC	8 A/250 V AC
- Incandescent lamp load	1000 W	1000 W	1000 W
DC switching capacity	800 mA/300 mA/150 mA	800 mA/300 mA/150 mA	800 mA/300 mA/150 mA
24 VDC/50 VDC/220 VDC			
Switching output	potential-free	potential-free	potential-free
Switch contacts	1 changeover contact	1 changeover contact + 1 NO	1 changeover contact
Ambient temperature	-25°C *) ... +55°C	-25°C *) ... +55°C	-25°C *) ... +55°C
Protection class	II	II	II
Accuracy	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C
Power reserve	3 years from factory at +20°C	3 years from factory at +20°C	3 years from factory at +20°C
Shortest switching time	1 min	1 min	1 sec
Programmable every	min	min	min
Memory spaces	50	50	50
Manual switch	automatic Fix ON/Fix OFF	automatic Fix ON/Fix OFF	automatic Fix ON/Fix OFF
Block formation of weekdays	free assignment	free assignment	free assignment
Holiday program/date range	yes	yes	yes
Random generator	up to 30 min	up to 30 min	up to 30 min
Switching state display	yes	yes	yes
Pulse switching commands	yes: sec, min, h, days	yes: sec, min, h, days	yes: sec, min, h, days
Cycle switching commands	yes: sec, min, h, days	yes: sec, min, h, days	yes: sec, min, h, days
Summer/winter time changeover	automatic / freely selectable / off	automatic / freely selectable / off	automatic / freely selectable / off
External output	yes	yes	yes
- Override	yes	yes	yes
- Countdown	20 min / in steps of 30 sec	20 min / in steps of 30 sec	20 min / in steps of 30 sec
DCF 77 input	-	-	yes
Max. Terminal capacity	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Connection type	captive ± screw terminals	captive ± screw terminals	captive ± screw terminals
Sealable	yes	yes	yes

\*) at limited display function

Dimensional drawings /  
circuit diagrams:



Digital DIN-rail time switches

DIN-rail time switches

- ASTRO function (talento 792 plus also with weekly program)
- Automatic summer time /winter time changeover
- 3 years running reserve
- Manual switch: FIX ON / FIX OFF
- Free weekday block formation
- Non-volatile memory (EEPROM)



Voltage	EAN-Code	Ord.-No.
	4010940	

+ 3a Lithium	FIX ON/OFF	$\pm 1$ h AUTO	$\pm 90$ min	language set 1 D, GB, F, I, E, P, CZ, NL
				language set 2 GB, S, N, DK, FIN, L, H

talento 791 plus

language

	ASTRO	230 V/50-60 Hz	034818	03.74.0001.1	set 1
		230 V/50-60 Hz	036430	03.74.0007.1	set 2

talento 792 plus

language

	ASTRO	230 V/50-60 Hz	034825	03.74.0002.1	set 1
		230 V/50-60 Hz	036447	03.74.0008.1	set 2
	7 x 24 h	MEMORY 50			



+ 3a Lithium	FIX ON/OFF	$\pm 1$ h AUTO	$\pm 90$ min	DCF 77 GPS	language set 1 D, GB, F, I, E, P, CZ, NL
--------------	------------	-------------------	--------------	---------------	---

language set 2  
GB, S, N, DK, FIN, L, H

talento 791 plus DCF

language

	ASTRO	230 V/50-60 Hz	034832	03.74.0003.1	set 1
--	-------	----------------	--------	--------------	-------

Radio antenna DCF77 and GPS see page 20

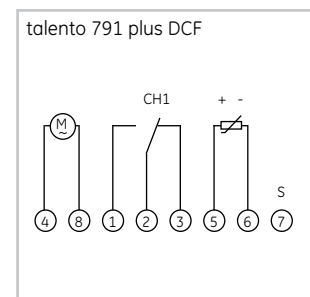
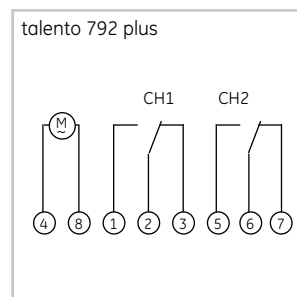
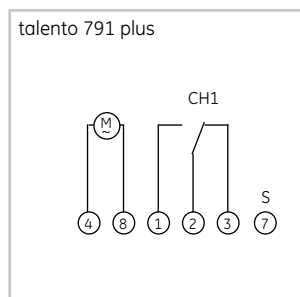
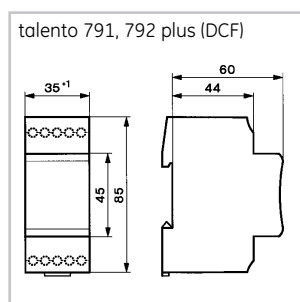
Assembly accessories see page 44

### Technical Data

	talento 791 plus	talento 792 plus	talento 791 plus DCF
Dimensions H x W x D (mm)	45 x 35 x 60	45 x 35 x 60	45 x 35 x 60
Distributor cut-out (mm)	46 x 36	46 x 36	46 x 36
Weight (g) approx.	170	170	170
Connection voltage	230 V/50-60 Hz	230 V/50-60 Hz	230 V/50-60 Hz
Power consumption at 230 V~ (AC)	5 VA	5 VA	5 VA
AC switching capacity			
- ohmic load (VDE, IEC)	16 A / 250 V AC	16 A / 250 V AC	16 A / 250 V AC
- inductive load cos. φ 0.6	8 A / 250 V AC	8 A / 250 V AC	8 A / 250 V AC
- Incandescent lamp load	1000 W	1000 W	1000 W
DC switching capacity	800 mA / 300 mA / 150 mA	800 mA / 300 mA / 150 mA	800 mA / 300 mA / 150 mA
24 VDC/50 VDC/220 VDC			
Switching output	potential-free	potential-free	potential-free
Switch contacts	1 changeover contact	2 changeover contacts	1 changeover contact
Ambient temperature	-25°C *) ... +55°C	-25°C *) ... +55°C	-25°C *) ... +55°C
Protection class	II	II	II
Accuracy	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C
Power reserve	3 years from factory at +20°C	3 years from factory at +20°C	3 years from factory at +20°C
Shortest switching time	-	1 min	-
Programmable every	-	min	-
Memory spaces	-	50 (for channel 2)	-
Astro program	yes	yes	yes
Astro offset	± 90 min	± 90 min	± 90 min
Manual switch	automatic	automatic	automatic
	Fix ON/Fix OFF	Fix ON/Fix OFF	Fix ON/Fix OFF
Block formation of weekdays	-	-	-
Holiday program/date range	-	-	-
Random generator	-	-	-
Switching state display	yes	yes	yes
Pulse switching commands	-	-	-
Cycle switching commands	-	-	-
Summer/winter time changeover	automatic / freely selectable / off	automatic / freely selectable / off	automatic / freely selectable / off
External output	-	-	-
- Override	-	-	-
- Countdown	-	-	-
DCF 77 input	-	-	yes
Max. Terminal capacity	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Connection type	captive ± screw terminals	captive ± screw terminals	captive ± screw terminals
Sealable	yes	yes	yes

\*) at limited display function

Dimensional drawings /  
circuit diagrams:



Digital DIN-rail time switches

DIN-rail time switches

- Daily, weekly and annual program
- 800 Memory spaces
- Automatic summer time /winter time changeover
- 3 years running reserve
- Manual switch: FIX ON / FIX OFF
- Free weekday block formation
- Non-volatile memory (EEPROM)
- Pulse and cycle function
- Random switching
- External input
- PC-supported program creation
- Date-dependent switching programs
- Can be expanded to 8 channels with talento CE plus (8 channel time switch)



Voltage		EAN-Code	Ord.-No.
		4010940	
365 x 24 h	3a Lithium	FIX ON/OFF	External input for Countdown or Override
sec./min./days	MEMORY 800	± 1 h AUTO	RND ?
			language set 1 D, GB, F, I, E, P, CZ, NL
			language set 2 GB, S, N, DK, FIN, L, H

talento 891 plus

 1x16 (8) A 250V~	230 V/50-60 Hz	available mid 2008
	110-120 V/50-60 Hz	available mid 2008
	24 V AC/DC	available mid 2008

talento 892 plus

 2x16 (8) A 250V~	230 V/50-60 Hz	available mid 2008
	110-120 V/50-60 Hz	available mid 2008
	24 V AC/DC	available mid 2008



365 x 24 h	3a Lithium	FIX ON/OFF	External input for Countdown or Override	RND ?	language set 1 D, GB, F, I, E, P, CZ, NL
sec./min./days	MEMORY 800	± 1 h AUTO	IR		language set 2 GB, S, N, DK, FIN, L, H
	DCF 77 GPS				

talento 991 plus DCF

 1x16 (8) A 250V~	230 V/50-60 Hz	available mid 2008

talento 992 plus DCF

 2x16 (8) A 250V~	230 V/50-60 Hz	available mid 2008

Amplifier module talento VM plus  
 Channel expansion talento CE plus  
 LAN module talento LAN plus  
 Optical waveguide  
 Radio antenna DCF77 and GPS  
 Software talento dialog plus

} see page 18 - 21

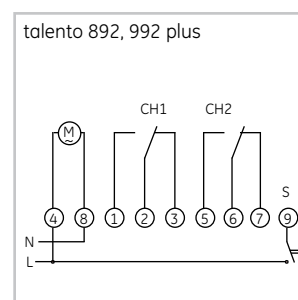
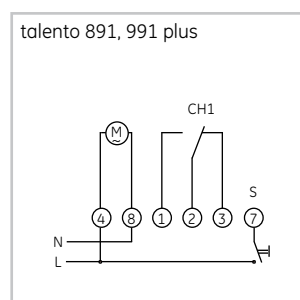
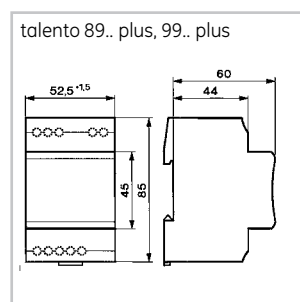
Assembly accessories see page 44

## Technical Data

	<b>talento 891 plus talento 892 plus</b>	<b>talento 991 plus DCF talento 992 plus DCF</b>
Dimensions H x W x D (mm)	45 x 52,5 x 60	45 x 52,5 x 60
Distributor cut-out (mm)	46 x 54	46 x 54
Weight (g) approx.	220	220
Connection voltage	230 V/50-60 Hz 110-120 V/50-60 Hz 24 V AC/DC	230 V/50-60 Hz
Power consumption at 230 V~ (AC)	5 VA	5 VA
AC switching capacity		
- ohmic load (VDE, IEC)	16 A / 250 V AC	16 A / 250 V AC
- inductive load cos. φ 0.6	2,5 A / 250 V AC	2,5 A / 250 V AC
- Incandescent lamp load	1000 W	1000 W
DC switching capacity	800 mA / 300 mA / 150 mA	800 mA / 300 mA / 150 mA
24 VDC/50 VDC/220 VDC		
Switching output	potential-free	potential-free
Switch contacts	1 (2) changeover contact	1 (2) changeover contact
Ambient temperature	-25°C *) ... +55°C	-25°C *) ... +55°C
Protection class	II	II
Accuracy	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C
Power reserve	3 years from factory at +20°C	3 years from factory at +20°C
Shortest switching time	1 sec	1 sec
Programmable every	min	min
Memory spaces	800	800
Manual switch	automatic Fix ON/Fix OFF	automatic Fix ON/Fix OFF
Block formation of weekdays	free assignment	free assignment
Holiday program/date range	-	-
Random generator	up to 30 min	up to 30 min
Switching state display	yes	yes
Pulse switching commands	yes: sec, min, h, days	yes: sec, min, h, days
Cycle switching commands	yes: sec, min, h, days	yes: sec, min, h, days
Summer/winter time changeover	automatic / freely selectable / off	automatic / freely selectable / off
External output	yes	yes
- Override	yes	yes
- Countdown	up to 20 min	up to 20 min
Max. Terminal capacity	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Connection type	captive ± screw terminals	captive ± screw terminals
Sealable	yes	yes

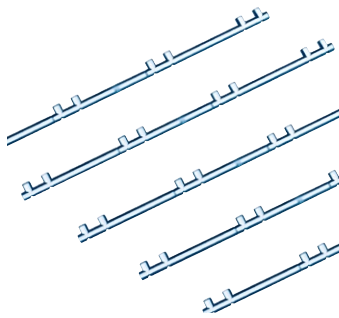
\*) at limited display function

Dimensional drawings /  
circuit diagrams:



Digital DIN-rail time switches - Accessories

DIN-rail time switches



Replacement optical waveguide for connecting talento 671 plus to talento 471/ 472 plus and talento 8xx/ 9xx plus to talento CE plus, talento VM plus and talento LAN plus.

Voltage	EAN-Code	Ord.-No.
	4010940	

**talento IR plus**

	034931	07.75.0013.1
--	--------	--------------



- The amplifier module talento VM plus is used to implement the optical IR signal on a 2-wire connection (max. 50 m).
- One device is required for each transmission location and one device for each reception location.
- IR interface included

**talento VM plus**

230 V/50-60 Hz	034740	07.75.0001.1
110-120 V/50-60 Hz	034757	07.75.0002.1
24 V AC/DC	034948	07.75.0014.1



- Channel expansion
- With talento VM plus the channel expansion can also be positioned in different distributors
- IR interface included

**talento CE plus**

230 V/50-60 Hz	available mid 2008
110-120 V/50-60 Hz	available mid 2008
24 V AC/DC	available mid 2008



- Module for connecting the talento 8xx/9xx plus to a LAN network for program transfer, program read-out, program modification and for manual remote switching.
- IR interface included

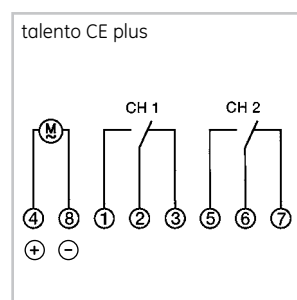
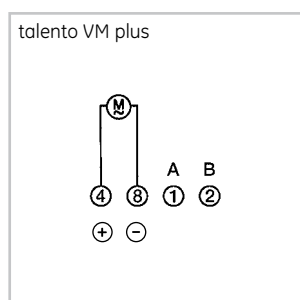
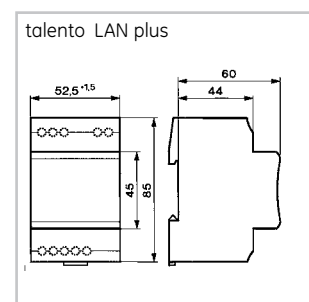
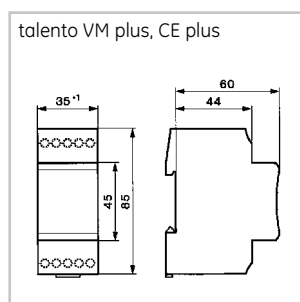
**talento LAN plus**

230 V/50-60 Hz	available mid 2008
----------------	--------------------

## Technical Data

	talento VM plus	talento CE plus	talento LAN plus
Dimensions H x W x D (mm)	45 x 35 x 60	45 x 35 x 60	45 x 52,5 x 60
Distributor cut-out (mm)	46 x 36	46 x 36	46 x 54
Weight (g) approx.	150	170	200
Connection voltage	230 V/50-60 Hz 110-120 V/50-60 Hz 24 V AC/DC	230 V/50-60 Hz 110-120 V/50-60 Hz 24 V AC/DC	230 V/50-60 Hz
Power consumption at 230 V~ (AC)	5 VA	5 VA	5 VA
AC switching capacity			
- ohmic load (VDE, IEC)	-	16 A / 250 V AC	-
- inductive load cos. φ 0.6	-	8 A / 250 V AC	-
- Incandescent lamp load	-	1000 W	-
DC switching capacity	-	800 mA / 300 mA / 150 mA	-
24 VDC/50 VDC/220 VDC			
Switching output	-	potential-free	-
Switch contacts	-	2 changeover contacts	-
Ambient temperature	-10°C ... +55°C	-10°C ... +55°C	-
Protection class	II	II	-
Accuracy	-	-	-
Power reserve	-	-	-
Shortest switching time	-	-	-
Programmable every	-	-	-
Memory spaces	-	-	-
Manual switch	-	automatic Fix ON/Fix OFF	-
Block formation of weekdays	-	-	-
Holiday program/date range	-	-	-
Random generator	-	-	-
Switching state display	-	yes	-
Pulse switching commands	-	-	-
Cycle switching commands	-	-	-
Summer/winter time changeover	-	-	-
External output	-	-	-
- Override	-	-	-
- Countdown	-	-	-
Max. Terminal capacity	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Connection type	captive ± screw terminals	captive ± screw terminals	captive ± screw terminals
Sealable	yes	yes	yes

Dimensional drawings /  
circuit diagrams:



Digital DIN-rail time switches - Accessories

DIN-rail time switches



- Surface-mounted installation
- Cable length on device: 2 metres
- Maximum cable length: 300 metres
- Direct free alignment with satellite
- Can be used outdoors (IP 54)
- With 24 V DC power supply unit

Radio antenna FA GPS

Voltage	EAN-Code	Ord.-No.
	4010940	

-	034856	07.75.0008.1
---	--------	--------------



- Optional/surface-mounted installation
- Cable length on device: 2 metres
- Maximum cable length: 300 metres
- Can be used outdoors (IP 54)

Radio antenna FA DCF 77

-	021184	07.01.0028.1
---	--------	--------------



- Hand-held programming device, transfers date/time and a maximum of 4 programs
- Stores programs in EEPROM; bidirectional serial port
- Transmission/reception of programs
- Replaceable battery
- Transfer of programs from time switch to time switch via talento taxi plus

talento taxi plus

-	034917	07.75.0011.1
---	--------	--------------



- consisting of:
- PC software „talento dialog plus“ for programming, wizard for switching program creation, automatic holiday specification \*), calculation of moving holidays \*), printing of switching programs. „talento astro“ for very simple creation of astronomical programs \*), calculation of switch-on and switch-off times depending on sunrise and sunset \*),
  - talento taxi hand-held programming device in combination with: talento 471 plus, talento 472 plus, talento 671 plus, talento 891 plus, talento 892 plus, talento 991 plus DCF, talento 992 plus DCF
  - Connection cable for connecting PC to talento taxi

\*) only in combination with talento 8xx/9xx plus

Set talento taxi plus

	034924	07.75.0012.1
--	--------	--------------

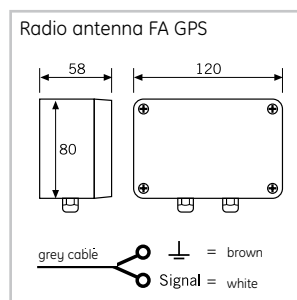
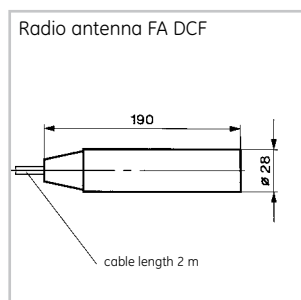
Adapter cable USB on serial (RS 232) is recommended:

HAMA (factory-nr. 000330) www.hama.de

## Technical Data








talento VM plus	Radio antenna FA DCF	Radio antenna FA GPS
Dimensions (mm)	∅ = 28 x 190	120 x 80 x 58
Weight (g) approx.	230	
Connection to time switch	10 mA DC	10 mA DC
Power consumption	3 mW	3 mW
Reception sensitivity	< 75 µV/m at +25°C	
Ambient temperature	-20°C ... +60°C	-25°C ... +70°C
Protection type	IP 54	IP 54
Cable length on device	2 m	2 m
Installation cable length	max. 300 m / 2 x 1,5 mm <sup>2</sup>	max. 300 m / 2 x 1,5 mm <sup>2</sup>
Power supply	-	230 V AC / 24 V DC

Dimensional drawings :



DIN-rail time switches

## Overview digital DIN-rail time switches

	 talento 371 mini	 talento 371	 talento 372	 talento 471	 talento 472	 talento 671	 talento 672
Channels	1	1	2	1	2	1	2
Connection voltage (Ord.-No.)							
230 V/50-60 Hz	03.32.00010.1	03.53.0002.1	03.53.0006.1	03.53.0010.1	03.53.0011.1	03.53.0012.1	03.53.0013.1
100-120 V/50-60 Hz		03.53.0003.1	03.53.0007.1				
24 V AC/DC		03.53.0004.1	03.53.0008.1				
12 V AC/DC		03.53.0005.1	03.53.0009.1				
Switching programs	Daily, weekly program	Daily, weekly program		Daily, weekly program		Daily, weekly program	
Memory spaces	42	20	30	30	40	30	40
Pulse function					X		X
Cycle function					X		X
Holidays program	X						
Random switching	X						
Manual switching (fix) ON/OFF; Override	X	X		X		X	
IR interface for PC-programming							
Antenna input							DCF 77
Autom. summer time / winter time changeover	± 1 h manual	X		X		X	
Runnig reserve	150 h	3 years		3 years		3 years	
Further technical informations	page 24	page 24		page 24		page 26	



talento 891	talento 892	talento 893	talento 894	talento 991	talento 992	talento 993	talento 994
1	2	3	4	1	2	3	4
03.59.0001.1	03.59.0003.1	03.59.0005.1	03.59.0007.1	03.59.0002.1	03.59.0004.1	03.59.0006.1	03.59.0008.1
			03.59.0027.1				03.59.0009.1
			03.59.0026.1				03.59.0010.1
<b>Daily, weekly annual program</b>				<b>Daily, weekly annual program</b>			
400				400			
X				X			
X				X			
X				X			
X				X			
X				X			
X				X			
				DCF 77			
X				X			
6 years				6 years			
page 26				page 26			

DIN-rail time switches

Digital DIN-rail time switches

DIN-rail time switches

- Daily and weekly program
- Switching preselection (Override), Fix ON, Fix OFF
- Non-volatile memory (EEPROM)



Phase-out model, respective new products see page 10

	Voltage	EAN-Code	Ord.-No.
		4010940	

7 x 24 h	$\frac{1}{T}$ ACCU 150 h		FIX ON/OFF	RND ?	
MEMORY 42	± 1 h				

- Free weekday block formation

talento 371 mini

$\frac{1}{L}$ 1x16 (2,5) A 250V~	230 V/50-60 Hz	029555	03.32.0010.1
----------------------------------	----------------	--------	--------------



Phase-out model, respective new products see page 10

7 x 24 h	± 3a Lithium		FIX ON/OFF	± 1 h AUTO
----------	--------------	--	------------	------------

- Fixed weekday block formation

talento 371

$\frac{1}{L}$ 1x16 (2,5) A 250V~	MEMORY 20	230 V/50-60 Hz	019808	03.53.0002.1
		100-120 V/50-60 Hz	019815	03.53.0003.1
		24 V AC/DC	019822	03.53.0004.1
		12 V AC/DC	019839	03.53.0005.1

talento 372

$\frac{1}{L}$ 2x16 (2,5) A 250V~	MEMORY 30	230 V/50-60 Hz	019846	03.53.0006.1
		100-120 V/50-60 Hz	019853	03.53.0007.1
		24 V AC/DC	019860	03.53.0008.1
		12 V AC/DC	019877	03.53.0009.1



Phase-out model, respective new products see page 12

7 x 24 h	± 3a Lithium		FIX ON/OFF	± 1 h AUTO	1-99 S/min
----------	--------------	--	------------	------------	------------

- Free weekday block formation

talento 471

$\frac{1}{L}$ 1x16 (2,5) A 250V~	MEMORY 30	230 V/50-60 Hz	019884	03.53.0010.1
----------------------------------	-----------	----------------	--------	--------------

talento 472

$\frac{1}{L}$ 2x16 (2,5) A 250V~	MEMORY 40	230 V/50-60 Hz	019891	03.53.0011.1
----------------------------------	-----------	----------------	--------	--------------

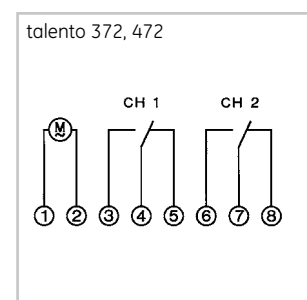
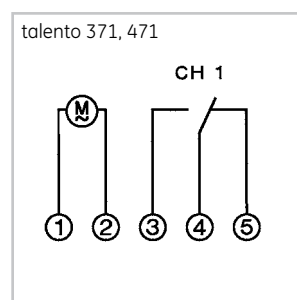
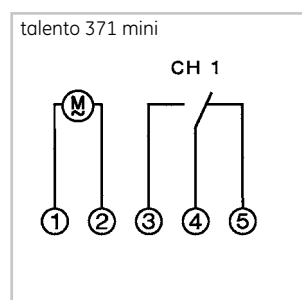
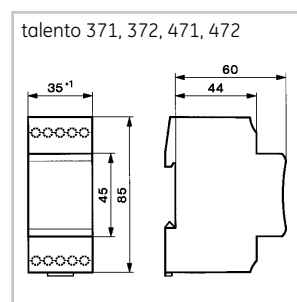
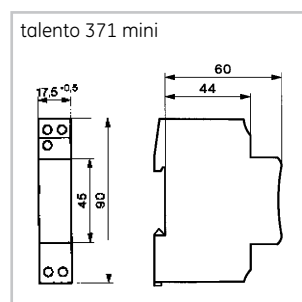
Assembly accessories see page 44

## Technical Data

	talento 371 mini	talento 371	talento 372	talento 471	talento 472
Dimensions H x W x D (mm)	45 x 17,5 x 60	45 x 35 x 60		45 x 35 x 60	
Distributor cut-out (mm)	46 x 18	46 x 36		46 x 36	
Weight (g) approx.	100	170		170	
Connection voltage	230 V/50-60 Hz	230 V/50-60 Hz 100-120 V/50-60 Hz 24 V AC/DC 12 V AC/DC		230 V/50-60 Hz	
Power consumption	5 VA	5 VA		5 VA	
AC switching capacity					
- ohmic load (VDE, IEC)	16 A/250 V AC	16 A/250 V AC		16 A/250 V AC	
- inductive load cos. φ 0,6	2,5 A/250 V AC	2,5 A/250 V AC		2,5 A/250 V AC	
- Incandescent lamp load	1000 W	1000 W		1000 W	
DC switching capacity					
24 V-/50 V-/220 V-	800 mA/300 mA/150 mA	-		-	
Switching output	potential-free	potential-free		potential-free	
Switch contacts	1 changeover contact	1 CO	2 CO	1 CO	2 CO
Ambient temperature	-25°C *) ... +55°C	-25°C *) ... +55°C		-25°C *) ... +55°C	
Protection class	II	II		II	
Accuracy	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C		typ ± 2,5 s/day at +20°C	
Power reserve	150 h at +20°C	3 years from factory at +20°C		3 years from factory at +20°C	
Shortest switching time	1 min	1 min		1 sec	
Programmable every	min	min		min	
Memory spaces	42	20	30	30	40
Switching preselection	yes	yes		yes	
Manual switch	automatic/preselection Fix ON/Fix OFF	automatic/preselection Fix ON/Fix OFF		automatic/preselection Fix ON/Fix OFF	
Block formation of weekdays	free assignment	fixed value		free assignment	
Holiday program	99 days	99 days		-	
Random generator	Switching times freely programmable	-		-	
- Switch-on interval	5 ... 60 min	-		-	
- Switch-off interval	5 ... 30 min	-		-	
Switching state display	yes	yes		yes	
Pulse switching commands	-	-		yes	
Cycle switching commands	-	-		yes	
Summer/winter time changeover	manual	automatic / freely selectable / off		automatic / freely selectable / off	
Connection type	captive ± screw terminals	captive ± screw terminals		captive ± screw terminals	
Sealable	yes	yes		yes	

\*) at limited display function

Dimensional drawings /  
circuit diagrams:



Digital DIN-rail time switches

DIN-rail time switches

- Daily, weekly and annual program
- Switching preselection (Override), Fix ON, Fix OFF
- Free weekday block formation
- Non-volatile memory (EEPROM)



Phase-out model, respective new products see page 12



	Voltage	EAN-Code	Ord.-No.
		4010940	

7 x 24h	3a Lithium		FIX ON/OFF	± 1h AUTO	1-99 S/min
---------	------------	--	------------	-----------	------------



talento 671

1x16 (2,5) A 250V~	MEMORY 30	230 V/50-60 Hz	019907	03.53.0012.1
-----------------------	-----------	----------------	--------	--------------

talento 672

2x16 (2,5) A 250V~	MEMORY 40	230 V/50-60 Hz	019914	03.53.0013.1
-----------------------	-----------	----------------	--------	--------------

365 x 24h	6a Lithium		FIX ON/OFF		
-----------	------------	--	------------	--	--

MEMORY 400	1-99 S/min	± 1h AUTO		1 x FUNCTION
------------	------------	-----------	--	--------------

- Infrared interface for program / date / time transfer
- Input possibility of switching program directly to time switch or via PC-software support
- Programming possibility for several years until 2096

talento 891

1x16 (2,5) A 250V~	230 V/50-60 Hz	019921	03.59.0001.1
-----------------------	----------------	--------	--------------

talento 892

2x16 (2,5) A 250V~	230 V/50-60 Hz	019945	03.59.0003.1
-----------------------	----------------	--------	--------------

talento 893

3x16 (2,5) A 250V~	230 V/50-60 Hz	019969	03.59.0005.1
-----------------------	----------------	--------	--------------

talento 894

4x16 (2,5) A 250V~	230 V/50-60 Hz	019983	03.59.0007.1
	100-120 V/50-60 Hz	028916	03.59.0027.1
	24 V AC/DC	028909	03.59.0026.1

talento 991

1x16 (2,5) A 250V~	DCF 77	230 V/50-60 Hz	019938	03.59.0002.1
-----------------------	--------	----------------	--------	--------------

talento 992

2x16 (2,5) A 250V~	DCF 77	230 V/50-60 Hz	019952	03.59.0004.1
-----------------------	--------	----------------	--------	--------------

talento 993

3x16 (2,5) A 250V~	DCF 77	230 V/50-60 Hz	019976	03.59.0006.1
-----------------------	--------	----------------	--------	--------------

talento 994

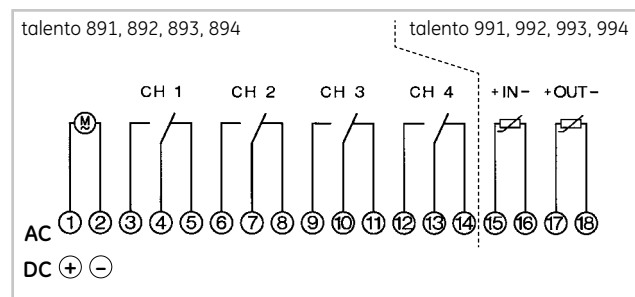
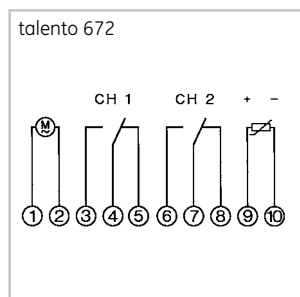
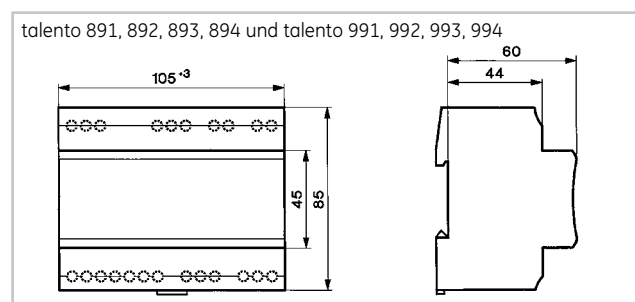
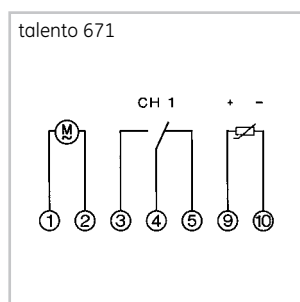
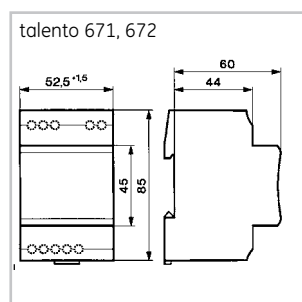
4x16 (2,5) A 250V~	DCF 77	230 V/50-60 Hz	019990	03.59.0008.1
		100-120 V/50-60 Hz	020002	03.59.0009.1
		24 V AC/DC	020019	03.59.0010.1

Radio antenna DCF77, software talento dialog plus see page 28 - Assembly accessories see page 44

## Technical Data

	talento 671	talento 672	talento 891, 892, 893 talento 991, 992, 993	talento 894 talento 994
Dimensions H x W x D (mm)	45 x 52,5 x 60		45 x 105 x 60	45 x 105 x 60
Distributor cut-out (mm)	46 x 54		46 x 108	46 x 108
Weight (g) approx.	220		600	600
Connection voltage	230 V/50-60 Hz		230 V/50-60 Hz	230 V/50-60 Hz 100-120 V/50-60 Hz 24 V AC/DC
Power consumption	5 VA		5 VA	5 VA
AC switching capacity				
- ohmic load (VDE, IEC)	16 A/250 V AC		16 A/250 V AC	16 A/250 V AC
- inductive load cos. φ 0,6	2,5 A/250 V AC		2,5 A/250 V AC	2,5 A/250 V AC
- Incandescent lamp load	1000 W		1000 W	1000 W
DC switching capacity				
24 V-/50 V-/220 V-	-		on request	on request
Switching output	potential-free		potential-free	potential-free
Switch contacts	1 CO	2 CO	1, 2, 3 changeover contacts	4 changeover contacts
Ambient temperature	-		-25°C *) ... +55°C	-25°C *) ... +55°C
Protection class	-		II	II
Accuracy	typ ± 2,5 s/day at +20°C		typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C
Power reserve	3 years from factory at +20°C		6 years from factory at +20°C	6 years from factory at +20°C
Shortest switching time	1 sec		1 sec	1 sec
Programmable every	min		min	min
Memory spaces	30	40	400	400
Switching preselection	yes		yes	yes
Manual switch	automatic/preselection Fix ON/Fix OFF		automatic/preselection Fix ON/Fix OFF	automatic/preselection Fix ON/Fix OFF
Block formation of weekdays	free assignment		single day button	single day button
Holiday program	-		-	-
Random generator	-		-	-
- Switch-on interval	-		-	-
- Switch-off interval	-		-	-
Switching state display	yes		yes	yes
Pulse switching commands	yes		yes	yes
Cycle switching commands	yes		yes	yes
Summer/winter time changeover	automatic / freely selectable / off		automatic / freely selectable / off	automatic / freely selectable / off
Connection type	captive ± screw terminals		captive ± screw terminals	captive ± screw terminals
Sealable	yes		yes	yes

\*) at limited display function



## Digital DIN-rail time switches - Accessories



Voltage	EAN-Code	Ord.-No.
	4010940	

- Optional/surface-mounted installation
- Cable length on device: 2 metres
- Maximum cable length: 300 metres
- Can be used outdoors (IP 54)

**Radio antenna FA DCF 77**

-	021184	07.01.0028.1
---	--------	--------------



Hand-held programming device

- For programming of talento 891-894 and talento 991-994 (see page 26)
- Transfers date/time and a maximum of 4 programs
- Stores programs in EEPROM; bidirectional serial port
- Transmission/reception of programs
- Transfer of programs from time switch to time switch via talento taxi
- Replaceable battery

**talento taxi**

-	021641	07.01.0030.1
---	--------	--------------



consisting of:

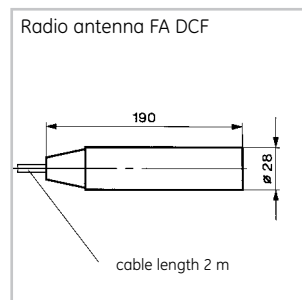
- PC software „talento dialog“ for programming, wizard for switching program creation, automatic holiday specification, calculation of moving holidays, printing of switching programs
- "talento astro" for very simple creation of astronomical programs, calculation of switch-on and switch-off times in dependence on sunrise and sunset
- talento taxi hand-held programming device for programming of talento 891-894 and talento 991-994 (see page 26)
- Connection cable for connecting PC to talento taxi
- Manual

**Set talento taxi**






-	021634	07.01.0029.1
---	--------	--------------

**Technical Data**

talento VM plus	Radio antenna FA DCF
Dimensions (mm)	$\varnothing = 28 \times 190$
Weight (g) approx.	230
Connection to time switch	10 mA DC
Power consumption	3 mW
Reception sensitivity	$< 75 \mu\text{V/m}$ at $+25^\circ\text{C}$
Ambient temperature	$-20^\circ\text{C} \dots +60^\circ\text{C}$
Protection type	IP 54
Cable length on device	2 m
Installation cable length	max. 300 m / $2 \times 1,5 \text{ mm}^2$



## Overview analog DIN-rail time switches

	 talento 111 mini	 talento 111	 talento 171	 talento 121	 talento 211 mini
<b>Channels</b>	1	1	1	1	1
<b>Connection voltage</b> (Ord.-No.)					
220-240 V/50 Hz	01.06.00004.1	01.28.0001.1	01.28.0002.1	01.28.0003.1	
230 V AC/110 V DC					02.03.0003.1
130 V AC/60 V DC					
30 V AC/12 V DC					
<b>Switching programs</b>	daily program	daily program	weekly program	hour program	daily program
<b>Quartz drive</b>					X
<b>Synchron drive</b>	X	X	X	X	
<b>Manual switch</b>	Automatic / FIX ON	Automatic / FIX ON / FIX OFF			Automatic / FIX ON
<b>Runnig reserve</b>					50 h
<b>Further technical information</b>	page 32	page 32			page 34



talento 211			talento 212	
talento 261	talento 271		talento 202	
1	1	1	2	2
02.28.0001.1	02.28.0015.1	02.28.0004.1	02.28.0007.1	02.28.0008.1
02.28.0002.1		02.28.0005.1		
02.28.0003.1		02.28.0006.1		
daily program	daily program	weekly program	daily program	daily and weekly program
	X		X	
Automatic / FIX ON / FIX OFF			Automatic / FIX ON / FIX OFF	
150 h			150 h	
page 34			page 34	

DIN-rail time switches

## Analog DIN-rail time switches

- Daily or weekly program
- Synchron


 $\frac{1 \times 16 (4) A}{250V \sim}$ 

I - ⌚

SYNCHRON

Voltage

EAN-Code

Ord.-No.

4010940

## talento 111 mini

24 h

220-240 V/50 Hz

022556

01.06.0004.1


 $\frac{1 \times 16 (4) A}{250V \sim}$ 

I - ⌚ - 0

SYNCHRON

## talento 111

24 h

220-240 V/50 Hz

020668

01.28.0001.1

## talento 171

7 x 24 h

220-240 V/50 Hz

020675

01.28.0002.1

## talento 121

1 h

220-240 V/50 Hz

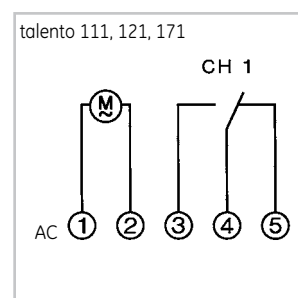
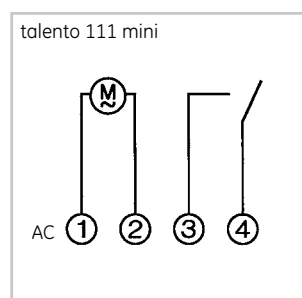
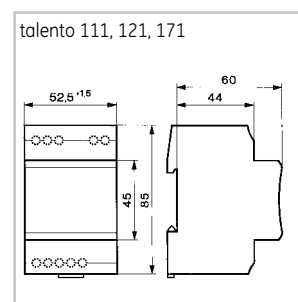
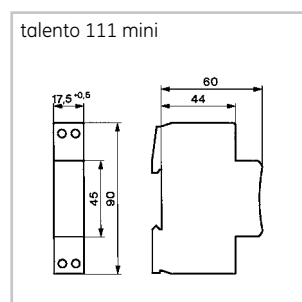
020682

01.28.0003.1

## Technical Data

	talento 111 mini	talento 111, 171, 121
Dimensions H x W x D (mm)	45 x 17,5 x 60	45 x 35 x 60
Distributor cut-out (mm)	46 x 18	46 x 36
Weight (g) approx.	100	170
Connection voltage	220-240 V/50-60 Hz	220-240 V/50-60 Hz
Power consumption at 230 V~ (AC)	ca. 1 VA	ca. 1 VA
AC switching capacity		
- ohmic load (VDE, IEC)	16 A/250 V AC	16 A/250 V AC
- inductive load cos. $\varphi$ 0,6	4 A/250 V AC	4 A/250 V AC
- Incandescent lamp load	1000 W	1350 W
Switching output	potential-free	potential-free
Switch contacts	1 NO	1 changeover contact
Protection class	II	II
Protection type	IP 20	IP 20
Accuracy	synchronic to network	synchronic to network
Power reserve	-	-
Charging time	-	-
Shortest switching time		
- day program	30 min	30 min
- week program	-	180 min
- 1h-program	-	1,25 min
Programmable every		
- day program	30 min	30 min
- week program	-	180 min
- 1h-program	-	1,25 min
Clock face	-	yes
Manual switch	automatic / Fix ON / Fix OFF	automatic / Fix ON / Fix OFF
Connection type	captive $\pm$ screw terminals	captive $\pm$ screw terminals
Ambient temperature	-25°C ... +55°C	-25°C ... +55°C
Sealable	yes	yes

Dimensional drawings / circuit diagrams:



Analog DIN-rail time switches

- Daily and/or weekly program
- Quartz

DIN-rail time switches



$\frac{1 \times 16 (4) A}{250V \sim}$	I - ⌚	QUARTZ	$\frac{1}{T}$ ACCU 50 h
---------------------------------------	-------	--------	-------------------------

talento 211 mini

24 h	230 V AC/110 V DC	022563	02.03.0003.1
------	-------------------	--------	--------------



$\frac{1 \times 16 (4) A}{250V \sim}$	I - ⌚ - 0	QUARTZ	$\frac{1}{T}$ ACCU 150 h
---------------------------------------	-----------	--------	--------------------------

talento 211

24 h	230 V AC/130 V DC	020750	02.28.0001.1
	130 V AC/60 V DC	020743	02.28.0002.1
	30 V AC/12 V DC	020736	02.28.0003.1

talento 261

24 h/15 min	230 V AC/130 V DC	026325	02.28.0015.1
-------------	-------------------	--------	--------------

talento 271

7 x 24 h	230 V AC/130 V DC	020729	02.28.0004.1
	130 V AC/ 60 V DC	020712	02.28.0005.1
	30 V AC/ 12 V DC	020705	02.28.0006.1



$\frac{2 \times 16 (4) A}{250V \sim}$	I - ⌚ - 0	QUARTZ	$\frac{1}{T}$ ACCU 150 h
---------------------------------------	-----------	--------	--------------------------

talento 212

24 h	24 h	230 V AC/130 V DC	020699	02.28.0007.1
------	------	-------------------	--------	--------------

talento 202

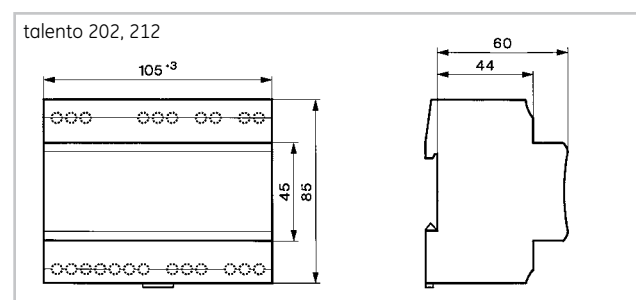
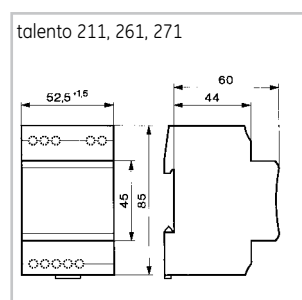
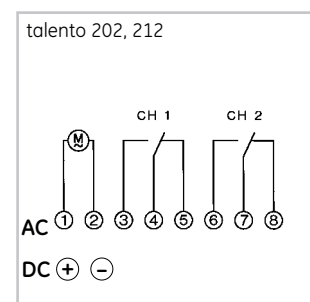
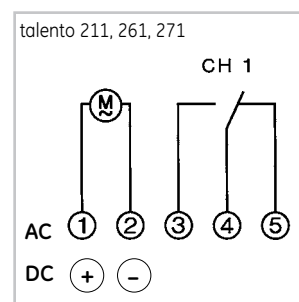
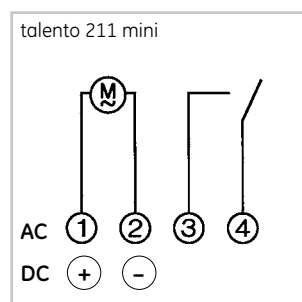
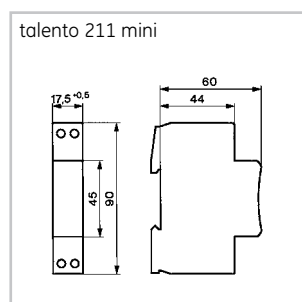
24 h	7x24 h	230 V AC/130 V DC	020767	02.28.0008.1
------	--------	-------------------	--------	--------------

Assembly accessories see page 44

## Technical Data




	talento 211 mini	talento 211 talento 271	talento 202 talento 212	talento 261
Dimensions H x W x D (mm)	45 x 17,5 x 60	45 x 52,5 x 60	45 x 105 x 60	45 x 52,5 x 63
Distributor cut-out (mm)	46 x 18	46 x 54	46 x 108	46 x 54
Weight (g) approx.	110	170	220	160
Connection voltage	230 V AC/110 V DC	230 V AC/130 V DC 130 V AC/60 VDC 30 V AC/12 VDC	- -	230 V AC/110 V DC
Power consumption at 230 V~ (AC)	approx. 1 VA	approx. 1 VA		approx. 1 VA
AC switching capacity	16 A/250 V AC 4 A/250 V AC - Incandescent lamp load 1000 W	16 A/250 V AC 4 A/250 V AC 1350 W		16 A/250 V AC 4 A/250 V AC 900 W
Switching output	potential-free	potential-free		potential-free
Switch contacts	1 NO	1 CO	2 CO	1 changeover contact
Protection class	II	II		II
Protection type	IP 20	IP 20		IP 20
Accuracy	typ ± 2,5 s/day at +20°C	typ ± 2,5 s/day at +20°C		typ ± 2,5 s/day at +20°C
Power reserve	50 h	150 h		150 h
Charging time	100 h	70 h		70 h
Shortest switching time				
- day program	30 min	30 min		15 min
- week program	-	180 min		-
- 1h-program	-	-		-
Programmable every				
- day program	30 min	30 min		15 min
- week program	-	180 min		-
- 1h-program	-	-		-
Clock face	-	yes		yes
Manual switch	automatic / Fix ON	automatic / Fix ON / Fix OFF		automatic / Fix ON / Fix OFF
Connection type	captive ± screw terminals	captive ± screw terminals		captive ± screw terminals
Ambient temperature	-20°C ... +55°C	-20°C ... +55°C		-20°C ... +55°C
Sealable	yes	yes		no

Dimensional drawings /  
circuit diagrams:










Overview Staircase lighting time switches

DIN-rail time switches

	 trealux 210	 trealux 610	 trealux 710
<b>Connection voltage</b> (Ord.-No.)			
230 V/50-60 Hz	18.13.0009.1	18.13.0007.1	18.13.0006.1
<b>Pre-warning</b>		<b>Impuls pre-warning</b>	<b>Half-time switching 10 - 30 sec</b>
<b>Autom. recognition of 3-or 4-line connection</b>	X	X	X
<b>Adjustment range</b>	0,5 - 20 min	0,5 - 99 min	0,5 - 99 min
<b>Input motion sensor</b>			X
<b>Service long-term function 1h</b>		X	X
<b>Further technical information</b>	page 38	page 38	page 38

## Overview Photo electric switches

	 turnus 200	 turnus 501 A	 turnus 501 E	 turnus 502 A	 turnus 502.1	 turnus 771	 turnus 772
<b>Channels</b>	1	1	1	1	1	1	2
<b>Connection voltage</b> (Ord.-No.)							
220-240 V/50-60 Hz	18.17.0001.1						
230 V/50-60 Hz		18.18.0001.1	18.18.0006.1	18.18.0002.1	18.18.0003.1	18.19.0001.1	18.19.0002.1
<b>Max. adjustable Lux-value</b>	2000	500		500		500	
<b>Brightness sensor for ...</b>	Integrated	Surface-mounting	Flush-mounting	Surface-mounting		Surface-mounting	
<b>Switching program</b>						weekly program	
<b>Memory spaces</b>						20	30
<b>Autom. summer time / winter time changeover</b>						X	
<b>Running reserve</b>						3 years	
<b>Further technical information</b>	page 40	page 40		page 40		page 42	

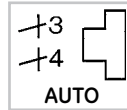
DIN-rail time switches

## Staircase lighting time switches

- Electronic
- Automatic recognition of 3-line or 4-line connection



1x16 (10) A  
250V~



- Adjustment range: 0.5 - 20 minutes
- Immediately adjustable
- Connection from below

### trealux 210

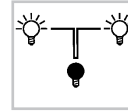
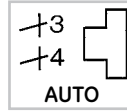
230 V/50-60 Hz

024789

18.13.0009.1



1x16 (10) A  
250V~



- Safety staircase lighting time switch in acc. to DIN 18015 with impulse pre-warning
- Adjustment range: 0.5 - 99,5 min.
- If any key is pressed for more than 2 seconds, the light remains on for 1 hour

### trealux 610

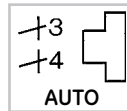
230 V/50-60 Hz

023232

18.13.0007.1



1x16 (10) A  
250V~



- Safety staircase lighting time switch in acc. to DIN 18015
- Pre-warning through reduced brightness /
- Glow lamp only
- Adjustment range: 0,5 - 99,5 min.
- Half-time switching adjustable: 10 - 30 sec
- If any key is pressed for more than 2 seconds, the light remains on for 1 hour, service long-term function
- Input motion sensor
- Diagnosis display of switch position
- Hour meters
- Display of switching position

### trealux 710

230 V/50-60 Hz

023225

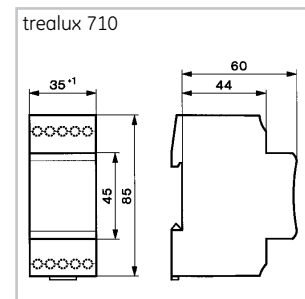
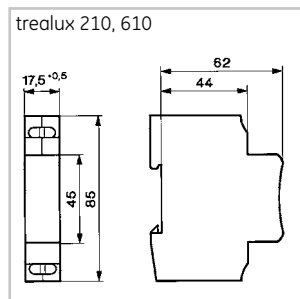
18.13.0006.1

Assembly accessories see page 44

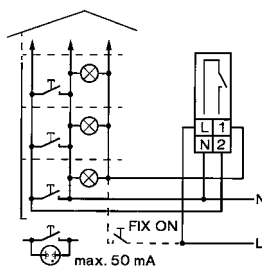
## Technical Data

	trealux 210	trealux 610	trealux 710
Dimensions (mm)	45 x 17,5 x 62	45 x 17,5 x 62	45 x 35 x 60
Distributor cut-out (mm)	46 x 18	46 x 18	46 x 36
Connection	230 V/50-60 Hz	230 V/50-60 Hz	230 V/50-60 Hz
Switching capacity AC			
- Ohmic load (VDE, IEC) cos. φ 1	16 A / 230 V AC	16 A/230 V AC	8 A/230 V AC
- Inductive load cos φ 0,6	10 A / 230 V AC	10 A/230 V AC	-
- Incandescent lamp load	2300 W	2300 W	1200 W
- Fluorescent lamp in DUO circuit	20 x 2 x 58 W	20 x 2 x 58 W	-
- Fluorescent lamp, parallel compensated	20 x 58 W	20 x 58 W	-
- Fluorescent lamp, series-compensated	40 x 58 W	40 x 58 W	-
- EVG	5 x 20 W	5 x 20 W	-
- KVG	1500 W	1500 W	-
Switch contacts	1 NO	1 NO	1 NO + semiconductor
Ambient temperature	-10°C ... +55°C	-10°C ... +55°C	-15°C ... +55°C
Protection class	II	II	II
Protection type	IP 20	IP 20	IP 20
Adjustment range	0,5 min ... 20 min	0,5 min ... 99,5 min	0,5 min ... 99,5 min
Dim time	-	-	10 sec ... 30 sec
Glow lamp load	max. 50 $\frac{A}{V}$ x1 mA	max. 50 $\frac{A}{V}$ x1 mA	max. 50 $\frac{A}{V}$ x1 mA
On-time	100% ED	100% ED	100% ED
Manual switch	yes	yes	yes
Re-triggerable	once	once	once
Connection type	captive ± screw terminals	captive ± screw terminals	captive ± screw terminals
Switching type	automatic recognition of 3-line or 4-line connection	automatic recognition of 3-line or 4-line connection	automatic recognition of 3-line or 4-line connection
Diagnosis functions	yes	yes	yes
Time extension	no	yes	yes

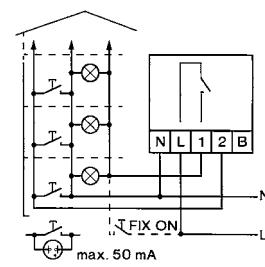
Dimensional drawings / circuit diagrams:



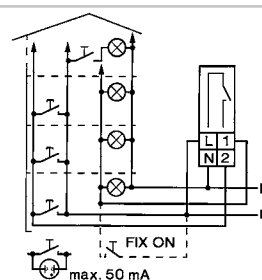
trealux 210, 610  
3-wire-connection



trealux 710  
3-wire-connection



trealux 210, 610  
4-wire-connection



trealux 710  
4-wire-connection

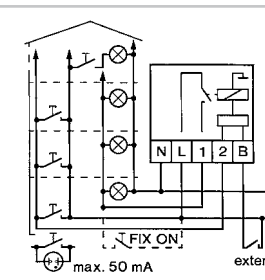


Photo electric switches

DIN-rail time switches



Voltage	EAN-Code	Ord.-No.
	4010940	

			<b>IP54</b>	ON / OFF switching delay 20 ... 120 sec
--	--	--	-------------	---

**turnus 200 (Lux 200)**

With integrated brightness sensor / Surface-mounting /Outdoor-mounting	220-240 V/50-60 Hz	018986	18.17.0001.1
--	--------------------	--------	--------------



			ON / OFF switching delay 100 sec (fix)
--	--	--	--

**turnus 501 A**

With brightness sensor surface-mounting (1) incl. in the scope of delivery	230 V/50-60 Hz	023249	18.18.0001.1
--	----------------	--------	--------------

**turnus 501 E**

With brightness sensor, flush-mounting (2) incl. in the scope of delivery	230 V/50-60 Hz	024031	18.18.0006.1
---	----------------	--------	--------------



			ON / OFF switching delay 0 ... 100 sec
--	--	--	--

- Light control system
- Adjustable ON/OFF switching delay 0 - 100 sec.
- Up to 10 units (20 channels) of the types turnus 502, 771 and 772 can be extended to form a light control system with only 1 brightness sensor.

**turnus 502 A**

With brightness sensor surface-mounting incl. in the scope of delivery	230 V/50-60 Hz	023256	18.18.0002.1
--	----------------	--------	--------------

**turnus 502.1**

Additional unit without brightness sensor	230 V/50-60 Hz	023973	18.18.0003.1
---	----------------	--------	--------------

Assembly accessories see page 44

## Technical Data

	turnus 200	turnus 501	turnus 502
Dimensions (mm)	111 x 83 x 43	45 x 17,5 x 60	45 x 52,5 x 60
Distributor cut-out (mm)	-	46 x 18	46 x 54
Weight (g) approx.	175	75	285
Connection	220-240 V/50-60 Hz	230 V/50-60 Hz	230 V/50-60 Hz
Power consumption at 230 V~ (AC)	ca. 6 VA	ca. 5 VA	ca. 2,5 VA
Switching output	potential-free	potential-free	potential-free
Switch contacts	1 NO	1 NO	2 changeover contacts
AC switching capacity			
- Ohmic load (VDE, IEC)	10 A/250 V AC	16 A/250 V AC	10 A/250 V AC
- Inductive load cos. φ 0,6	2 A/250 V AC	8 A/250 V AC	8 A/250 V AC
- Incandescent lamp load	1200 W	2000 W	2000 W
DC switching capacity			
24 V~/60 V~/220 V~	-	ca. 800 mA/300 mA/150 mA	ca. 800 mA/300 mA/150 mA
Functionality	electronic	electronic	electronic
Connection type	captive ± screw terminals	captive ± screw terminals	captive ± screw terminals
Sealable	-	-	yes
Ambient temperature:			
- Control unit	-35°C ... +60°C	-20°C ... +55°C	-20°C ... +55°C
- Brightness sensor	-	-30°C ... +70°C	-30°C ... +70°C
Protection type:			
- Control unit	IP 54	IP 20	IP 20
- Brightness sensor	-	IP 65	IP 65
Brightness sensor	-	not potential-free	SELV
- Length connecting lead	-	max. 100 m	max. 100 m
- Terminal capacity	-	min. 0,75 mm <sup>2</sup>	min. 0,75 mm <sup>2</sup>
<b>Photo electric switches:</b>			
- Adjustment range	2 lx - 2000 lx	2 lx - 500 lx	2 lx - 500 lx
- Hysteresis	approx. factor 1.3 of engaging value	approx. factor 1.3 of engaging value	approx. factor 1.3 of engaging value
- Switching delay	20 ... 120 sec	approx. 100 s ON/100 s OFF	adjustable: appr. 0-100s ON/0-100s OFF
- Switching state display	undelayed	undelayed	undelayed

Dimensional drawings / circuit diagrams:

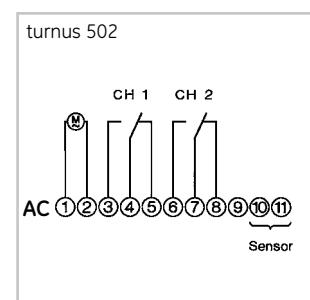
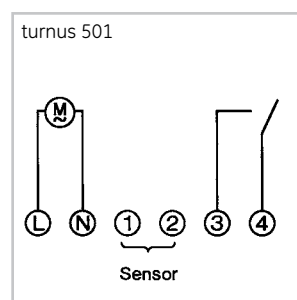
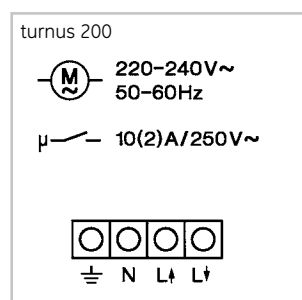
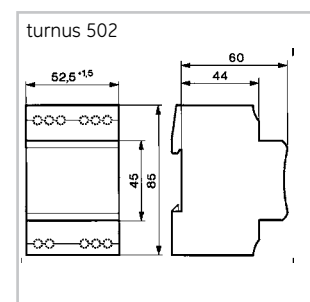
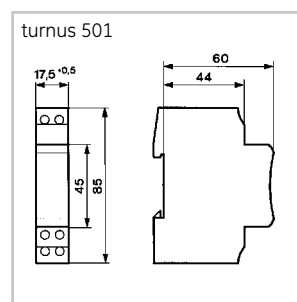
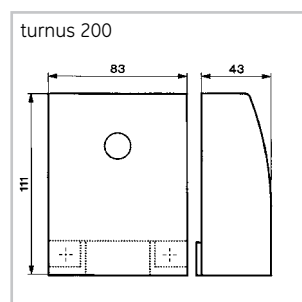


Photo electric switches

DIN-rail time switches



Voltage	EAN-Code	Ord.-No.
	4010940	

LUX

± 1h  
AUTO

7 x 24h

ON / OFF  
switching delay  
0 ... 100 sec

- Brightness sensor for surface-mounting included in the scope of delivery
- Adjustable ON/OFF switching delay 0 - 100 sec
- Up to 10 units (20 channels) of the types turnus 502, 771 and 772 can be extended to form a light control system with only 1 brightness sensor
- With weekly time switch

turnus 771

$\frac{1 \times 16 (8) A}{250V \sim}$	MEMORY 20	230 V/50-60 Hz	023263	18.19.0001.1
---------------------------------------	-----------	----------------	--------	--------------

turnus 772

$\frac{2 \times 10 (8) A}{250V \sim}$	MEMORY 30	230 V/50-60 Hz	023270	18.19.0002.1
---------------------------------------	-----------	----------------	--------	--------------



Sensor LF

2-500 Lux	002671	07.02.0001.1
500-10.000 Lux	027643	07.02.0004.1

Sensor LF-flush-mounting

2-500 Lux	016630	07.02.0003.1
-----------	--------	--------------

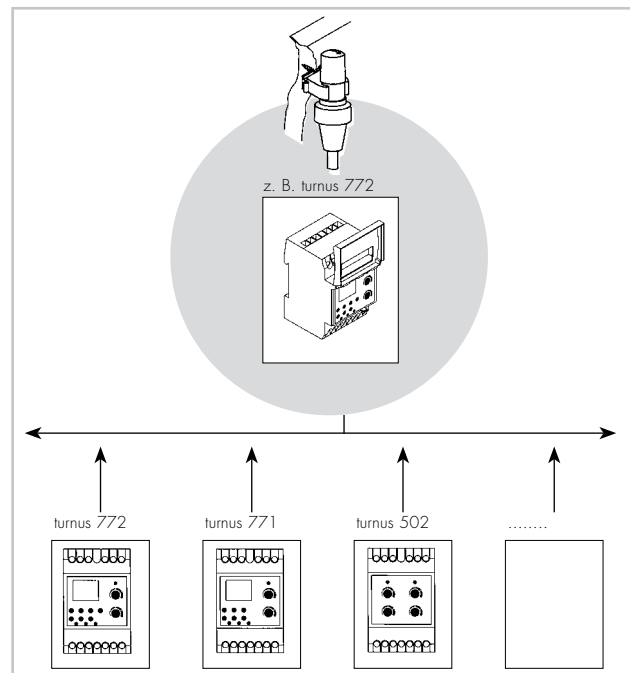
Cap LF

500-10.000 Lux	029166	07.02.0003.2
----------------	--------	--------------

Assembly accessories see page 44

## Technical Data

	turnus 771	turnus 772
Dimensions (mm)	45 x 52,5 x 60	
Distributor cut-out (mm)	46 x 54	
Weight (g) approx.	250	285
Connection	230 V/50-60 Hz	
Power consumption at 230 V~ (AC)	ca. 2,5 VA	
Switching output	potential-free	
Switch contacts	1 CO	2 CO
AC switching capacity		
- Ohmic load (VDE, IEC)	16 A/250 V AC	10 A/250 V AC
- Inductive load cos. φ 0,6	8 A/250 V AC	
- Incandescent lamp load	2000 W	
DC switching capacity		
24 V-/60 V-/220 V-	ca. 800 mA/300 mA/150 mA	
Functionality	electronic	
Connection type	captive ± screw terminals	
Sealable	yes	
Ambient temperature:		
- Control unit	-20°C ... +55°C	
- Brightness sensor	-30°C ... +70°C	
Protection type:		
- Control unit	IP 20	
- Brightness sensor	IP 65	
Brightness sensor	SELV	
- Length connecting lead	max. 100 m	
- Terminal capacity	min. 2 x 0,75 mm <sup>2</sup>	
<b>Photo electric switches:</b>		
- Adjustment range	2 lx - 500 lx	
- Hysteresis	approx. factor 1.3 of engaging value	
- Switching delay	adjustable: appr. 0-100s ON/0-100s OFF	
- Switching state display	undelayed	
<b>Time switch:</b>		
- Memory spaces	20	30
- Shortest switching time	1 min	
- Programmable every	min	
- Block formation of weekdays	fixed value	
- Channel block formation	-	
- Switching state display	yes	
- Summer /winter time changeover	automatic	
- Manual switch	automatic / preselection FIX ON/FIX OFF	
- Accuracy	typ ± 2,5 s/day at +20°C	
- Running reserve	3 years from factory	

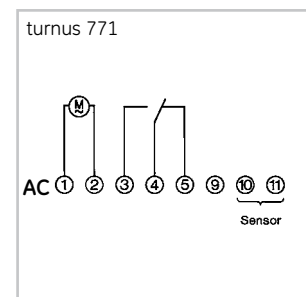
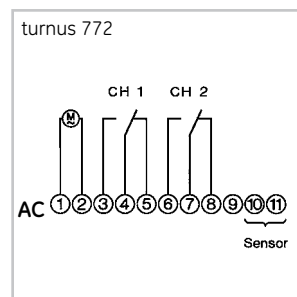
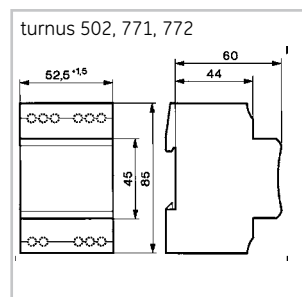


Pilot unit could be:

- turnus 502
- turnus 771
- turnus 772

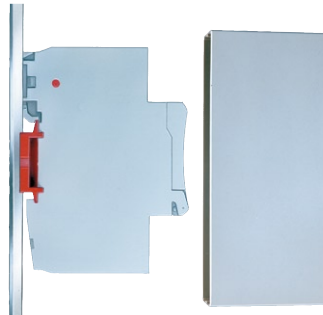
10 units at maximum are operated as a system with a brightness sensor. Each of the units - with brightness sensor - can also be applied individually.

Dimensional drawings / circuit diagrams:



Accessories – DIN-rail time switches

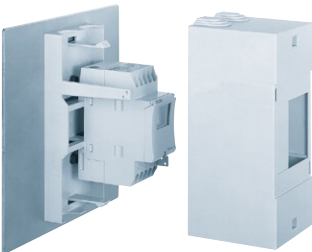
DIN-rail time switches



Designation	for ...	EAN-Code	Ord.-No.
		4010940	

**Wall installation kit 1 module**

talento 111 mini talento 211 mini talento 371 mini plus trealux 210, 610 turnus 501	002657	18.01.0004.2
---	--------	--------------

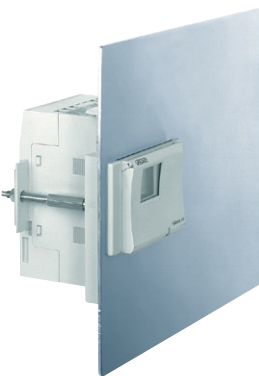


**Wall installation kit 2-3 modules**

talento 111, 121, 171 talento 211, 261, 271 talento 3xx (plus) talento 4xx (plus) talento 6xx (plus) talento 7xx (plus) talento 8xx plus talento 9xx plus trealux 710 turnus 502, 771, 772	021719	03.53.0083.2
---	--------	--------------

**Wall installation kit 6 modules**

talento 202, 212 talento 8xx talento 9xx	021733	03.59.0046.2
--	--------	--------------



**Installation frame up to 6 TE**

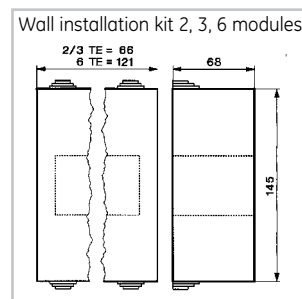
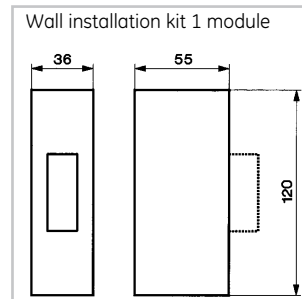
talento (plus) trealux turnus	021726	03.59.0047.2
-------------------------------------	--------	--------------

**Lithium Battery**

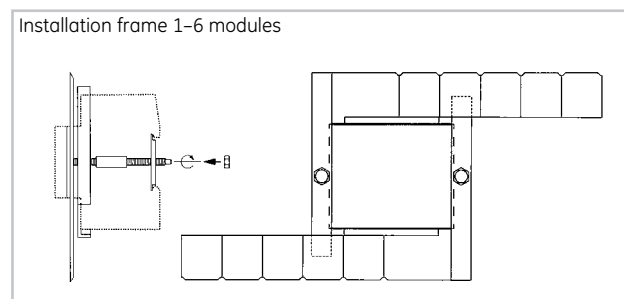
6 years running reserve	talento 8xx talento 9xx	024048	09.02.0007.8
3 years running reserve	talento 371 mini plus	032821	09.02.0005.8

### Technical Data

Dimensional drawings /  
circuit diagrams:



Dimensional drawings /  
circuit diagrams:

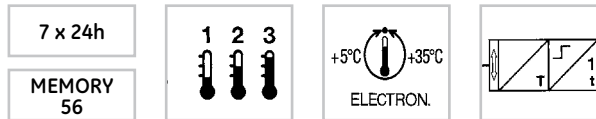




## EIB-Range

Ordering data, technical data:	EIB bus final products with integrated bus coupler	48 - 49
	EIB system appliances	50 - 51
	EIB auxiliary clocks	52 - 53

## EIB bus final products with integrated bus coupler/accessories



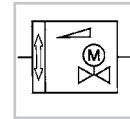
- Room thermostat clock with display operation/ integrated bus coupler
- Synchronisation of time via master clock,
- 6 EIB objects, holiday-, party function

### tempic 500 EIB

Voltage	EAN-Code	Ord.-No.
	4010940	



- Control drive with electric motor,
- Binary input e.g. for window contacts
- Installed directly on radiator valve



### termo 500 EIB

Adaptations see table below

014032	17.13.0001.1
--------	--------------

### Adaptations termo 500

Valve types	Logo	Ordering-No.	Valve types for which the actuator can be assembled without adapter:
Oventrop M 30x1.0 Fine-pitch thread	<b>OV</b>	17.13.0003.1 à 3 pieces	Heimeier
Danfoss RA 2000	<b>D</b>	17.13.0002.1 à 3 pieces	MNG/11.5
Danfoss RAV	<b>D</b>	17.13.0009.1 à 3 pieces	Oventrop M 30x1.5 <b>OV</b>
TA TRV	<b>TA</b> HIT BY THE EXPERT	17.13.0008.1 à 3 pieces	Comap M 30x1.5
Comap M 8x1.5	<b>COMAP</b>	17.13.0008.1 à 3 pieces	Honeywell Brauckmann <b>IB</b>
Vaillant	<b>Vaillant</b>	17.13.0010.1 à 3 pieces	Kermi Valve heating unit <b>KERMI</b>
VELTA-Compact distrib. VELTA-Euro distributor		17.13.0007.1 à 3 pieces	Böhmisch distributor
Giacomini		17.13.0012.1 à 3 pieces	



### EIB product data base (without torso)

 can be downloaded via internet - [www.grasslin.de](http://www.grasslin.de) - or requested via e-mail.

### EIB rail

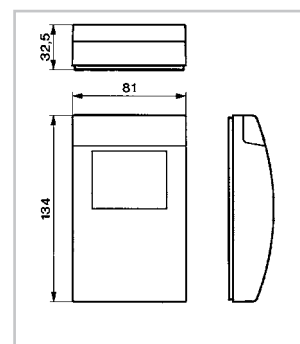
Self-adhesive for DIN-rail	214 mm	002176	17.08.0002.1
	243 mm	002206	17.08.0005.1
	277 mm	002213	17.08.0006.1

### DIN-rail cover EIB

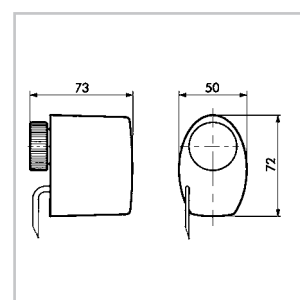
240 mm	004071	17.08.0007.1
--------	--------	--------------

## Technical data

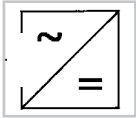

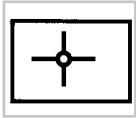
<b>tempic 500 EIB</b>	
Dimensions (mm)	134 x 81 x 32,5
Weight (g) approx.	200
Supply voltage	from Bus
Connection	via busterterminal
Bus coupler	Integrated (Bus Interface Module - BIM)
Power consumption	< 240 mW
Running reserve	5 h, Akku, NiCd-free
Control ranges of temperature	
- Heating	Temp 3 18°C ... 35°C
	Temp 2 14°C ... 20°C
	Temp 1 5°C ... 16°C
- Cooling	Temp 3 27°C ... 35°C
	Temp 2 24°C ... 29°C
	Temp 1 15°C ... 26°C
Type of control	proportional and cyclic switching
Differential gap of temperature	± 0,25 K up to ± 0,4 K
Ambient temperature	-5°C up to +45°C
Protection class	II
Protection type	IP 20



<b>termo 500 EIB</b>	
Dimensions (mm)	72 x 50 x 73
Weight (g) approx.	170
Application	electromotive, proportional EIB-actuator for standard radiator valves
Supply voltage	from Bus
Connection	via 2-wired connecting line
Bus coupler	Integrated (Bus Interface Module BIM)
Power consumption	< 240 mW (< 12 mA at 20 V DC)
Communication items	EIS 6 (target value, actual value) 8 Bit, EIS 1 (mandatory setting), 1 Bit, non EIS (state), 8 Bit
Integrated functions	target value after starting (parametrisable) automatic synchronisation of actuation (adjustment at 0%) automatic flushing of valve (parametrisable) mandatory setting e.g. antifreeze (parametrisable)
Addressing	button and LED behind removable blind
Manipulating force	> 80 N
Manipulating time	approx. 120 s/mm
Max. pass (actuator)	4 mm
Standard pass (valve)	2,56 mm
Protection type	IP 21
Protection class	III
Stability of noise voltage	EN 50082-2, EN 50081-1
Connecting line	J-Y (ST)Y 1x2x0,6 firmly assembled, length: 1m (other lengths available on request)
Housing	ABS plastics white, similar RAL 9003, blind blue (other colour combinations on request)
Operating temperature	-5°C ... +45°C
Storing temperature	-25°C ... +70°C



## EIB system appliances

	Type / equipment	EAN-Code	Ord.-No.
	 <ul style="list-style-type: none"> <li>- 640 mA including coupler. Generates and controls the EIB system voltage.</li> <li>- Every bus line requires at least one power supply.</li> <li>- Additional power output (uncoupled) via bus clamp.</li> </ul> <p><b>Power supply EIB</b></p> <p>230 V AC +10%/-15%, 50-60 Hz 29 V DC + 1 V/- 1 V, Fan-out current: 640 mA</p>	4010940	
	 <p>Decouples the bus line from the power supply, facilitates the clearing of the bus line and the backspacing of the BUS participants.</p> <p><b>Coupler EIB</b></p>	002169	17.08.0001.1
	 <p>To connect the bus line with the DIN-rail</p> <p><b>Dual connector EIB</b></p>	002183	17.08.0003.1
		013035	17.08.0016.1

**Technical data**

<b>Power supply EIB</b>	
Dimensions (mm)	45 x 126 x 55
Switchboard panel (mm)	46 x 128
Weight (g) approx.	460
Type	system component
Supply voltage	network connection
Connection	plug terminal without screws
Primary voltage	230 V AC
Secondary voltage	29 V DC
Fan-out current	640 mA
Ambient temperature	-5°C ... +45°C

<b>Coupler EIB</b>	
Dimensions (mm)	45 x 35 x 55
Switchboard panel (mm)	46 x 36
Weight (g) approx.	103
Type	system component
Supply voltage	from bus
Connection	via data interface
Ambient temperature	-5°C ... +45°C

<b>Connector EIB</b>	
Dimensions (mm)	45 x 17,5 x 68
Switchboard panel (mm)	46 x 18
Weight (g) approx.	41
Mounting depth (mm)	68

## EIB auxiliary clocks / Accessories

- Analog EIB auxiliary clocks for indoors.
- Reception of the time telegramme via master clock.
- No parametric setting required.
- Integrated bus coupler

Type / equipment	EAN-Code	Ord.-No.
	4010940	

- Plastic housing, grey/white RAL 9002
- with acrylic glass cover



### ticlo 632.1 EIB

Ø 30 cm/Circular with number	029814	17.08.0051.1
------------------------------	--------	--------------

### ticlo 632.0 EIB

Ø 30 cm/Circular with line	029821	17.08.0052.1
----------------------------	--------	--------------

### ticlo 642.1 EIB

Ø 40 cm/Circular with number	029838	17.08.0053.1
------------------------------	--------	--------------

### ticlo 642.0 EIB

Ø 40 cm/Circular with line	029845	17.08.0054.1
----------------------------	--------	--------------

### EIB clock for indoor and outdoor application (e.g. sports facilities)

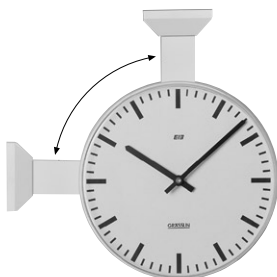
- Housing with aluminum profile, naturally anodized, with ESG safety
- Glass and protection against ball shots according to DIN 18032, part 3



### ticlo 851.1 EIB

□ 50 cm/square/norm line	028015	17.08.0048.1
--------------------------	--------	--------------

Assembly set for double-sided clocks (consisting of assembly frame for mechanical connection of 2 identical slave clocks and the related bracket for wall or ceiling mounting).



### ticlo 632.5 EIB

greywhite RAL 9002, length 10 cm 90° rotation: possibility of suspended installation for clock Ø 30 cm	029920	17.08.0055.1
---	--------	--------------

### ticlo 642.5 EIB

greywhite RAL 9002, length 10 cm 90° rotation: possibility of suspended installation for clock Ø 40 cm	029937	17.08.0056.1
---	--------	--------------









## Universal time switches / Time switch modules

Overview:	Mechanical universal time switches <b>tactic</b> / Time switch modules <b>FM/1</b>	56
	Digital universal time switches <b>tactic plus</b> / Time switch modules <b>FMD</b>	57
Ordering data, technical data:	Mechanical universal time switches <b>tactic</b>	58 - 59
	Digital universal time switches <b>tactic plus</b>	60 - 61
	Mechanical time switch modules <b>FM/1</b>	62 - 63
	Digital time switch modules <b>FMD</b>	64 - 65
Accessories:	Universal time switches / Time switch modules	66

Overview mechanical universal time switches / time switch modules

	 		 		 		 	
	tactic 111.1	tactic 171.1	tactic 211.1	tactic 271.1	FM/1 STuZH	FM/1 SWuZH	FM/1 QRTuZH	FM/1 QRWuZH
	Universal time switch		Universal time switch		Time switch modul		Time switch modul	
<b>Channels</b>	1		1		1		1	
<b>Connection voltage</b> (Ord.-No.)								
220-240 V/50-60 Hz	01.80.0001.1	01.80.0002.1			01.76.0088.1	01.76.0089.1		
230 V AC/130 V DC			02.80.0001.1	02.80.0002.1			02.76.0075.1	02.76.0076.1
<b>Switching programs</b>	daily progr.	weekly progr.	daily progr.	weekly progr.	daily progr.	weekly progr.	daily progr.	weekly progr.
<b>Synchronous drive</b>	X				X			
<b>Quartz drive</b>			X				X	
<b>Programmable every ...</b>	15 min	2 h	15 min	2 h	15 min	2 h	15 min	2 h
<b>Manual switch</b> (Permanent ON / AUTO / OFF)	X		X		X		X	
<b>Clock face</b>	X		X		X		X	
<b>Running reserve</b>			150 h				150 h	
<b>Further technical information</b>	page 58		page 58		page 62		page 62	

## Overview digital universal time switches / time switch modules

	 tactic 371.1 plus		 tactic 372.1 plus		 tactic 571.1 plus		 tactic 572.1 plus	
	Universal time switch		Universal time switch		Time switch modul		Time switch modul	
<b>Channels</b>	1	2	1	2	1	2	1	2
<b>Connection voltage</b> (Ord.-No.)								
230 V/50-60 Hz	03.62.0001.1	03.62.0002.1	03.87.0001.1	03.87.0003.1	03.58.0017.1	03.58.0019.1	03.60.0001.1	03.60.0013.1
110-120 V/50-60 Hz			03.87.0004.1					
24 V AC/DC			03.87.0002.1					
12 V AC/DC			03.87.0006.1					
<b>Switching programs</b>	daily, weekly progr.		daily, weekly progr.		daily, weekly progr.		daily, weekly progr.	
<b>Text programming</b>			X				X	
<b>Weekday blocks</b>	single days or week day block formation predetermined		free		single days or week day block formation predetermined		free	
<b>Memory spaces</b>	20		50		20		50	
<b>Permanent ON/OFF</b>	X		X		X		X	
<b>AM/PM Switch</b>	X		X		X		X	
<b>Running reserve</b>	3 years		3 years		3 years		3 years	
<b>Autom. summer time / winter time changeover</b>	manual		automatic		manual		automatic	
<b>Further technical information</b>	page 60		S. 60		page 64		page 64	

Universal time switches  
Time switch modules

## Mechanical universal time switches

- Battery backup with quartz version
- Daily or weekly program
- Improved dust protection
- 1 Channel
- 16 A/250 V AC switching capacity
- Surface, flush and DIN-rail mounting

Universal time switches  
Time switch modules



	Voltage	EAN-Code	Ord.-No.
		4010940	

$\int$   $\frac{1 \times 16 (8) A}{250V \sim}$ 
I -  $\odot$  - 0
SYNCHRON

### tactic 111.1

24 h	220-240 V/50-60 Hz	003975	01.80.0001.1
------	--------------------	--------	--------------

### tactic 171.1

7 x 24 h	220-240 V/50-60 Hz	003982	01.80.0002.1
----------	--------------------	--------	--------------



$\int$   $\frac{1 \times 16 (8) A}{250V \sim}$ 
I -  $\odot$  - 0
QUARTZ
 $\frac{1}{T}$  ACCU 150 h

### tactic 211.1

24 h	230 V AC/130 V DC	004019	02.80.0001.1
------	-------------------	--------	--------------

### tactic 271.1

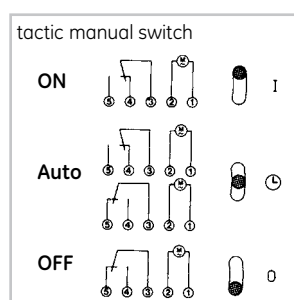
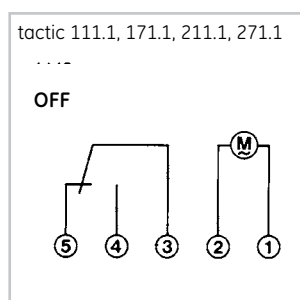
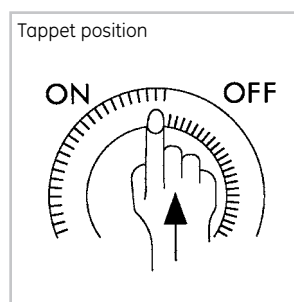
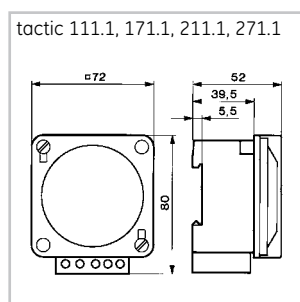
7 x 24 h	230 V AC/130 V DC	004026	02.80.0002.1
----------	-------------------	--------	--------------

Accessories see page 66

## Technical data

	tactic 111.1	tactic 171.1	tactic 211.1	tactic 271.1
Dimensions H x W x D (mm)	72 x 72 x 34,5		72 x 72 x 34,5	
Cut out (mm)	68 x 68		68 x 68	
Dimensions of front frame (mm)	72 x 72		72 x 72	
Fitting depth (mm)	39,5		39,5	
Weight (g) approx.	155		165	
Nominal voltage	220 - 240 V AC / 50-60 Hz		230 V AC / 130 V DC	
Power consumption	1 VA at 230 V AC		2 VA at 230 V AC	
Current output				
- Relay	1 changeover contact, potential-free		1 changeover contact, potential-free	
Switching current AC				
- Resistive load (VDE, IEC)	16 A/250 V AC		16 A/250 V AC	
- Resistive load (UL)	21 A/250 V AC		21 A/250 V AC	
- Inductive load cos. φ 0,6	8 A/250 V AC		8 A/250 V AC	
- Incandescent lamp load	1300 W		1300 W	
Minimum switching current AC	100 mA/20 V AC		100 mA/20 V AC	
Minimum switching current DC	100 mA/20 V DC		100 mA/20 V DC	
Battery backup	-		150 h	
Battery charge time	-		70 h	
Operation accuracy	synchronal to network		typ ± 1,5s/day at 20°C	
Ambient temperature	-20°C ... +55°C		-20°C ... +55°C	
Security level				
for fitting according to instructions	II		II	
Shortest switching time				
- Daily program	15 min		15 min	
- Weekly program	2 h		2 h	
Shortest switching interval				
- Daily program	15 min		15 min	
- Weekly program	2 h		2 h	
Automatic override	yes		yes	
Clock face	yes		yes	
Sealing	possible		possible	
According to	EN 60730-1 EN 60730-2-7		EN 60730-1 EN 60730-2-7	
Type of connection	flat DIN 6.3 mm Fitted socket (Accessories)		flat DIN 6.3 mm Fitted socket (Accessories)	

Dimensional drawings / circuit diagrams:



Digital universal time switches

- Easy programming (Menu-led or text programming)
- Running reserve 3 years
- Daily and weekly program
- Compatible fitting with mechanical universal time switches tactic
- Surface, flush and DIN-rail mounting



	Voltage	EAN-Code	Ord.-No.
		4010940	

MEMORY 20	± 1h	$\frac{1}{T}$ ACCU 3a	24 h 7 x 24 h		FIX ON/OFF
-----------	------	-----------------------	------------------	--	------------

Menu-led programming with flexible and fixed programs

tactic 371.1 plus

$\frac{1}{L}$ 1x16 (4) A 250V~	230 V/50-60 Hz	038007	03.62.0001.1
-----------------------------------	----------------	--------	--------------

tactic 372.1 plus

$\frac{1}{L}$ 2x16 (2,5) A 250V~	230 V/50-60 Hz	038014	03.62.0002.1
-------------------------------------	----------------	--------	--------------



MEMORY 50	± 1h AUTO	$\frac{1}{T}$ ACCU 3a	24 h 7 x 24 h		FIX ON/OFF
-----------	--------------	-----------------------	------------------	--	------------

Text programming

tactic 571.1 plus

$\frac{1}{L}$ 1x16 (8) A 250V~	230 V/50-60 Hz	038021	03.87.0001.1
	24 V AC/DC	038038	03.87.0002.1

tactic 572.1 plus

$\frac{1}{L}$ 2x16 (2,5) A 250V~	230 V/50-60 Hz	038045	03.87.0003.1
	110-120 V/50-60 Hz	038052	03.87.0004.1
	24 V AC/DC	038069	03.87.0005.1
	12 V AC/DC	038076	03.87.0006.1

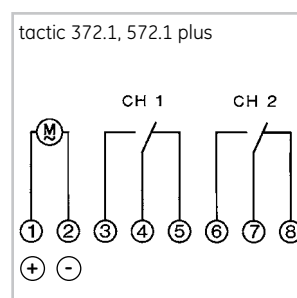
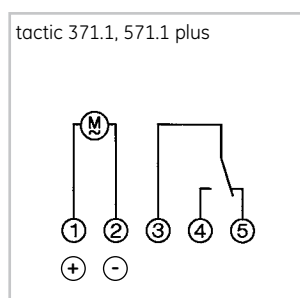
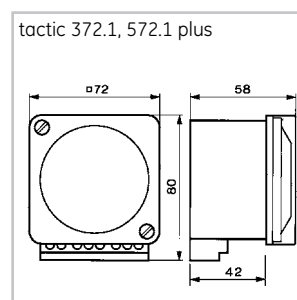
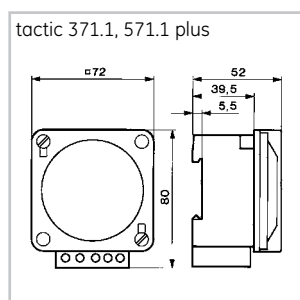
## Technical data

	tactic 371.1 plus	tactic 571.1 plus	tactic 372.1 plus	tactic 572.1 plus
Dimensions H x W x D (mm)	72 x 72 x 35	72 x 72 x 58	72 x 72 x 35	72 x 72 x 58
Cut out (mm)	68 x 68		68 x 68	
Fitting depth (mm)	20,5	42	20,5	42
Frame dimensions DIN 43700 (mm)	72 x 72		72 x 72	
Weight (g) approx.	135	220	135	220
Nominal voltage	230 V AC/50-60 Hz		230 V AC/50-60 Hz	
	-	-	-	110-120VAC/50-60Hz
	-	24 V AC/DC	-	24 V AC/DC
	-	-	-	12 V DC
Power consumption	4,4 VA		4,4 VA	
Current output				
- Relay	1 changeover contact, potential-free		2 changeover contacts, potential-free	
Switching current AC				
- Resistive load (VDE, IEC)	16 A /250 V AC		16 A /250 V AC	
- Inductive load cos. φ 0,6	4 A /250 V AC	8 A /250 V AC	2,5 A /250 V AC	
- Incandescent lamp load	1000 W		500 W	
Switching current DC				
	10 A/24 V DC		13 A/24 V DC	
	3 A/60 V DC		0,7 A/60 V DC	
	1 A/100 V DC		0,3 A/100 V DC	
Minimum switching current AC	100 mA/20 V AC		100 mA/20 V AC	
Minimum switching current DC	100 mA/20 V DC		100 mA/20 V DC	
Battery backup *)	3 years from factory at 20°C		3 years from factory at 20°C	
Operation accuracy	type ±2,5 s/day at 20°C		type ±2,5 s/day at 20°C	
Ambient temperature **)	-25°C **) ... +55°C		-25°C **) ... +55°C	
Shortest switching time	1 min		1 min	
Shortest switching interval	1 min		1 min	
Number of channels	1		2	
Anzahl der Speicherplätze	20	50	20	50
Override	yes		yes	
Display of output status	yes		yes	
Switch-over to daylight saving time	button ±1 h	automatic	button ±1 h	automatic
According to	EN 60730-1 EN 60730-2-7		EN 60730-1 EN 60730-2-7	

\*) non rechargeable

\*\*) -25°C at limited display function

Dimensional drawings /  
circuit diagrams:



Mechanical time switch modules

- Battery backup with quartz version
- Daily or weekly program
- Improved dust protection
- 1 Channel
- 16 A/250 V AC switching capacity
- Compatible fitting with digital time switch modules FMD
- Only for fitted mounting



$\frac{1}{L} \frac{1 \times 16 (8) A}{250V \sim}$	I - $\odot$ - 0	SYNCHRON
---	-----------------	----------

FM/1 STuZH

	Voltage	EAN-Code	Ord.-No.
24 h	220-240 V/50-60 Hz	000264	01.76.0088.1

FM/1 SWuZH

7 x 24 h	220-240 V/50-60 Hz	000271	01.76.0089.1
----------	--------------------	--------	--------------



$\frac{1}{L} \frac{1 \times 16 (8) A}{250V \sim}$	I - $\odot$ - 0	QUARTZ	$\frac{1}{T} \frac{ACCU}{150 h}$
---	-----------------	--------	----------------------------------

FM/1 QRTuZH

24 h	230 V AC/130 V DC	000592	02.76.0075.1
------	-------------------	--------	--------------

FM/1 QRWuZH

7 x 24 h	230 V AC/130 V DC	000608	02.76.0076.1
----------	-------------------	--------	--------------

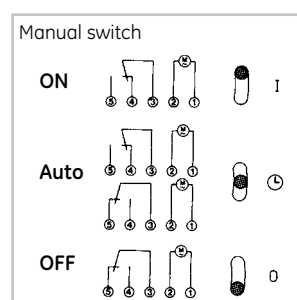
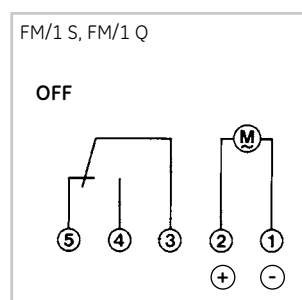
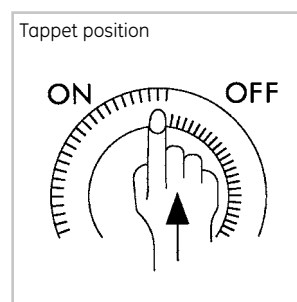
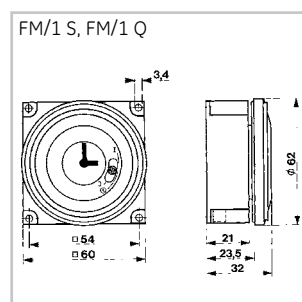
Universal time switches  
Time switch modules

Accessories see page 66

## Technical data

	FM/1 S	FM/1 Q
Dimensions H x W x D (mm)	60 x 60 x 32	60 x 60 x 32
Cut out (mm)	Ø 64	Ø 64
Fitting depth (mm)	21	21
Weight (g) approx.	75	75
Nominal voltage	220-240 V AC/50-60 Hz	230V AC/130 V DC
Power consumption	1 VA at 220 V AC	2 VA at 220 V AC
Current output		
- Relay	1 changeover contact, potential-free	1 changeover contact, potential-free
Switching current AC		
- Resistive load (VDE, IEC)	16 A/250 V AC	16 A/250 V AC
- Resistive load (UL)	21 A/250 V AC	21 A/250 V AC
- Inductive load cos. φ 0,6	8 A/250 V AC	8 A/250 V AC
- Incandescent lamp load	1350 W	1350 W
Switching current DC	-	-
Minimum switching current AC	100 mA/20 V AC	100 mA/20 V AC
Minimum switching current DC	100 mA/20 V DC	100 mA/20 V DC </td
Battery backup	-	150 h
Battery charge time	-	70 h
Operation accuracy	synchronal to network	typ. ± 1,5 s/day at +20°C
Ambient temperature	-40°C ... +85°C	-20°C ... +55°C
Security level		
for fitting according to instructions	II	II
Shortest switching time		
- Daily program	15 min	15 min
- Weekly program	2 h	2 h
Shortest switching interval		
- Daily program	15 min	15 min
- Weekly program	2 h	2 h
Automatic override	yes	yes
Clock face	yes	yes
According to	EN 60730-1 EN 60730-2-7	EN 60730-1 EN 60730-2-7
Type of connection	flat DIN 6.3 mm	flat DIN 6.3 mm

Dimensional drawings /  
circuit diagrams:



Digital time switch modules

- Easy programming (Menu-led or text programming)
- Running reserve 3 years
- Daily and weekly program
- Compatible fitting with mechanical time switch modules FM
- Only for fitted mounting



Voltage	EAN-Code	Ord.-No.
	4010940	

MEMORY 20
± 1h
ACCU 3a
24 h  
7 x 24 h
FIX ON/OFF

Menu-led programming with flexible and fixed programs

FMD 120

1x16 (4) A 250V~	230 V/50-60 Hz	037949	03.58.0017.1
---------------------	----------------	--------	--------------

FMD 220

2x5 (1) A 250V~	230 V/50-60 Hz	037963	03.58.0019.1
--------------------	----------------	--------	--------------



MEMORY 50
± 1h  
AUTO
ACCU 3a
24 h  
7 x 24 h
FIX ON/OFF

Text programming

FMD 150

1x16 (8) A 250V~	230 V/50-60 Hz	037604	03.60.0001.1
---------------------	----------------	--------	--------------

FMD 250

2x5 (1) A 250V~	230 V/50-60 Hz	037994	03.60.0013.1
--------------------	----------------	--------	--------------

Universal time switches  
Time switch modules

Accessories see page 66

## Technical data

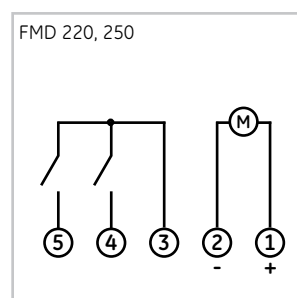
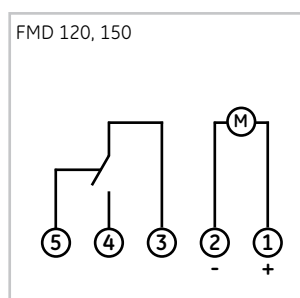
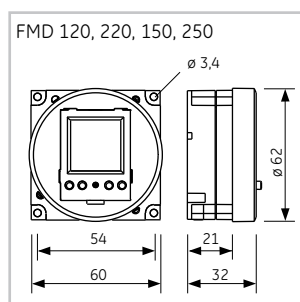
	FMD 120	FMD 220	FMD 150	FMD 250
	Relay		Relay	
Dimensions H x W x D (mm)	60 x 60 x 32		60 x 60 x 32	
Cut out (mm)	Ø 64		Ø 64	
Fitting depth (mm)	21		21	
Weight (g) approx.	90		90	
Nominal voltage	230 V AC/50-60 Hz 110-120 V AC/50-60 Hz 24 V AC/DC 12 V DC		230 V AC/50-60 Hz 110-120 V AC/50-60 Hz	
Power consumption	4,4 VA		4,4 VA	
Current consumption without load	0,015 mA		0,015 mA	
Current output	1 CO	2 NO	1 CO	2 NO
- Relay	potential-free		potential-free	
Switching current AC				
- Resistive load (VDE, IEC)	16 A /250 V AC	5 A /250 V AC	16 A /250 V AC	5 A /250 V AC
- Resistive load (UL)	16 A /250 V AC	-	16 A /250 V AC	-
- Inductive load cos. φ 0,6	4 A /250 V AC	1 A /250 V AC	8 A /250 V AC	1 A /250 V AC
- Incandescent lamp load	1000 W	-	1000 W	-
Switching current DC	10 A/24 V DC 3 A/60 V DC 1 A/100 V DC	2 A/24 V DC 0,3 A/60 V DC 0,1 A/100 V DC	10 A/24 V DC 3 A/60 V DC 1 A/100 V DC	2 A/24 V DC 0,3 A/60 V DC 0,1 A/100 V DC
Minimum switching current AC	100 mA / 20 V AC		100 mA / 20 V AC	
Minimum switching current DC	100 mA / 20 V DC		100 mA / 20 V DC	
Battery backup *)	3 years from factory at 20°C		3 years from factory at 20°C	
Operation accuracy	type ±2,5 s/day at 20°C		type ±2,5 s/day at 20°C	
Ambient temperature **)	-10°C ... +55°C		-10°C ... +55°C	
Shortest switching time	1 min		1 min	
Shortest switching interval	1 min		1 min	
Number of channels	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>
Memory spaces	20		50	
Override	yes		yes	
Display of output status	yes		yes	
Switch-over to daylight saving time	button ±1 h		button ±1 h	
Type of connection	DIN blade terminal 6.3 mm ***)		DIN blade terminal 6.3 mm ***)	
According to	EN 60730-1 EN 60730-2-7		EN 60730-1 EN 60730-2-7	

\*) non rechargeable

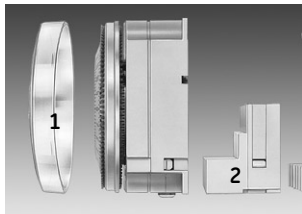
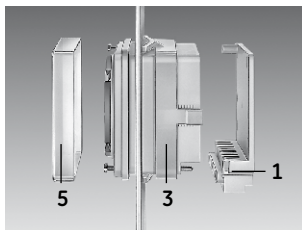
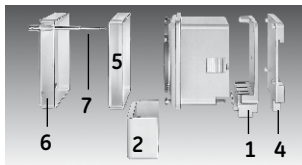
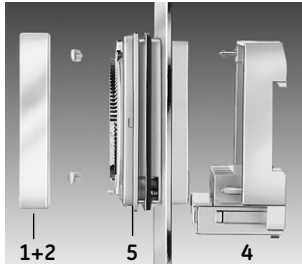
\*\*) -25°C at limited display function

\*\*\*) Further types of connection on request

Dimensional drawings /  
circuit diagrams:



Universal time switches / time switch modules - Accessories



	L = Scope of delivery EZ = Spare parts/Accessories	EAN-Code 4010940	Ord.-No.
--	---	---------------------	----------

for  
tactic 211.1  
tactic 111.1  
tactic 271.1  
tactic 171.1  
tactic 571.1

1 - Glass	L / E Z	002787	46.13.0001.4
2 - Sealing glass	- / E Z	003210	46.13.0002.4
3 - Terminal cover	L / E Z	002817	01.78.0004.6
4 - Base	L / E Z	003340	01.78.0002.2
5 - Seal	- / - Z	002848	01.45.0017.6
6 - Flush-mounting socket (For front panel mounting if the sheet thickness is > 1.5 mm)	- / - Z	002831	01.79.0002.2

for  
tactic 371.1 plus  
tactic 372.1 plus  
tactic 571.1 plus  
tactic 572.1 plus  
tactic 572.1

1 - Base	L / E Z	002718	03.52.0003.2
2 - Terminal cover (2-channel)	L / E Z	002749	01.96.0043.6
3 - Frame	L / E Z	002763	44.27.0001.4
4 - Mounting plate for rail	- / E Z	002770	01.46.0334.2
5 - Glass (tactic 3xx plus, 5xx plus)	L / E Z	037567	01.46.0082.6
Glass (tactic 572.1)	L / E Z	002787	46.13.0001.4
6 - Sealing glass	- / E Z	003210	46.13.0002.4
7 - Sealing screw	- / E Z	013769	16.10.0011.8

for  
FM/1 Q  
FM/1 S

1 - Glass	- / - Z	011215	01.76.0054.6
2 - Flush-mounting socket	- / - Z	002831	01.79.0002.2





Room thermostats





### Room thermostat clocks

Overview:	<b>famoso</b>	70 - 71
Ordering data, technical data:	<b>famoso</b>	72 - 77

### Thermostats





Overview:	<b>thermio</b>	70 - 71
Ordering data, technical data:	<b>thermio</b>	78 - 79





Overview room thermostat clocks

				
	famoso 1000 rf T	famoso 601 rf T famoso 651 rf T	famoso 500 famoso 550	famoso 505 famoso 555
	Radio controlled room thermostat clock	Radio controlled room thermostat clock	Room thermostat clock wired connection	Room thermostat clock wired connection
Connection voltage (Ord.-No.)	Battery	04.51.0001.1	04.53.0002.1 04.53.0004.1	
	220-240 V/50-60 Hz		04.34.0001.1 04.34.0002.1	04.34.0005.1 04.34.0006.1
Switching programs	weekly program	daily program weekly program	daily program weekly program	daily program weekly program
Display	X			
Underfloor heating				X X
Further technical information	page 72	page 72	page 74	page 74

Overview Thermostats

Room thermostats

				
	thermio E	thermio 513	thermio 403	thermio 103
Controller	electronic	Bi-metal	Bi-metal	Bi-metal
Connection voltage (Ord.-No.)	24 V/50-60 Hz	04.46.0014.1		
	220-240 V/50-60 Hz		04.46.0001.1	04.46.0005.1 04.46.0006.1
Connection for time switch		X		X
digital temp. indicator (actual and desired temp.)	X			
Further technical information	page 78	page 78	page 78	page 78

				
famoso 800   famoso 850		famoso 1000	famoso 801	famoso 601
Room thermostat clock wired connection		Room thermostat clock wired connection	Room thermostat clock wired connection	Room thermostat clock wired connection
04.42.0007.1   04.42.0008.1		04.50.0001.1	04.42.0011.1	04.40.0008.1
daily program	weekly program	weekly program	daily program	daily program
X	X	X	X	
page 74		page 76	page 76	page 76

Radio controlled room thermostat clocks



- Transmission ensured by high quality 868 MHz
- Communication range of up to 30 meters
- Flat and attractive design
- Battery operation (Transmitter)



	Voltage	EAN-Code	Ord.-No.
		4010940	
4	MEMORY 56	2x MIGNON LR 6 • AA ALKALINE	1 2
7 x 24 h	1x5 (1) A / 250V~	+5°C / +35°C ELECTRON.	

famoso 1000 rf Set

consisting of:	Transmitter	2 x 1.5 V	032807	04.51.0002.1
	Receiver	230 V / 50-60 Hz		



famoso 1000 rfT

	Transmitter	2 x 1.5 V	030964	04.51.0001.1
--	-------------	-----------	--------	--------------



4	1x5 (1) A / 250V~	2x MIGNON LR 6 • AA ALKALINE	1 2	+5°C / +35°C ELECTRON.	
---	-------------------	------------------------------	-----	------------------------	--

famoso 601 rf Set

24 h	Transmitter	2 x 1.5 V	037437	04.53.0001.1
	Receiver	230 V / 50-60 Hz		

famoso 651 rf Set

7 x 24 h	Transmitter	2 x 1.5 V	037451	04.53.0003.1
	Receiver	230 V / 50-60 Hz		



famoso 601 rf T

24 h	Transmitter	2 x 1.5 V	037444	04.53.0002.1
------	-------------	-----------	--------	--------------

famoso 651 rf T

7 x 24 h	Transmitter	2 x 1.5 V	037468	04.53.0004.1
----------	-------------	-----------	--------	--------------



1x5 (1) A / 250V~	4
-------------------	---

For use with transmitter:  
famoso 1000 rfT 1ch, 601/651 rfT

RecUNO

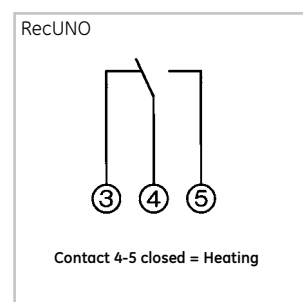
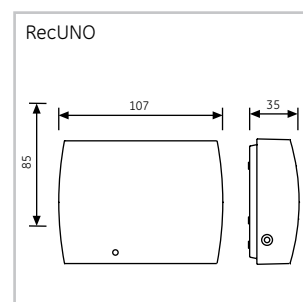
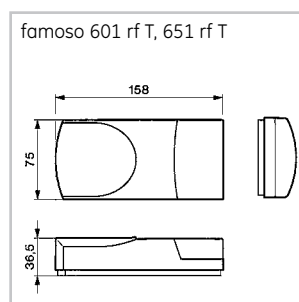
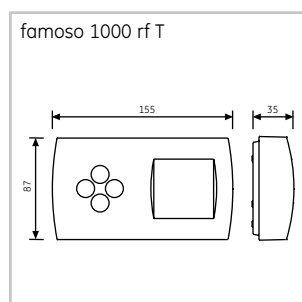
	Receiver	230V / 50-60Hz	031220	04.52.0001.1
--	----------	----------------	--------	--------------

## Technical data

	famoso 1000 rfT	famoso 601, 651 rfT
Dimensions H x W x D (mm)	87 x 155 x 35	158 x 75 x 36,4
Weight (g) approx.	185	250
Connection	potential-free	potential-free
Operating voltage	Battery, 2 x LR6 Alkaline	Battery, 2 x LR6 Alkaline
Running reserve at 20°C	Program memory	
Time accuracy at 25°C	± 2,5 s / day	± 2,5 s / day
Battery lifetime	1 year (dep. on switching frequency)	1 year (dep. on switching frequency)
Control range of day temperatures	+5°C ... +30°C	+5°C ... +32°C
Control range of night temperatures	+5°C ... +30°C	+5°C ... +32°C
Ambient temperature	-5°C ... +45°C	-5°C ... +45°C
Antifreeze	5°C	durch Einstellung auf 5°C
Differential gap of temperature	± 0,25 ... 0,4 K	± 0,25 ... 0,5 K
Controller	electronic, PID / 2 points	electronic, 2 points
Day program	0,5 h	15 min
Week program	0,5 h (programmable every 30min)	2 h (programmable every hour)
Operating modes	Day / Night / Party / Holiday / AUTO / Override	Day / Night / AUTO
Timer/ control	sign for heating	yes / -
Selector switch	Temp 1/2, Automatic, party and holidays	Temperature 1,2, „Automatic“
Assembling mode	wall mounting	wall mounting
Connection	wireless	wireless
Control period	5...30min	5...30min
Transmission frequency	868,3 MHz	868,3 MHz
Transmission power	corresp. LEPT/ERC/REC 70-03 E class 7a	corresp. LEPT/ERC/REC 70-03 E class 7a
Transmission range	approx. 30m, in buildings	approx. 30m, in buildings
Antenna	internal	internal
Coding	65536 Codes	65536 Codes
Power transmission	< 1mW	< 1mW
Radio state display	Symbol	
Protection class	II	II
Protection type	IP 20	IP 20
According to	EN 60730-1, EN 60730-2-7 EN 60730-2-9	EN 60730-1, EN 60730-2-7 EN 60730-2-9
Language instruction manual (more languages possible)	D, GB, F, I, NL	D, GB, F, I, NL




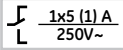
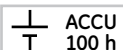


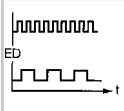



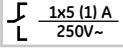
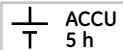
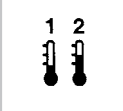

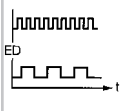


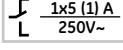
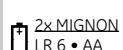

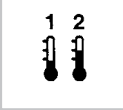

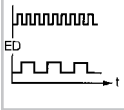


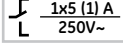
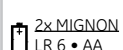

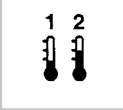

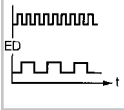


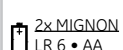

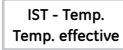
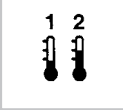

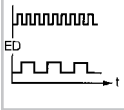


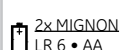

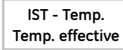
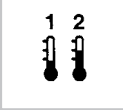

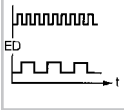
RecUno	
Dimensions H x W x D (mm)	87 x 108 x 35
Weight (g) approx.	113
Resistive load	5 A/250V (VDE, IEC), cos φ 1 (at temperature level up to 30°C)
Inductive load	1 A/250V cos φ 0,6 (at temperature level up to 30°C)
Minimum switching capacity DC	100mA bei 6V AC/DC
Operating voltage	220-240 V AC
Ambient temperature	-5°C ... +45°C
Antenna	intern
Radio state display	LED
Protection Class	II
Protection type	IP20

Dimensional drawings /  
circuit diagrams:



Room thermostat clocks wired connection

- Wired connection
- Flat and attractive design
- Time and temperature control accuracy

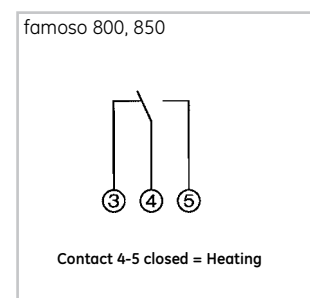
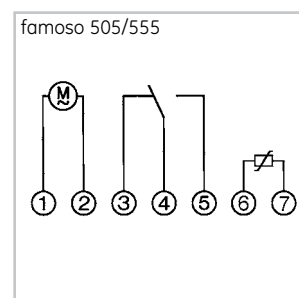
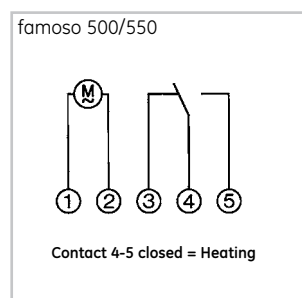
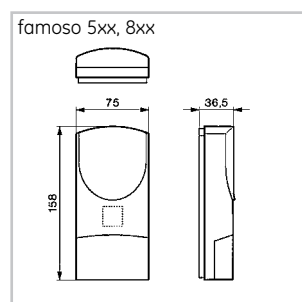
	Voltage	EAN-Code	Ord.-No.	
	      	4010940		
	<b>famoso 500</b>			
	24 h	230 V/50-60 Hz	020231	04.34.0001.1
	      			
	<b>famoso 550</b>			
	7 x 24 h	230 V/50-60 Hz	020224	04.34.0002.1
	      			
	<b>famoso 505</b>			
	24 h	230 V/50-60 Hz	027421	04.34.0005.1
	      			
	<b>famoso 555</b>			
	7 x 24 h	230 V/50-60 Hz	027438	04.34.0006.1
	      			
	<b>famoso 800</b>			
	24 h	2 x 1,5 V	020187	04.42.0007.1
	      			
	<b>famoso 850</b>			
	7 x 24 h	2 x 1,5 V	020194	04.42.0008.1

## Technical data

	famoso 500, 550	famoso 505, 555	famoso 800, 850
Dimensions (mm)	158 x 75 x 36,5	158 x 75 x 36,5	158 x 75 x 36,5
Weight (g) approx.	250	250	250
Connection	230 V/50-60 Hz	230 V/50-60 Hz	Battery, 2 x LR6 Alkaline
Switching capacity			
- Ohmic load	5 A/250 V~	5 A/250 V~	5 A/250 V~
- Inductive load cos φ 0,6	1 A/250 V~	1 A/250 V~	1 A/250 V~
- Minimal	1 mA at 24 V	1 mA at 24 V	1 mA at 24 V
Switching output	potential-free	potential-free	potential-free
Switch contacts	1 changeover contact	1 changeover contact	1 changeover contact
Ambient temperature	-5°C ... +45°C	-5°C ... +45°C	-5°C ... +45°C
Accuracy	± 2,5 s/day at +25°C	± 2,5 s/day at +25°C	± 2,5 s/day at +25°C
Running reserve	100 h	5 h	Battery
Charging time	-	-	-
Battery life time	-	-	approx. 1 year
Shortest switching time			
- Day program	15 min	15 min	15 min
- Week program	2h	2h	2h
Switching preselection	-	-	-
Switching state display			
- Timer/ control	yes/-	yes/-	yes/yes
- Selector switch	Temperature 1, 2, Automatic	Temperature 1, 2, Automatic	Temperature 1, 2, Automatic
Assembling mode	Construction with receptacle terminals on supportplate	Construction with receptacle terminals on supportplate	Construction with receptacle terminals on supportplate
Connection type	6 screw terminals 2,5 mm <sup>2</sup> each resp. 2 x 1,25 mm <sup>2</sup>	6 screw terminals 2,5 mm <sup>2</sup> each resp. 2 x 1,25 mm <sup>2</sup>	3 screw terminals 2,5 mm <sup>2</sup> each resp. 2 x 1,25 mm <sup>2</sup>
Control range of day temperatures	+5°C ... +32°C	+5°C ... +32°C	+5°C ... +32°C
Control range of night temperatures	-	-	-
Antifreeze	by setting to +5°C	by setting to +5°C	by setting to +5°C
Differential gap of temperature	± 0,25 ... 0,5 K*	± 0,25 ... 0,5 K*	± 0,25 ... 0,4 K*
Controller	elektronic	elektronic	digital
Protection class	II	II	II
Protection type	IP 20	IP 20	IP 20


\* higher deviations are possible depending on the heating system and the heated room

Dimensional drawings / circuit diagrams:




Room thermostat clocks wired connection

- Wired connection
- Flat and attractive design
- Time and temperature control accuracy





	Voltage	EAN-Code	Ord.-No.
		4010940	

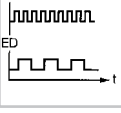
2 

$\frac{1 \times 5 (1) A}{250V \sim}$

2x MIGNON  
LR 6 • AA  
ALKALINE


1 2  



+5°C  +35°C  
ELECTRON.



**famoso 601**


7 x 24 h	2 x 1,5 V	022709	04.40.0008.1
----------	-----------	--------	--------------




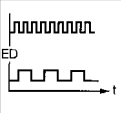
2 

$\frac{1 \times 5 (1) A}{250V \sim}$

2x MIGNON  
LR 6 • AA  
ALKALINE


1 2  



+5°C  +35°C  
ELECTRON.



**famoso 801**


24 h	2 x 1,5 V	022716	04.42.0011.1
------	-----------	--------	--------------




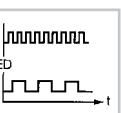
2 

$\frac{1 \times 5 (1) A}{250V \sim}$

2x MIGNON  
LR 6 • AA  
ALKALINE


1 2  


+5°C  +35°C  
ELECTRON.









- Standard program individually adjustable  
- Holiday program up to 99 days







	2 x 1,5 V	030957	04.50.0001.1
--	-----------	--------	--------------



Electrothermic actuator, actuator housing including position indicator, Changeover for ON/OFF without power supply – **adapter set for**

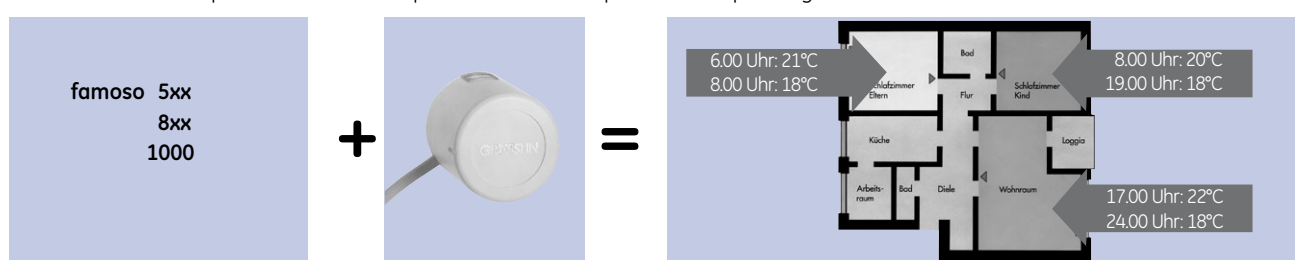
Valve type	Logo	Order-No. Set (à 3 adapters)
Oventrop M 30x1.0 Fine-pitch thread		10.01.0002.1
Danfoss RA 2000		17.13.0002.1
Danfoss RAV		17.13.0009.1
Vaillant		17.13.0010.1
VELTA-Distribution panel		17.13.0007.1
Giacomini		17.13.0012.1

**Actuator without adapter to be assembled with following valve**

Heimeier	
Oventrop M 30x1.5	
Comap M 30x1.5	
Honeywell Brauckmann	
Kermi Valve heating unit	
Böhmisch distributor	

	230 V / 50-60 Hz	012861	10.01.0001.1
--	------------------	--------	--------------

Further combination possibilities: The components have to be purchased separately!

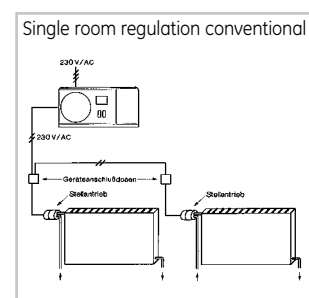
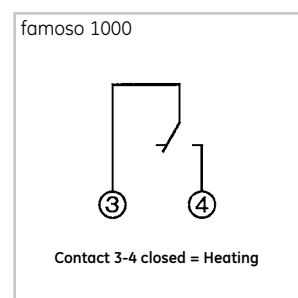
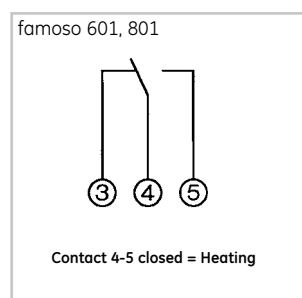
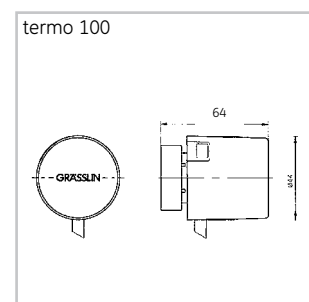
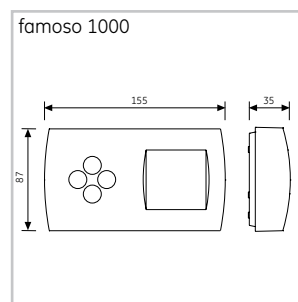
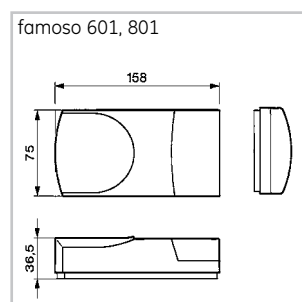


## Technical data

	famoso 601, 801	famoso 1000	termo 100
Dimensions (mm)	158 x 75 x 36,5	87 x 155 x 35	
Weight (g) approx.	250	185	
Connection	Battery 2 x LR6 Alkaline	Battery, 2 x LR6 Alkaline	Power supply 230 V AC 50/60 Hz
Switching capacity			Power consumption
- Ohmic load	5 A/250 V~	5 A/250 V~	starting power 58 VA
- Inductive load cos φ 0,6	1 A/250 V~	1 A/250 V~	starting current 230 mA
- Minimal	1 mA at 24 V	100 mA at 6 V AC/DC	operation 2,5 W
Switching output	potential-free	potential-free	Range of functional temperature -5°C ... +50°C
Switch contacts	1 changeover contact	1 NO opens with raising temperature	Range of stocking temperature -20°C ... +70°C
Ambient temperature	-5°C ... +45°C	-5°C ... +45°C	Operating time 3 min
Accuracy	± 2,5 s/day at +25°C	± 2,5 s/day at +25°C	Adjustment travel deviation 3 mm
Running reserve	Battery	Program memory	Adjustment travel compression 105 N
Charging time	-	-	Protection type IP 42
Battery life time	approx. 1 year	approx. 1 year	Protection class II
Shortest switching time			Adaptor connecting nut M 30x1.5, nickel-plated
- Day program	15 min	0,5 h	Connecting line 2 x 0,5 mm <sup>2</sup> , 0,8 m long
- Week program	2h	0,5 h programmable every 30 min	Factory setting reversible to OFF / ON
Switching preselection	-	yes	Colour RAL 9010
Switching state display			
- Timer/ control	yes/yes	sign for heating operating mode	
- Selector switch	Temperature 1, 2, Automatic		
Assembling mode	Construction with receptacle terminals on supportplate	Construction with receptacle terminals on supportplate	
Connection type	3 screw terminals 2,5 mm <sup>2</sup> each resp. 2 x 1,25 mm <sup>2</sup>	2 screw terminals 2,5 mm <sup>2</sup> each	
Control range of day temperatures	+5°C ... +32°C	+5°C ... +30°C	
Control range of night temperatures	-	+5°C ... +30°C	
Antifreeze	by setting to +5°C	+5°C	
Differential gap of temperature	± 0,25 ... 0,4 K*	± 0,25 ... 0,4 K*	
Controller	digital	digital	
Protection class	II	II	
Protection type	IP 20	IP 20	

\* higher deviations are possible depending on the heating system and the heated room

Dimensional drawings / circuit diagrams:



**Thermostats**



- Electronic control with digital temperature indicator (actual and desired temp.), with power steering
- No battery required,
- Surface-mounting

**thermio E**

Voltage	EAN-Code	Ord.-No.
24 V/50-60 Hz	4010940	



- Bi-metal controller / Rotary knob for temperature adjustment / Manual switch for night-time reduction
- Connection for time switch (night-time reduction)
- Thermic feedback
- Surface-mounting

**thermio 513**

Voltage	EAN-Code	Ord.-No.
24 V/50-60 Hz	033231	04.46.0014.1



- Bi-metal controller / Rotary knob for temperature adjustment / Manual switch for heating ON/OFF
- Thermic feedback
- Surface-mounting

**thermio 403**

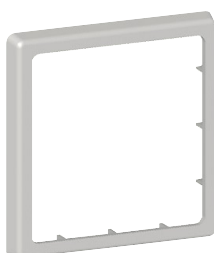
Voltage	EAN-Code	Ord.-No.
230 V/50-60 Hz	019167	04.46.0001.1



- Bi-metal controller / Rotary knob for temperature adjustment
- Connection for time switch (night-time reduction)
- Thermic feedback
- Surface-mounting

**thermio 103**

Voltage	EAN-Code	Ord.-No.
230 V/50-60 Hz	019464	04.46.0006.1



- Fitted for all thermostats thermio
- 80,5 x 80,5 mm (5 mm thick)

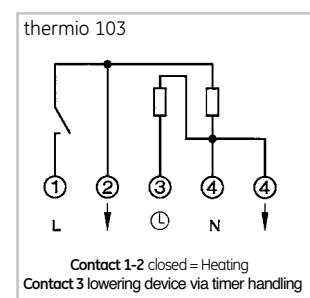
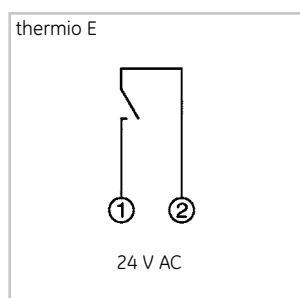
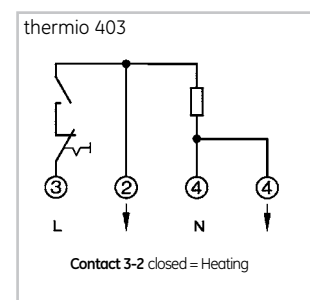
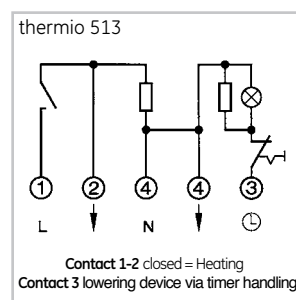
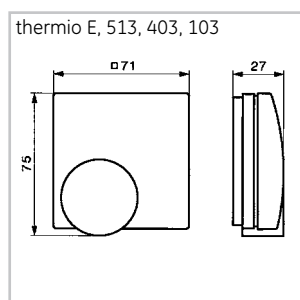
**Frames**

EAN-Code	Ord.-No.
035044	04.46.0038.6

## Technical data

	thermio E	thermio 513	thermio 403	thermio 103
Dimensions (mm)	75 x 71 x 27	75 x 71 x 27	75 x 71 x 27	
Weight (g) approx.	60	70	90	60
Connection	2-wire	3-wire and 4-wire	2-wire or 3-wire	
Power consumption	100 mW	approx. 200 mW	approx. 200 mW	
Switching capacity				
- Ohmic load		10 A/250 V~	10 A/250 V~	
- Inductive load $\cos \varphi 0,6$		4 A/250 V~	4 A/250 V~	
- minimal	20 mA /24 V-	0,1 A/230 V-	0,1 A/230 V-	
Switching output	opens with raising temperature	opens with raising temperature	opens with raising temperature	
Switch contacts	-	Ag Ni	Ag Ni	
Ambient temperature	T 30	T 30	T 30	
Switching state display	sign of flame	symbol	symbol 0-1	-
- Control	-	LED green	-	-
- Selector switch	-	night lowering device ON/OFF	heating ON/OFF	-
Assembling mode	wall mounting	wall mounting	wall mounting	
Connection type	screw terminal with wire protection	screw terminal with wire protection	screw terminal with wire protection	
Control range of day temperatures	+5°C ... +30°C	+5°C ... +30°C	+5°C ... +30°C	
Night lowering device	-	approx. 4 K	approx. 4 K	-
Antifreeze	-	adjustable by turning knob catch	adjustable by turning knob catch	
Differential gap of temperature	approx. 0,5 K	approx. 0,5 K	approx. 0,5 K	
Refeeding		thermic	thermic	
Stacking temperature	-20°C ... +70°C	-20°C ... +70°C	-20°C ... +70°C	
Protection class	II after accordant installation	II after accordant installation	II after accordant installation	
Protection type	IP 20	IP 20	IP 20	
Fault clearance of sparks	acc. to EN 55014	acc. to EN 55014	acc. to EN 55014	

Dimensional drawings /  
circuit diagrams:





## Plug-in time switches

Overview:	<b>topica / Tip</b>	82 - 83
Ordering data, technical data:	Plug-in time switches <b>topica / Tip</b>	84 - 87
	Automatic fish feeder <b>Rondomatic</b>	86 - 87

## Tariff time switches



Ordering data, technical data:	<b>tasu</b>	88 - 89
--------------------------------	-------------	---------

## Hour meters

Ordering data, technical data:	<b>taxxo</b>	90 - 91
Accessories:	<b>taxxo</b>	92

Overview plug-in time switches

				
	topica 200 S	topica 400 S	topica 450 S	topica 410 S
Order No.	16.25.0008.1	16.26.0008.1	16.40.0001.1	16.27.0001.1
Switching programs	daily program	daily progr.	weekly progr.	daily program
Display		Clock face		Clock face
Memory spaces				20
Programmable every ...	15 min	15 min	2 h	15 min
Runnig reserve				150 h
Override				X
Random switching				X
Weekday blocks				X
Further technical information	page 84	page 84		page 84

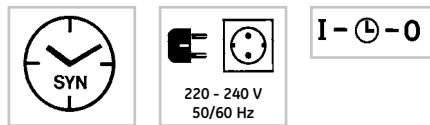
	
<b>tip 100 S</b>	<b>topica digi</b>
16.30.0001.1	16.14.0001.1
<b>daily program</b>	<b>daily, weekly program</b>
	<b>digital</b>
	<b>40</b>
<b>15 min</b>	<b>1 min</b>
	<b>2500 h</b>
	<b>X</b>
	<b>X</b>
	<b>X</b>
<b>page 86</b>	<b>page 86</b>

Plug-in time switches



Plug-in & tariff time switches, Hour meters

	Voltage	EAN-Code 4010940	Ord.-No.
--	---------	---------------------	----------



topica 200 S

24 h	220-240 V/50-60 Hz	002428	16.25.0008.1
------	--------------------	--------	--------------

topica 400 S

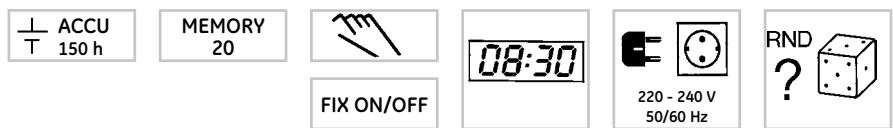
24 h	Clock face	220-240 V/50-60 Hz	002435	16.26.0008.1
------	------------	--------------------	--------	--------------

topica 450 S

7 x 24 h	Clock face	220-240 V/50-60 Hz	003906	16.40.0001.1
----------	------------	--------------------	--------	--------------

topica 410 S

24 h	IP54	220-240 V/50-60 Hz	016241	16.27.0001.1
------	------	--------------------	--------	--------------



Random function to simulate presence when you are not home. The lights are being turned on and off as programmed, however with chronological delay.

topica 500

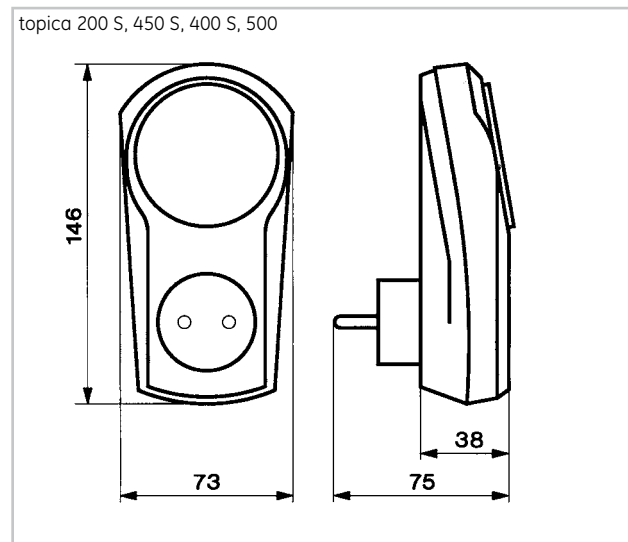
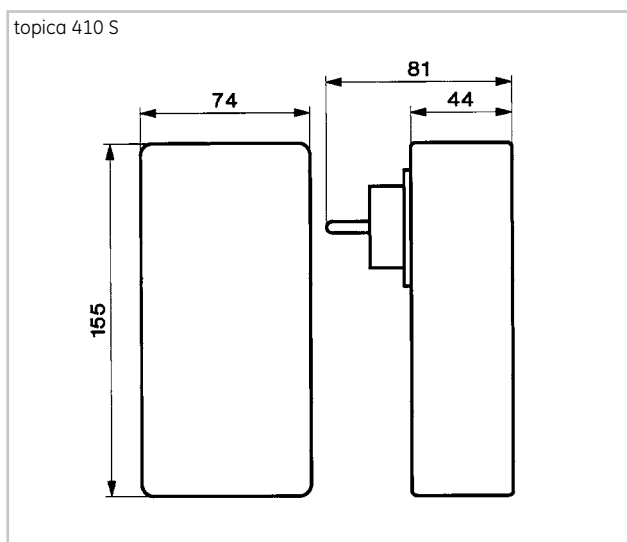
7 x 24 h	220-240 V/50-60 Hz	012328	16.13.0001.1
----------	--------------------	--------	--------------

Accessory for: topica 200 S  
topica 450 S  
topica 400 S

Glass		011215	01.76.0054.6
-------	--	--------	--------------

## Technical data

	topica 200 S	topica 450 S, 400S, 410 S	topica 500
Connection	220-240 V/50-60 Hz	220-240 V/50-60 Hz	220-240 V/50-60 Hz
Switching capacity			
- Ohmic load	16 A/250 V~ μ	16 A/250 V~ μ	16 A/250 V~ μ
- Inductive load	8 A/250 V~ μ	8 A/250 V~ μ	2,5 A/250 V~ μ
Ambient temperature			
- Continuous operating	-10°C ... +55°C	-10°C ... +55°C	-10°C ... +45°C
- Short time rating	-10°C ... +55°C	-10°C ... +55°C	-10°C ... +55°C
Running reserve	-	-	150 h at +20°C
Charging time	-	-	140 h
Memory spaces	-	-	20
Shortest switching time	15 min	15 min (400 S, 410 S) 2 h (450 S)	1 min
Programmable	each 15 min	each 15 min (400 S, 410 S) each 2 h (450 S)	each minute
Display	-	clock hands	LCD
Manual switch	yes	yes	yes
Run display	-	yes	yes
Switching state display	-	yes	yes
Special functions	-	-	fixed weekday block formation
Random generator	-	-	retards the switching command from 1-45 minutes
Protection type	-	IP54 (410 S)	-



Plug-in & tariff time switches, Hour meters

Plug-in time switches / Automatic fish feeder

	Voltage	EAN-Code	Ord.-No.
		4010940	



tip 100 S

24 h	220-240 V/50-60 Hz	031992	16.30.0001.1
------	--------------------	--------	--------------



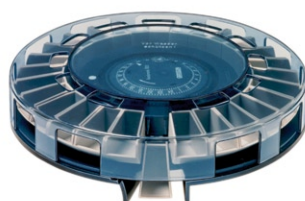
MEMORY 40

RND ?

Countdown

topica digi

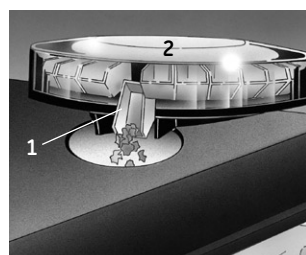
7 x 24 h	220-240 V/50-60 Hz	034696	16.14.0001.1
----------	--------------------	--------	--------------



Automatic fish feeder

Rndomatic 400

28 x 24 h	230 V/50-60 Hz	003364	16.58.0001.1
-----------	----------------	--------	--------------



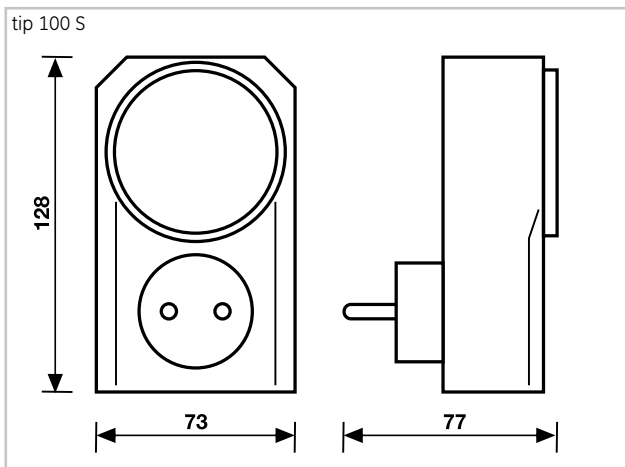
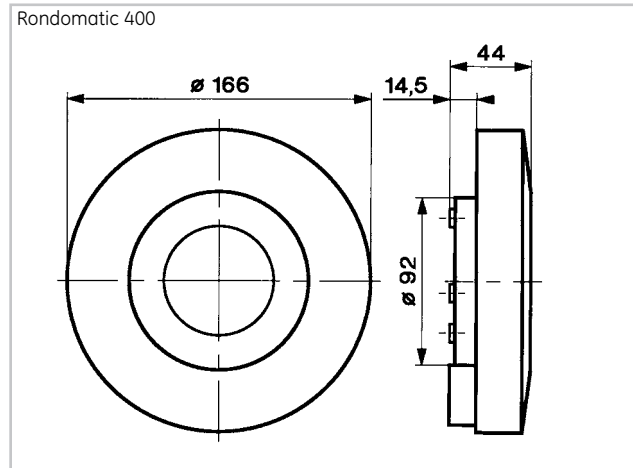
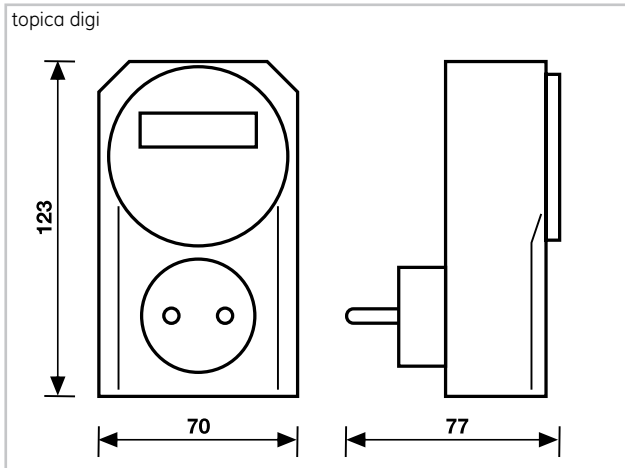
Accessories for: Rondomatic

(L=Scope of delivery, EZ=Spare parts/Accessories)

1 - Food container	L / E Z	017316	85.21.0002.4
2 - Cover glass	L / E Z	017323	85.13.0001.3
Plug-in riders	L / E Z	024079	85.15.0006.4
Attachment bracket	L / E Z	024086	16.58.0016.6
Assembly kit	- / - Z	024093	16.58.0004.2

### Technical data

	tip 100 S	topica digi	Rondomatic 400
Connection	220-240 V/50-60 Hz	220-240 V/50-60 Hz	Connection 230 V/50 Hz
Switching capacity			Operating voltage 24 V/50 Hz
- Ohmic load	16 A/250 V~ μ	16 A/250 V~ μ	Minimal feeding interval 2 h
- Inductive load	-	2,5 A/250 V~ μ	Maximum feeding period (for daily feeding) 27 days
Ambient temperature			Food container 28
- Continuous operating	-10°C bis +55°C	-10°C ... +45°C	Filling volume: per food container 3,5 ccm
- Short time rating	-10°C bis +55°C	-10°C ... +55°C	Total filling vol. approx. 100 ccm
Running reserve	-	2500 h at +20°C	Repetition of feeding program each 24 h
Charging time	-	140 h	
Memory spaces	-	40 (20 ON, 20 OFF)	
Shortest switching time	15 min	1 min	
	-	-	
Programmable	every 15 min	every minute	
	-	-	
Display	-	LCD	
Manual switch	yes	yes	
Run display	-	yes	
Switching state display	-	yes	
Special functions	-	fixed weekday block formation	
Random generator	-	retards the switching command from 1-45 minutes	
Protection type	-	-	



Tariff time switches



	Voltage	EAN-Code	Ord.-No.
		4010940	

24 h
 $\frac{1 \times 10 (8) A}{250V \sim}$ 
 $\frac{1}{T}$  ACCU 150 h
QUARTZ

Cover and glass separately sealable with leads

- Assembly:
- Three-point assembly on counter panel
  - Clamping cover in accordance with DIN 43857, part 5

**tasu 511 (MIL 02 T/1 QRTUZ)**

	230 V AC/130 V DC	013974	02.08.0001.1
--	-------------------	--------	--------------



7 x 24 h
 $\frac{2 \times 10 (2,5) A}{250V \sim}$ 
 $\frac{1}{T}$  ACCU 3 m
FIX ON/OFF

MEMORY 20
± 1 h

Cover and glass separately sealable with leads

- Assembly:
- Three-point assembly on counter panel
  - Clamping cover in accordance with DIN 43857, part 5

**tasu 472 plus (MIL 02T D220)**

	220-240 V/50-60 Hz	038625	03.62.0008.1
--	--------------------	--------	--------------



7 x 24 h
 $\frac{2 \times 10 (2,5) A}{250V \sim}$ 
 $\frac{1}{T}$  ACCU 6 m
FIX ON/OFF

MEMORY 50
± 1 h Auto

Cover and glass separately sealable with leads

- Assembly:
- Three-point assembly on counter panel
  - Clamping cover in accordance with DIN 43857, part 5

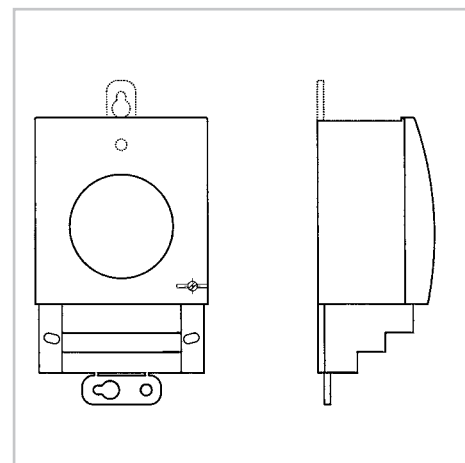
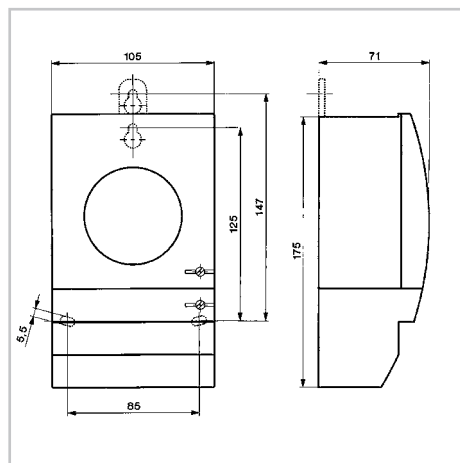
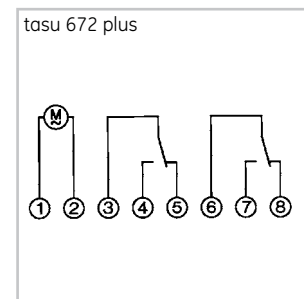
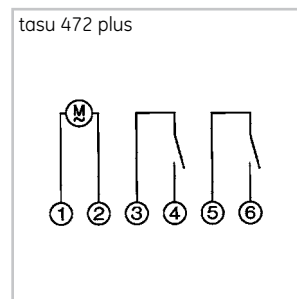
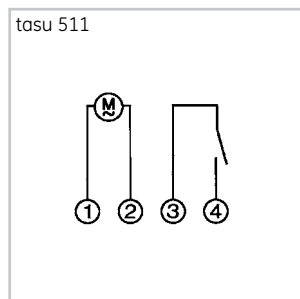
**tasu 672 plus (MIL 02T D250)**

	220-240 V/50-60 Hz	038557	03.87.0010.1
--	--------------------	--------	--------------

## Technical data

	tasu 511	tasu 472 plus	tasu 672 plus
Dimensions (mm)	175 x 105 x 71	175 x 105 x 71	175 x 105 x 71
Connection	230 V AC/130 V DC	220-240 V/50-60 Hz	220-240 V/50-60 Hz
Power consumption	ca. 2 V A	ca. 4,4 A	ca. 4,4 A
Switching capacity	10 A/250 V~ μ	10 A/250 V~ μ	10 A/250 V~ μ
Switching output	potential-free	potential-free	potential-free
Switch contact	1 NO	2 NO	2 changeover contacts
Ambient temperature	-20°C ... +55°C	-10°C ... +55°C	-10°C ... +55°C
Protection class	II	II	II
Protection type	IP 51	IP 51	IP 51
Accuracy	typ ±1 sec./day at +20°C	typ ±1 sec./day at +20°C	typ ±1 sec./day at +20°C
Running reserve	150 h	6 months	6 months
Charging time	70 h	-	-
Programmable every	15 min	min	min
Memory spaces	-	20	50
Further voltages on request			

Dimensional drawings /  
circuit diagrams:



Hour meters

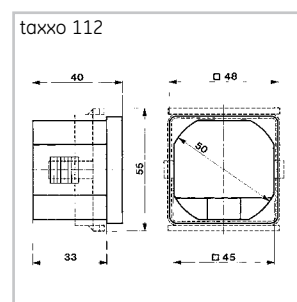
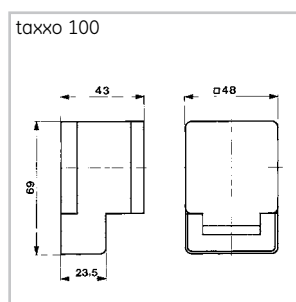
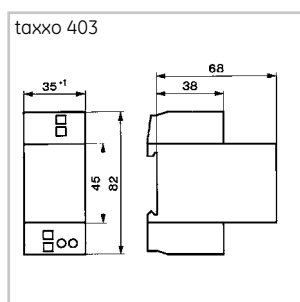
- Flush, surface or DIN-rail mounting
- Robust and reliable
- Various dimensions, round and square
- Latching screws or low profile plugs

	Voltage	EAN-Code	Ord.-No.
<hr/>			
DIN-rail mounting			
<b>taxxo 403 (UWZ 35 V)</b>			
	220-240 V/50 Hz	001773	05.21.0001.1
	110-120 V/50 Hz	001780	05.21.0002.1
	36- 48 V/50 Hz	001797 *	05.21.0003.1 *
	18- 26 V/50 Hz	001803 *	05.21.0004.1 *
	110-127 V/60 Hz	001810 *	05.21.0009.1 *
<hr/>			
Surface-mounting			
<b>taxxo 100 (UWZ 48 A)</b>			
	220-240 V/50 Hz	001339	05.15.1001.1
	330-380 V/50 Hz	001506	05.15.1089.1
	110-120 V/50 Hz	001407	05.15.1019.1
	36- 48 V/50 Hz	001452	05.15.1049.1
	18- 26 V/50 Hz	001377	05.15.1010.1
	110-127 V/60 Hz	001438 *	05.15.1026.1 *
<hr/>			
Screw terminals / Flush-mounting			
<b>taxxo 112 (UWZ 48 KED)</b>			
	220-240 V/50 Hz	002268	05.15.1038.1
	110-120 V/50 Hz	002282	05.15.1118.1
	18- 26 V/50 Hz	002275	05.15.1016.1
	110-127 V/60 Hz	002299 *	05.15.1031.1 *
<hr/>			
Screw terminals (VBG4)/Flush-mounting			
<b>taxxo 612 (FWZ 36 K)</b>			
	220-240 V/50 Hz	001599	05.20.0006.1
	330-380 V/50 Hz	001742	05.20.0033.1
	18- 26 V/50 Hz	001667	05.20.0016.1
<hr/>			
Screw terminals (VBG4)/Flush-mounting			
<b>taxxo 712 (FWZ 55 K)</b>			
	220-240 V/50 Hz	001582	05.20.0004.1
	110-120 V/50 Hz	001728	05.20.0029.1
	36- 48 V/50 Hz	001711	05.20.0028.1
	18- 26 V/50 Hz	001681	05.20.0018.1
	110-127 V/60 Hz	001629 *	05.20.0008.1 *

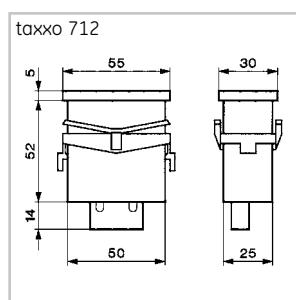
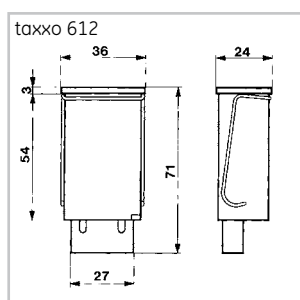
\* These variants are being produced only upon receipt of special orders.

## Technical data

	taxxo 403	taxxo 100	taxxo 112
Dimensions H x W x D (mm)	82 x 35 x 68	69 x 48 x 43	55 x 48 x 40
Switchboard panel (mm)	-	-	45 x 45
Distributor cut-out (mm)	46 x 36	-	-
Mounting depth (mm)	68	43	33
Weight (g) approx.	90	70	60
Connection	see ordering data	see ordering data	see ordering data
Power consumption	approx. 1 VA	approx. 1 VA	approx. 1 VA
Ambient temperature	-20°C ... +55°C	-20°C ... +55°C	-20°C ... +55°C
Protection class	II	II	II
Protection type front	IP 20	IP 20	IP 20
Accuracy	synchronic to network	synchronic to network	synchronic to network
Metering capacitance	99999,99 h	99999,99 h	99999,99 h
Run display	yes	yes	yes
Assembling mode	distributing bus bar	assembling with clamp cover	integration
Connection type	captive ± screw terminals 1 x 2,5 resp. 2 x 1,5 mm <sup>2</sup>	receptacle with screw terminals	screw terminals



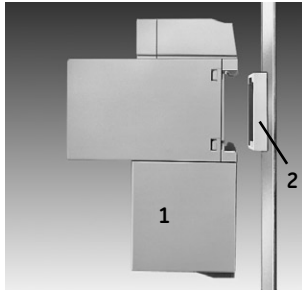
	taxxo 612	taxxo 712
Dimensions H x W x D (mm)	24 x 36 x 57	30 x 55 x 71
Switchboard panel (mm)	22 x 33	25 x 50
Distributor cut-out (mm)	-	-
Mounting depth (mm)	68	66
Weight (g) approx.	34	50
Connection	see ordering data	see ordering data
Power consumption	approx. 1 VA	approx. 1 VA
Ambient temperature	-20°C ... +55°C	-20°C ... +55°C
Protection class	II	II
Protection type front	IP 20 (IP 54 with sealing s. accessories)	IP 20 (IP 54 with sealing s. accessories)
Accuracy	synchronic to network	synchronic to network
Metering capacitance	99999,99 h	99999,99 h
Run display	yes	yes
Assembling mode	integration	integration
Connection type	screw terminals	screw terminals



Plug-in & tariff time  
switches, Hour meters

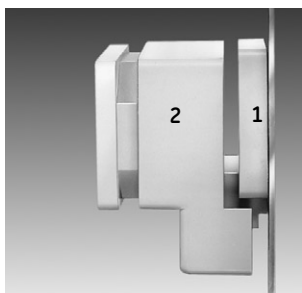
Hour meters / Accessories

L = Scope of delivery	EAN-Code	Ord.-No.
EZ = Spare parts/Accessories	4010940	



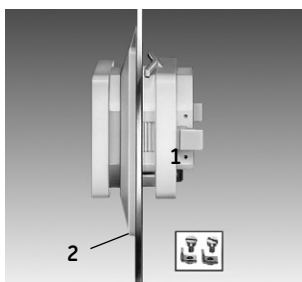
for: taxxo 403

1+2 - Wall installation kit 2 modules	-/EZ	011246	05.21.0005.2
---------------------------------------	------	--------	--------------



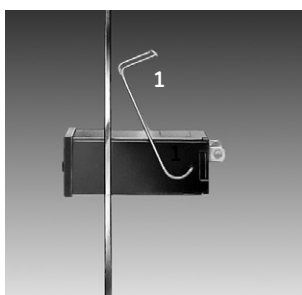
for: taxxo 100

1 - Base	L/EZ	002862	15.92.0021.4
2 - Surface mounting housing	L/EZ	002879	50.12.0001.4



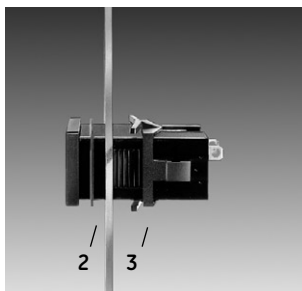
for: taxxo 112

1 - Ratchet clamp	L/EZ	002886	15.27.0011.4
2 - Cover 55 x 55	-/EZ	008802	05.15.0065.6
Cover 72 x 72	-/EZ	008819	16.26.0006.4
with sealing IP 54	-/EZ	011253	11.24.0008.8
vertical assembly (glass vertical)			



for: taxxo 612

1 - Spring clip	L/EZ	002961	05.20.0026.6
2 - Sealing	-/EZ	002978	11.24.0007.8



for: taxxo 712

2 - Sealing	-/EZ	002992	14.24.0001.5
3 - Ratchet clamp	L/EZ	002985	14.27.0002.4

## Index

Backup devices for UWZ 52, UWZ 60 / Outlet types UNI 45	94
Backup devices for digi 56-72/1, digi 16-72/1, MIL/1 digi 42 and MIL 2008e	95
Backup devices for UWZ 52, UWZ 60 / Outlet types UNI 45	96
Alphabetical directory / Overview follow-up types	98 - 103
Ordering number directory	104 - 107
Pictogram explanation	112

## Backup devices for UWZ 52, UWZ 60 / Outlet types UNI 45



Type / equipment	Voltage	EAN-Code 4010940	Ord.-Nr.
------------------	---------	---------------------	----------

### taxxo 212 (UWZ 52 KE)

Screw terminal (VBG4)	220-240 V/50 Hz	001513	05.15.1090.1
Flush-mounting	110-120 V/50 Hz	001544	05.15.1105.1

### taxxo 332 (UWZ 60 ZKE)

Central fixing	220-240 V/50 Hz	001568	05.15.1108.1
----------------	-----------------	--------	--------------



### UNI 45 TE

Day-program/Flush-mounting	230-240 V/50 Hz	000202	01.50.0002.1
----------------------------	-----------------	--------	--------------

### UNI 45 WE

Week-program/Flush-mounting	230-240 V/50 Hz	003333	01.50.0076.1
-----------------------------	-----------------	--------	--------------

### UNI 45 1hE

1 h short-time program / Flush-mounting	230-240 V/50 Hz	000226	01.50.0013.1
--	-----------------	--------	--------------

## Scope of delivery / Accessories

	L = Scope of delivery E Z = Spare parts/Accessories	EAN-Code 4010940	Ord.-No.
--	--	---------------------	----------

### UWZ 52 KE

Frame	L / E Z	002886	15.27.0011.4
-------	---------	--------	--------------

### UWZ 60 ZKE

Median bail	L / E Z	002930	10.28.0017.4
Knurled screw	L / E Z	002947	17.23.0001.4
Cover Ø 60	L / E Z	002954	05.15.0064.6

### UNI 45

Base	L / E Z	003265	50.92.0013.4
Frame	L / E Z	003272	50.13.0002.4
Attachment screw	L / E Z	003296	50.22.0001.5
Glass	L / E Z	003302	50.13.0001.3
Ratchet clamp	L / E Z	002886	15.27.0011.4

## Backup devices for digi 56-72/1, digi 16-72/1, MIL/1 digi 42 and MIL 2008 Type series for assembling on existing sockets



Type / equipment	Voltage	EAN-Code	Ord.-Nr.
		4010940	

### MIL D150

<b>1-channel</b>	220-240 V/50-60 Hz	038588	03.87.0011.1
Running reserve/Day- and week-program/50 Memory spaces/without Base	24 V AC/DC	038595	03.87.0012.1

#### Replacement for:

#### digi 56-72/1

1-channel/Running reserve/day- and week-program/56 Memory space	220 V/50-60 Hz		
	120 V/50-60 Hz		

#### digi 16-72/1

1-channel/Running reserve/day- and week-program/16 Memory space	220-240 V/50-60 Hz		
---	--------------------	--	--



### MIL/1 QRTuZH

1-channel	230 V AC/130 V DC	015671	02.45.0001.1
Quartz with Running reserve/day-program/ without Base	130 V AC/ 60 V DC	015688	02.45.0002.1
	30 V AC/ 12 V DC	015695	02.45.0003.1

### MIL/1 QRWuZH

1-channel	230 V AC/130 V DC	016142	02.45.0004.1
Quartz with Running reserve/week-program/without Base			

#### Replacement for:

#### MIL 2008 SFTu

1-channel/day-program	220-240 V/50 Hz		
-----------------------	-----------------	--	--

#### MIL 2008 SFWu

1-channel/week-program	220-240 V/50 Hz		
------------------------	-----------------	--	--

#### MIL 2008 QFRTu

1-channel/Running reserve/day-program	230 V AC/130 V DC		
	30 V AC/ 12 V DC		

#### MIL 2008 QFRWu

1-channel/Running reserve/day-program	230 V AC/130 V DC		
---------------------------------------	-------------------	--	--

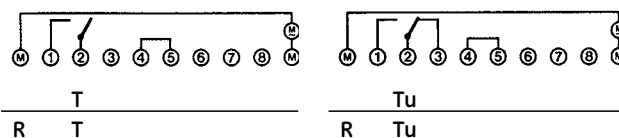
## Backup devices for SU-type series for assembling on existing sockets



Type / equipment	Voltage	EAN-Code	Ord.-Nr.
SU/1 QRTuZH		4010940	
Quartz with running reserve/ Day-program/ Without Base	220-240 V/50-60 Hz	004347	02.05.0001.1

Replacement for:

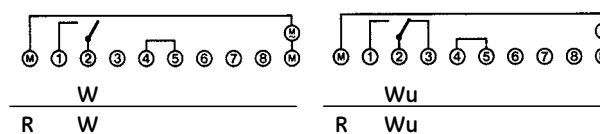
Device is assembled on an already installed socket



SU D120		038298	03.62.0004.1
Running reserve / 20 memory spaces / Without base	220-240 V/50-60 Hz		

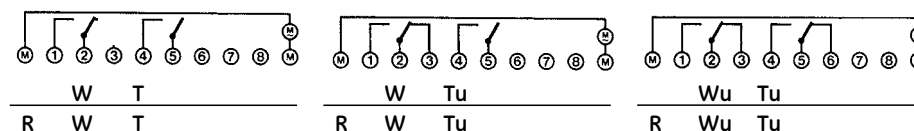
Replacement for:

Device is assembled on an already installed socket



### Attention!

Rewire the circuit points depending on the arrangement combination daily/weekly program



### Attention:

During replacement or backfitting on switching riders or coding

- On or Off e.g. heating
- On or Off e.g. night-time reduction



## Alphabetical directory / Overview follow-up types

Designation	Old Designation	EAN-Code 4010940	Ord.-No	Voltage	Page	Follow-up type	Page
AS 08..	-	Frensch GmbH, Dahlingstrasse 119, 47229 Duisburg Tel.-Nr. 0 20 65/25 58-0 Fax: 0 20 65/25 58-20 e-mail: info@frensch.de, internet: www.frensch.de					
AS 09..	-						
AS 41..	-						
Cap LF [3] 500-10.000 Lux	-	029166	07.02.0003.2	-	42	-	-
Chronostat 2ST	-	-	-	-	-	famoso 500	74
Chronostat 2SW	-	-	-	-	-	famoso 550	74
Chronostat 3	-	-	-	-	-	famoso 500	74
Chronostat 4E QRT	-	-	-	-	-	famoso 500	74
Chronostat 4E QRW	-	-	-	-	-	famoso 550	74
Chronostat 6E	-	-	-	-	-	famoso 1000	76
Chronostat 8E	-	-	-	-	-	famoso 1000	76
Chronostat 400	-	-	-	-	-	famoso 800	74
Chronostat 450	-	-	-	-	-	famoso 850	74
Chronostat 700	-	-	-	-	-	famoso 500	74
Chronostat 750	-	-	-	-	-	famoso 550	74
Chronostat 900	-	-	-	-	-	famoso 1000	76
Chronostat 1000	-	-	-	-	-	famoso 1000	76
Coupler EIB	-	002183	17.08.0003.1	-	45	-	-
digi 12-45	-	-	-	-	-	talento 371 plus	10
digi 12-72	-	-	-	-	-	tactic 571.1 plus	60
digi 16-72/1	-	-	-	-	-	MIL D150	95
digi 32-72/2	-	-	-	-	-	tactic 572.1 plus	60
digi 56-45/1	-	-	-	-	-	talento 991	26
digi 56-45/2	-	-	-	-	-	talento 992	26
digi 56-72/1	-	-	-	-	-	MIL D150	95
digi 56-72/2	-	-	-	-	-	tactic 572.1 plus	60
digi 127	-	-	-	-	-	talento 994	26
digi 128-45/4	-	-	-	-	-	talento 994	26
DIN-rail cover EIB	-	004071	17.08.0007.1	-	48	-	-
DS 053	-	-	-	-	-	turnus 501	40
DS 053u	-	-	-	-	-	turnus 501	40
Dual connector EIB	-	013035	17.08.0016.1	1	50	-	-
Easy Prog.	-	-	-	-	-	talento taxxi	28
EIB rail	-	002176	17.08.0002.1	-	48	-	-
EIB rail	-	002206	17.08.0005.1	-	48	-	-
EIB rail	-	002213	17.08.0006.1	-	48	-	-
famoso 500	-	020231	04.34.0001.1	230 V/50-60 Hz	74	-	-
famoso 505	-	027421	04.34.0005.1	230 V/50-60 Hz	74	-	-
famoso 550	-	020224	04.34.0002.1	230 V/50-60 Hz	74	-	-
famoso 555	-	027438	04.34.0006.1	230 V/50-60 Hz	74	-	-
famoso 601	-	022709	04.40.0008.1	230 V/50-60 Hz	76	-	-
famoso 601 rf Set	-	037437	04.53.0001.1	2 x 1,5 V	72	-	-
famoso 601 rf T	-	037444	04.53.0002.1	2 x 1,5 V	72	-	-
famoso 651 rf Set	-	037451	04.53.0003.1	2 x 1,5 V	72	-	-
famoso 651 rf T	-	037468	04.53.0004.1	2 x 1,5 V	72	-	-
famoso 800	-	020187	04.42.0007.1	2 x 1,5 V	74	-	-
famoso 801	-	022716	04.42.0011.1	2 x 1,5 V	76	-	-
famoso 850	-	020194	04.42.0008.1	2 x 1,5 V	74	-	-
famoso 1000	-	030957	04.50.0001.1	2 x 1,5 V	76	-	-
famoso 1000 rf Set	-	032807	04.51.0002.1	2 x 1,5 V	72	-	-
famoso 1000 rf T 1ch	-	030964	04.51.0001.1	2 x 1,5 V	72	-	-
FM/1 digi 16	-	-	-	-	-	FMD 120	64
FM/1 digi 20	-	-	-	-	-	FMD 120	64
FM/1 QRTuZH	-	000592	02.76.0075.1	230 VAC/130 VDC	62	-	-
FM/1 QRWuZH	-	000608	02.76.0076.1	230 VAC/130 VDC	62	-	-
FM/1 STuZH	-	000264	01.76.0088.1	220-240 V/50 Hz	62	-	-
FM/1 SWuZH	-	000271	01.76.0089.1	220-240 V/50 Hz	62	-	-
FMD 120	-	037949	03.58.0017.1	230 V/50 Hz	64	-	-
FMD 150	-	037968	03.60.0001.1	230 V/50-60 Hz	64	-	-
FMD 220	-	037939	03.58.0019.1	230 V/50 Hz	64	-	-
FMD 250	-	037998	03.60.0013.1	230 V/50-60 Hz	64	-	-
MIL D150	-	038588	03.87.0011.1	230 V/50-60 Hz	95	-	-
MIL D150	-	038595	03.87.0012.1	24 V AC/DC	95	-	-
MIL/1 digi 42	-	-	-	-	-	MIL D150	95
MIL/1 QRTuZH	-	015688	02.45.0002.1	130 V AC/ 60 V DC	95	-	-
MIL/1 QRTuZH	-	015671	02.45.0001.1	230 V AC/130 V DC	95	-	-
MIL/1 QRTuZH	-	015695	02.45.0003.1	30 V AC/ 12 V DC	95	-	-
MIL/1 QRWuZH	-	016142	02.45.0004.1	230 V AC/130 V DC	95	-	-
MIL 01T/1 digi 16	-	-	-	-	-	tasu 371	88
MIL 01T/1QRTuZ	-	-	-	-	-	tasu 211	88
MIL 96/4 digi 322 F	-	-	-	-	-	talento 994	26
MIL 96/4 digi 322JF	-	-	-	-	-	talento 994	26
MIL 96/4 digi 322JFPD	-	-	-	-	-	talento 994	26
MIL 2001 F1hu	-	= MIL 2008 SF 1hu	-	-	-	* 2) talento 121	32
MIL 2001 FRT	-	-	-	-	-	* 1) tactic 211.1	58
MIL 2001 FRTu	-	= MIL 2008 QFRTu	-	-	-	1) tactic 211.1 tactic 571.1 plus	58 60

## Alphabetical directory / Overview follow-up types

Designation	Old Designation	EAN-Code 4010940	Ord.-No	Voltage	Page	Follow-up type	Page
MIL 2001 FRW	-	-	-	-	-	* 1) tactic 271.1	58
MIL 2001 FRWu	-	= MIL 2008 QFRWu	-	-	-	* 1) tactic 271.1 tactic 571.1 plus tactic 572.1 plus	58 60 60
MIL 2001 FT	-	= MIL 2008 SFTu	-	-	-	} MIL/1 QRTuZH	95
MIL 2001 FTu	-	= MIL 2008 SFTu	-	-	-		
MIL 2001 FW	-	= MIL 2008 SFWu	-	-	-	} MIL/1 QRWuZH	95
MIL 2001 FWu	-	= MIL 2008 SFWu	-	-	-		
MIL 2002 QRTuJu	-	-	-	-	-	talento 994	26
MIL 2002 QRTuTu	-	-	-	-	-	tactic 572.1 plus	60
MIL 2002 QRTuWu	-	-	-	-	-	tactic 572.1 plus	60
MIL 2008 QFRTu	-	-	-	-	-	MIL/1 QRTuZH	95
MIL 2008 QFRWu	-	-	-	-	-		
MIL 2008 QFRTu	-	-	-	-	-	MIL/1 QRWuZH	95
MIL 2008 QFRWu	-	-	-	-	-		
MIL 2008 QFRT	-	-	-	-	-		
MIL 2008 QFRW	-	-	-	-	-		
MIL 2008 QMRT	-	B1 bis B7	} For customized variants manufacturer should be contacted directly.				
MIL 2008 QMRTu	-	B1 bis B7					
MIL 2008 QMRW	-	B1 bis B7					
MIL 2008 QMRWu	-	B1 bis B7					
MIL 2008 QMT	-	B1 bis B7					
MIL 2008 SFTu	-	-	-	-	-	MIL/1 QRTuZH	95
MIL 2008 SFWu	-	-	-	-	-	MIL/1 QRWuZH	95
MIL 2008 SF1hu	-	-	-	-	-	* 2) talento 121	32
MIL 2008 SFT	-	-	-	-	-	MIL/1 QRTuZH	95
MIL 2008 SFW	-	-	-	-	-	MIL/1 QRWuZH	95
MIL 2008 SMT	-	B1 und B2	} For customized variants manufacturer should be contacted directly.				
MIL 2008 SMTu	-	B1 und B2					
MIL 2008 SMW	-	B1 und B2					
MIL 2008 SMWu	-	B1 und B2					
Power supply EIB	-	002169	17.08.0001.1	230 V AC	50	-	-
Radio antenna FADCF 77	-	021184	07.01.0028.1	-	20,28	-	-
Radio antenna FA GPS	-	034856	07.75.0008.1	-	20	-	-
RecUNO	-	031220	04.52.0001.1	230V/50-60Hz	72	-	-
RKU 300	-	-	-	-	-	famoso 500	74
RKU 300-1	-	-	-	-	-	famoso 500	74
RKU 300-5	-	-	-	-	-	famoso 500	74
Rondomatic 400	-	003364	16.58.0001.1	230 V/50 Hz	86	-	-
Sensor LF 500-10.000 Lux	-	027643	07.02.0004.1	-	42	-	-
Sensor LF	-	002671	07.02.0001.1	-	42	-	-
Sensor LF-flush m.	-	016630	07.02.0003.1	-	42	-	-
STA-E	-	-	-	-	-	topica 500	84
STA-PT	-	-	-	-	-	topica 400S	84
STA-PW	-	-	-	-	-	topica 450S	84
STA-T	-	-	-	-	-	topica 200S	84
STA-W	-	-	-	-	-	topica 450S	84
SU/1 digi 20	-	-	-	-	-	SU D120	96
SU/1 digi 16	-	-	-	-	-	SU D120	96
SU/1 QRTuZH	-	004347	02.05.0001.1	220-240 V/50 Hz	96	-	-
SU D120	-	038298	03.62.0004.1	220-240 V/50-60 Hz	96	-	-
SU-RTT	-	-	-	-	-	tactic 572.1 plus	60
SU-RTTT	-	-	-	-	-	talento 993	26
SU-RTuT	-	-	-	-	-	tactic 572.1 plus	60
SU-RTuTT	-	-	-	-	-	talento 993	26
SU-RTuTu	-	-	-	-	-	tactic 572.1 plus	60
SU-RTuTuT	-	-	-	-	-	talento 993	26
SU-TT	-	-	-	-	-	tactic 572.1 plus	60
SU-TTT	-	-	-	-	-	talento 993	26
SU-TuT	-	-	-	-	-	tactic 572.1 plus	60
SU-TuTT	-	-	-	-	-	talento 993	26
SU-TuTu	-	-	-	-	-	tactic 572.1 plus	60
SU-TuTuT	-	-	-	-	-	talento 993	26
SU-RWT	-	-	-	-	-	tactic 572.1 plus	60
SU-RWTT	-	-	-	-	-	talento 993	26
SU-RWTu	-	-	-	-	-	tactic 572.1 plus	60
SU-RWuTT	-	-	-	-	-	talento 993	26
SU-RWuTu	-	-	-	-	-	tactic 572.1 plus	60
SU-RWuTuT	-	-	-	-	-	talento 993	26
SU-WT	-	-	-	-	-	tactic 572.1 plus	60
SU-WTT	-	-	-	-	-	talento 993	26
SU-WTu	-	-	-	-	-	tactic 572.1 plus	60
SU-WuTT	-	-	-	-	-	talento 993	26
SU-WuTu	-	-	-	-	-	tactic 572.1 plus	60
SU-WuTuT	-	-	-	-	-	talento 993	26

## Alphabetical directory / Overview follow-up types

Designation	Old Designation	EAN-Code 4010940	Ord.-No	Voltage	Page	Follow-up type	Page
tactic 111.1	-	003975	01.80.0001.1	220-240 V/50 Hz	58	-	-
tactic 171.1	-	003982	01.80.0002.1	220-240 V/50 Hz	58	-	-
tactic 211.1	-	004019	02.80.0001.1	230 V AC/130 V DC	58	-	-
tactic 271.1	-	004026	02.80.0002.1	230 V AC/130 V DC	58	-	-
tactic 371.1 plus	-	038007	03.62.0001.1	230 V/50 Hz	60	-	-
tactic 372.1 plus	-	038014	03.62.0002.1	230 V/50 Hz	60	-	-
tactic 571.1 plus	-	038021	03.87.0001.1	230 V/50-60 Hz	60	-	-
tactic 571.1 plus	-	038038	03.87.0002.1	24 V AC/DC	60	-	-
tactic 572.1 plus	-	038045	03.87.0003.1	230 V/50-60 Hz	60	-	-
tactic 572.1 plus	-	038052	03.87.0004.1	110-120 V/50-60 Hz	60	-	-
tactic 572.1 plus	-	038069	03.87.0005.1	24 V AC/DC	60	-	-
tactic 572.1 plus	-	038076	03.87.0006.1	12 V AC/DC	60	-	-
talento 111	V86/1 STu	020668	01.28.0001.1	220-240 V/50 Hz	32	-	-
talento 111 mini	V86/1 ST M1	022556	01.06.0004.1	220-240 V/50 Hz	32	-	-
talento 121	V86/1 S 1 hu	020682	01.28.0003.1	220-240 V/50 Hz	32	-	-
talento 171	V86/1 SWu	020675	01.28.0002.1	220-240 V/50 Hz	32	-	-
talento 202	V86/2 QRTuWu	020767	02.28.0008.1	220-240 V AC/130 V DC	34	-	-
talento 211	V86/1 QRTu	020750	02.28.0001.1	220-240 V AC/130 V DC	34	-	-
talento 211	V86/1 QRTu	020743	02.28.0002.1	130 V AC/60 V DC	34	-	-
talento 211	V86/1 QRTu	020736	02.28.0003.1	30 V AC/12 V DC	34	-	-
talento 211 mini	V86/1 QRT M1	022563	02.03.0003.1	220-240 V AC/110 V DC	34	-	-
talento 212	V86/2 QRTuTu	020699	02.28.0007.1	220-240 V AC/130 V DC	34	-	-
talento 261	-	026325	02.28.0015.1	220-240 V AC/130 V DC	34	-	-
talento 271	V86/1 QRWu	020729	02.28.0004.1	220-240 V AC/130 V DC	34	-	-
talento 271	V86/1 QRWu	020712	02.28.0005.1	130 V AC/ 60 V DC	34	-	-
talento 271	V86/1 QRWu	020705	02.28.0006.1	30 V AC/ 12 V DC	34	-	-
talento 371	V86/1 digi 42	019808	03.53.0002.1	230 V/50-60 Hz	24	talento 371 plus	10
talento 371	V86/1 digi 42	019815	03.53.0003.1	100-120 V/50-60 Hz	24	talento 371 plus	10
talento 371	V86/1 digi 42	019822	03.53.0004.1	24 V AC/DC	24	talento 371 plus	10
talento 371	V86/1 digi 42	019839	03.53.0005.1	12 V AC/DC	24	talento 371 plus	10
talento 371 mini	V86/1 digi 42 M1	029555	03.32.0010.1	230 V/50-60 Hz	24	talento 371 mini plus	10
talento 371 mini plus	-	034078	03.72.0001.1	230 V/50-60 Hz	10	-	-
talento 371 plus	-	033910	03.73.0001.1	230 V/50-60 Hz	10	-	-
talento 371 plus	-	033972	03.73.0005.1	110-120 V/50-60 Hz	10	-	-
talento 371 plus	-	033989	03.73.0004.1	24 V AC/DC	10	-	-
talento 372	V86/2 digi 42	019846	03.53.0006.1	230 V/50-60 Hz	24	talento 372 plus	10
talento 372	V86/2 digi 42	019853	03.53.0007.1	100-120 V/50-60 Hz	24	talento 372 plus	10
talento 372	V86/2 digi 42	019860	03.53.0008.1	24 V AC/DC	24	talento 372 plus	10
talento 372	V86/2 digi 42	019877	03.53.0009.1	12 V AC/DC	24	talento 372 plus	10
talento 372 plus	-	033927	03.73.0002.1	230 V/50-60 Hz	10	-	-
talento 372 plus	-	034023	03.73.0008.1	110-120 V/50-60 Hz	10	-	-
talento 372 plus	-	034016	03.73.0007.1	24 V AC/DC	10	-	-
talento 372 plus	-	033996	03.73.0003.1	12 V AC/DC	10	-	-
talento 471	-	019884	03.53.0010.1	230 V/50-60 Hz	24	talento 471 plus	12
talento 471 plus	-	033941	03.75.0001.1	230 V/50-60 Hz	12	-	-
talento 471 plus	-	034054	03.75.0005.1	110-120 V/50-60 Hz	12	-	-
talento 472	-	019891	03.53.0011.1	230 V/50-60 Hz	24	talento 472 plus	12
talento 472 plus	-	033958	03.75.0002.1	230 V/50-60 Hz	12	-	-
talento 472 plus	-	034061	03.75.0006.1	110-120 V/50-60 Hz	12	-	-
talento 671	-	019907	03.53.0012.1	230 V/50-60 Hz	26	talento 671 plus DCF	12
talento 671 plus DCF	-	033965	03.75.0003.1	230 V/50-60 Hz	12	-	-
talento 671 plus DCF	-	034047	03.75.0004.1	110-120 V/50-60 Hz	12	-	-
talento 672	-	019914	03.53.0013.1	230 V/50-60 Hz	26	-	-
talento 791 plus	-	034818	03.74.0001.1	230 V/50-60 Hz	14	-	-
talento 791 plus DCF	-	034832	03.74.0003.1	230 V/50-60 Hz	14	-	-
talento 792 plus	-	034825	03.74.0002.1	230 V/50-60 Hz	14	-	-
talento 891	-	019921	03.59.0001.1	230 V/50-60 Hz	26	-	-
talento 892	-	019945	03.59.0003.1	230 V/50-60 Hz	26	-	-
talento 893	-	019969	03.59.0005.1	230 V/50-60 Hz	26	-	-
talento 894	-	019983	03.59.0007.1	230 V/50-60 Hz	26	-	-
talento 894	-	028916	03.59.0027.1	100-120 V/50-60 Hz	26	-	-
talento 894	-	028909	03.59.0026.1	24 V AC/DC	26	-	-
talento 991	V86/1 digi 322 JF	019938	03.59.0002.1	230 V/50-60 Hz	26	-	-
talento 992	V86/2 digi 322 JF	019952	03.59.0004.1	230 V/50-60 Hz	26	-	-
talento 993	V86/3 digi 322 JF	019976	03.59.0006.1	230 V/50-60 Hz	26	-	-
talento 994	V86/3 digi 322 JF	019990	03.59.0008.1	230 V/50-60 Hz	26	-	-
talento 994	V86/3 digi 322 JF	020002	03.59.0009.1	100-120 V/50-60 Hz	26	-	-
talento 994	V86/3 digi 322 JF	020019	03.59.0010.1	24 V AC/DC	26	-	-
talento IR plus	-	034931	07.75.0013.1	-	18	-	-
talento taxxi	-	021641	07.01.0030.1	-	28	-	-
talento taxxi plus	-	034917	07.75.0011.1	-	20	-	-
talento VM plus	-	034740	07.75.0001.1	230 V/50-60 Hz	18	-	-
talento VM plus	-	034757	07.75.0002.1	110-120 V/50-60 Hz	18	-	-
talento VM plus	-	034948	07.75.0014.1	24 V AC/DC	18	-	-
tasu 472 plus	-	038625	03.62.0008.1	230 V/50-60 Hz	88	-	-
tasu 511	-	013974	02.08.0001.1	230 V AC/130 V DC	88	-	-

## Alphabetical directory / Overview follow-up types

Designation	Old Designation	EAN-Code 4010940	Ord.-No	Voltage	Page	Follow-up type	Page
tasu 672 plus	-	038557	03.87.0010.1	230 V/50-60 Hz	88	-	-
taxxo 100	UWZ 48A	001339	05.15.1001.1	220-240 V/50 Hz	90	-	-
taxxo 100	UWZ 48A	001506	05.15.1089.1	330-380 V/50 Hz	90	-	-
taxxo 100	UWZ 48A	001407	05.15.1019.1	110-120 V/50 Hz	90	-	-
taxxo 100	UWZ 48A	001452	05.15.1049.1	36-48 V/50 Hz	90	-	-
taxxo 100	UWZ 48A	001377	05.15.1010.1	18-26 V/50 Hz	90	-	-
taxxo 100	UWZ 48A	001438	05.15.1026.1	110-127 V/60 Hz	90	-	-
taxxo 112	UWZ 48KED	002268	05.15.1038.1	220-240 V/50 Hz	90	-	-
taxxo 112	UWZ 48KED	002282	05.15.1118.1	110-120 V/50 Hz	90	-	-
taxxo 112	UWZ 48KED	002275	05.15.1016.1	18-26 V/50 Hz	90	-	-
taxxo 112	UWZ 48KED	002299	05.15.1031.1	110-127 V/60 Hz	90	-	-
taxxo 212	UWZ 52 KE	001513	05.15.1090.1	220-240 V/50 Hz	94	-	-
taxxo 212	UWZ 52 KE	001544	05.15.1105.1	110-120 V/50 Hz	94	-	-
taxxo 332	UWZ 60 ZKE	001568	05.15.1108.1	220-240 V/50 Hz	94	-	-
taxxo 403	UWZ 35 V	001773	05.21.0001.1	220-240 V/50 Hz	90	-	-
taxxo 403	UWZ 35 V	001780	05.21.0002.1	110-120 V/50 Hz	90	-	-
taxxo 403	UWZ 35 V	001797	05.21.0003.1	36-48 V/50 Hz	90	-	-
taxxo 403	UWZ 35 V	001803	05.21.0004.1	18-26 V/50 Hz	90	-	-
taxxo 403	UWZ 35 V	001810	05.21.0009.1	110-127 V/60 Hz	90	-	-
taxxo 612	FWZ 36K	001599	05.20.0006.1	220-240 V/50 Hz	90	-	-
taxxo 612	FWZ 36K	001742	05.20.0033.1	330-380 V/50 Hz	90	-	-
taxxo 612	FWZ 36K	001667	05.20.0016.1	18-26 V/50 Hz	90	-	-
taxxo 712	FWZ 55K	001582	05.20.0004.1	220-240 V/50 Hz	90	-	-
taxxo 712	FWZ 55K	001728	05.20.0029.1	110-120 V/50 Hz	90	-	-
taxxo 712	FWZ 55K	001711	05.20.0028.1	36-48 V/50 Hz	90	-	-
taxxo 712	FWZ 55K	001681	05.20.0018.1	18-26 V/50 Hz	90	-	-
taxxo 712	FWZ 55K	001629	05.20.0008.1	110-127 V/60 Hz	90	-	-
tempic 500 EIB	EIB-Chronostat	017217	17.12.0002.1	-	48	-	-
termo 100	Esatherm 1	012861	10.01.0001.1	230 V / 50-60 Hz	76	-	-
termo 500 EIB	EIB-Esadrive 1	014032	17.13.0001.1	-	48	-	-
thermio 103	thermio 3	019464	04.46.0006.1	230 V/50-60 Hz	78	-	-
thermio 403	thermio 3 H	019471	04.46.0005.1	230 V/50-60 Hz	78	-	-
thermio 513	thermio 3 HNL	019167	04.46.0001.1	230 V/50-60 Hz	78	-	-
thermio E	-	033231	04.46.0014.1	24 V/50-60 Hz	78	-	-
ticlo 632.0 EIB	-	029821	17.08.0052.1	-	52	-	-
ticlo 632.1 EIB	-	029814	17.08.0051.1	-	52	-	-
ticlo 632.5 EIB	-	029920	17.08.0055.1	-	52	-	-
ticlo 642.0 EIB	-	029845	17.08.0054.1	-	52	-	-
ticlo 642.1 EIB	-	029838	17.08.0053.1	-	52	-	-
ticlo 642.5 EIB	-	029937	17.08.0056.1	-	52	-	-
ticlo 851.1 EIB	EIB-Slave Clock 850 QA	028015	17.08.0048.1	-	52	-	-
tip 100 S	-	031992	16.30.0001.1	220-240 V/50 Hz	86	-	-
topica 200 S	-	002428	16.25.0008.1	220-240 V/50 Hz	84	-	-
topica 400 S	-	002435	16.26.0008.1	220-240 V/50 Hz	84	-	-
topica 410 S	-	016241	16.27.0001.1	220-240 V/50 Hz	84	-	-
topica 450 S	-	003906	16.40.0001.1	220-240 V/50 Hz	84	-	-
topica 500	-	012328	16.13.0001.1	220-240 V/50 Hz	84	-	-
topica digi	-	034696	16.14.0001.1	220-240 V/50 Hz	86	-	-
trealux 200	-	-	-	-	-	trealux 210	38
trealux 210	-	024789	18.13.0009.1	230 V/50 Hz	38	-	-
trealux 400	-	-	-	-	-	trealux 210	38
trealux 600	-	-	-	-	-	trealux 610	38
trealux 610	-	023232	18.13.0007.1	230 V/50-60 Hz	38	-	-
trealux 710	-	023225	18.13.0006.1	230 V/50-60 Hz	38	-	-
turnus 200	Lux 200	018986	18.17.0001.1	220-240 V/50-60 Hz	40	-	-
turnus 501 A	-	023249	18.18.0001.1	220-240 V/50-60 Hz	40	-	-
turnus 501 E	-	024031	18.18.0006.1	220-240 V/50-60 Hz	40	-	-
turnus 502 A	-	023256	18.18.0002.1	230 V/50-60 Hz	40	-	-
turnus 502.1	-	023973	18.18.0003.1	230 V/50-60 Hz	40	-	-
turnus 771	-	023263	18.19.0001.1	230 V/50-60 Hz	42	-	-
turnus 772	-	023270	18.19.0002.1	230 V/50-60 Hz	42	-	-
UNI 45 1hA	-	-	-	-	-	* 4) talento 121	32
UNI 45 1hE	-	000226	01.50.0013.1	220 V/50 Hz	94	talento 121	32
UNI 45 1hV	-	-	-	-	-	talento 121	32
UNI 45 TE	-	000202	01.50.0002.1	220 V/50 Hz	94	-	-
UNI 45 TV	-	-	-	-	-	talento 111	32
UNI 45 WA	-	-	-	-	-	tactic 171.1	58
UNI 45 WE	-	003333	01.50.0076.1	220 V/50 Hz	94	* 3) tactic 171.1	58
UNI 45 WV	-	-	-	-	-	talento 171	32
UTR 310	-	-	-	-	-	famoso 500	74
UTR 310-1	-	-	-	-	-	famoso 500	74
UTR 310-2	-	-	-	-	-	famoso 500	74
UWZ 45 V	-	-	-	-	-	taxxo 403	90
V6 RTT	-	-	-	-	-	talento 212	34
V6 RTuT	-	-	-	-	-	talento 212	34

## Alphabetical directory / Overview follow-up types

Designation	Old Designation	EAN-Code 4010940	Ord.-No	Voltage	Page	Follow-up type	Page
V6 RTuTu	-	-	-	-	-	talento 212	34
V6 RTW	-	-	-	-	-	talento 202	34
V6 RTuW	-	-	-	-	-	talento 202	34
V6 RTWu	-	-	-	-	-	talento 202	34
V6 RTuWu	-	-	-	-	-	talento 202	34
V6 TT	-	-	-	-	-	talento 212	34
V6 TuT	-	-	-	-	-	talento 212	34
V6 TuTu	-	-	-	-	-	talento 212	34
V6 TW	-	-	-	-	-	talento 202	34
V6 TuW	-	-	-	-	-	talento 202	34
V6 TWu	-	-	-	-	-	talento 202	34
V6 TuWu	-	-	-	-	-	talento 202	34
V72 1h	-	-	-	-	-	talento 121	32
V72 1hu	-	-	-	-	-	talento 121	32
V73 QRTu	-	-	-	-	-	talento 211	34
V72 QRWu	-	-	-	-	-	talento 271	34
V72 RT	-	-	-	-	-	talento 211	34
V72 RTu	-	-	-	-	-	talento 211	34
V72 RW	-	-	-	-	-	talento 271	34
V72 RWu	-	-	-	-	-	talento 271	34
V72 T	-	-	-	-	-	talento 111	32
V72 W	-	-	-	-	-	talento 171	32
V72 Wu	-	-	-	-	-	talento 171	32
V73 1hu	-	-	-	-	-	talento 121	32
V73 Tu	-	-	-	-	-	talento 111	32
V73 Wu	-	-	-	-	-	talento 171	32
V86/1 digi 12	-	-	-	-	-	talento 371 plus	10
V86/1 digi 20	-	-	-	-	-	talento 371 plus	10
V86/1 digi 42	-	-	-	-	-	talento 371 plus	10
V86/1 digi 42 M1	-	-	-	-	-	talento 371 mini plus	10
V86/1 digi 322 F	-	-	-	-	-	talento 991	26
V86/1 digi 322 JF	-	-	-	-	-	talento 991	26
V86/1 DS 2	-	-	-	-	-	turnus 501	35
V86/1 DSC 16	-	-	-	-	-	turnus 771	42
V86/1 QRT M1	-	-	-	-	-	talento 211 mini	34
V86/1 QRTu	-	-	-	-	-	talento 211	34
V86/1 QRWu	-	-	-	-	-	talento 271	34
V86/1 S1hu	-	-	-	-	-	talento 121	32
V86/1 ST M1	-	-	-	-	-	talento 111 mini	32
V86/1 STu	-	-	-	-	-	talento 111	32
V86/1 SWu	-	-	-	-	-	talento 171	32
V86/2 digi 32 M2	-	-	-	-	-	talento 372 plus	10
V86/2 digi 322 F	-	-	-	-	-	talento 992	26
V86/2 digi 322 JF	-	-	-	-	-	talento 992	26
V86/2 digi 322 JF IR	-	-	-	-	-	talento 992	26
V86/2 digi 42	-	-	-	-	-	talento 372 plus	10
V86/2 DS 3	-	-	-	-	-	turnus 502	40
V86/2 DS 3.0	-	-	-	-	-	turnus 502	40
V86/2 DSC 32	-	-	-	-	-	turnus 772	42
V86/2 DSC 32.0	-	-	-	-	-	turnus 772	42
V86/2 QRTuTu	-	-	-	-	-	talento 212	34
V86/2 STuTu	-	-	-	-	-	talento 212	34
V86/2 STuWu	-	-	-	-	-	talento 202	34
V86/3 digi 322 F	-	-	-	-	-	talento 993	26
V86/4 digi 322 F	-	-	-	-	-	talento 994	26
V86/4 digi 322 JF	-	-	-	-	-	talento 994	26
V86/4 digi 322 JF IR	-	-	-	-	-	talento 994	26

1. Installation dimensions are identical. Easy replacement in switch cabinet. Because of diverse assignment of connectors, rewiring and new socket necessary.
2. Replacement through DIN-rail mounting or phase out type MIL 2008, UNI45 1hE while stocks last.
3. Replacement through DIN-rail mounting of MIL 72/1 or phase out type UNI45... while stocks last.
4. Assembly set for wall mounting necessary, p.44.



## Ordering number directory

Ord.-No	EAN- Code number	Designation	Voltage	Page
01.06.0004.1	4010940022556	talento 111 mini	220-240 V/50 Hz	32
01.28.0001.1	4010940020668	talento 111	220-240 V/50 Hz	32
01.28.0002.1	4010940020675	talento 171	220-240 V/50 Hz	32
01.28.0003.1	4010940020682	talento 121	220-240 V/50 Hz	32
01.45.0017.6	4010940002848	Seal	for tactic	66
01.46.0082.6	4010940037567	Glass	for tactic plus	66
01.46.0334.2	4010940002770	Mounting plate for rail	for tactic plus	66
01.50.0002.1	4010940000202	UNI 45 TE	220 V/50 Hz	94
01.50.0013.1	4010940000226	UNI 45 1hE	220 V/50 Hz	94
01.50.0076.1	4010940003333	UNI 45 WE	220 V/50 Hz	94
01.76.0054.6	4010940011215	Glass	for FM/1	66
01.76.0054.6	4010940011215	Glass	for topica	84
01.76.0088.1	4010940000264	FM/1 STuZH	220-240 V/50 Hz	62
01.76.0089.1	4010940000271	FM/1 SWuZH	220-240 V/50 Hz	62
01.78.0002.2	4010940003340	Base	for tactic	66
01.78.0004.6	4010940002817	Terminal cover	for tactic	66
01.79.0002.2	4010940002831	Flush-mounting socket	for tactic	66
01.80.0001.1	4010940003975	tactic 111.1	220-240 V/50 Hz	58
01.80.0002.1	4010940003982	tactic 171.1	220-240 V/50 Hz	58
01.96.0043.6	4010940002749	Terminal cover (2-channel)	for tactic plus	66
02.03.0003.1	4010940022563	talento 211 mini	230 V AC/110 V DC	34
02.05.0001.1	4010940004347	SU/1 QRTuZH	220-240 V/50 Hz	96
02.08.0001.1	40109400113974	tasu 511	230 V AC/130 V DC	88
02.28.0001.1	4010940020750	talento 211	230 V AC/130 V DC	34
02.28.0002.1	4010940020743	talento 211	130 V AC/60 V DC	34
02.28.0003.1	4010940020736	talento 211	30 V AC/12 V DC	34
02.28.0004.1	4010940020729	talento 271	230 V AC/130 V DC	34
02.28.0005.1	4010940020712	talento 271	130 V AC/ 60 V DC	34
02.28.0006.1	4010940020705	talento 271	30 V AC/ 12 V DC	34
02.28.0007.1	4010940020699	talento 212	230 V AC/130 V DC	34
02.28.0008.1	4010940020767	talento 202	230 V AC/130 V DC	34
02.28.0015.1	4010940026325	talento 261	230 V AC/130 V DC	34
02.45.0001.1	4010940015671	MIL/1 QRTuZH	230 V AC/130 V DC	95
02.45.0002.1	4010940015688	MIL/1 QRTuZH	130 V AC/ 60 V DC	95
02.45.0003.1	4010940015695	MIL/1 QRTuZH	30 V AC/ 12 V DC	95
02.45.0004.1	4010940016142	MIL/1 QRWuZH	230 V AC/130 V DC	95
02.76.0075.1	4010940000592	FM/1 QRTuZH	230 V AC/130 V DC	62
02.76.0076.1	4010940000608	FM/1 QRWuZH	230 V AC/130 V DC	62
02.80.0001.1	4010940004019	tactic 211.1	230 V AC/130 V DC	58
02.80.0002.1	4010940004026	tactic 271.1	230 V AC/130 V DC	58
03.32.0010.1	4010940029555	talento 371 mini	230 V/50-60 Hz	24
03.52.0003.2	4010940002718	Base	for tactic plus	66
03.53.0002.1	4010940019808	talento 371	230 V/50-60 Hz	24
03.53.0003.1	4010940019815	talento 371	100-120 V/50-60 Hz	24
03.53.0004.1	4010940019822	talento 371	24 V AC/DC	24
03.53.0005.1	4010940019839	talento 371	12 V AC/DC	24
03.53.0006.1	4010940019846	talento 372	230 V/50-60 Hz	24
03.53.0007.1	4010940019853	talento 372	100-120 V/50-60 Hz	24
03.53.0008.1	4010940019860	talento 372	24 V AC/DC	24
03.53.0009.1	4010940019877	talento 372	12 V AC/DC	24
03.53.0010.1	4010940019884	talento 471	230 V/50-60 Hz	24
03.53.0011.1	4010940019891	talento 472	230 V/50-60 Hz	24
03.53.0012.1	4010940019907	talento 671	230 V/50-60 Hz	26
03.53.0013.1	4010940019914	talento 672	230 V/50-60 Hz	26
03.53.0083.2	4010940021719	Wall installation kit 2-3 TE	talento, trealux, turnus	44
03.58.0017.1	4010940037949	FMD 120	230 V/50 Hz	64
03.58.0019.1	4010940037939	FMD 220	230 V/50 Hz	64
03.59.0001.1	4010940019921	talento 891	230 V/50-60 Hz	26
03.59.0002.1	4010940019938	talento 991	230 V/50-60 Hz	26
03.59.0003.1	4010940019945	talento 892	230 V/50-60 Hz	26
03.59.0004.1	4010940019952	talento 992	230 V/50-60 Hz	26
03.59.0005.1	4010940019969	talento 893	230 V/50-60 Hz	26
03.59.0006.1	4010940019976	talento 993	230 V/50-60 Hz	26
03.59.0007.1	4010940019983	talento 894	230 V/50-60 Hz	26
03.59.0008.1	4010940019990	talento 994	230 V/50-60 Hz	26
03.59.0009.1	4010940020002	talento 994	100-120 V/50-60 Hz	26

## Ordering number directory

Ord.-No	EAN- Code number	Designation	Voltage	Page
03.59.0010.1	4010940020019	talento 994	24 V AC/DC	26
03.59.0026.1	4010940028909	talento 894	24 V AC/DC	26
03.59.0027.1	4010940028916	talento 894	100-120 V/50-60 Hz	26
03.59.0046.2	4010940021733	Wall installation kit 6 TE	talento 202, 212	44
03.59.0047.2	4010940021726	Installation frame	talento (plus)	44
03.60.0001.1	4010940037968	FMD 150	230 V/50-60 Hz	64
03.60.0013.1	4010940037998	FMD 250	230 V/50-60 Hz	64
03.62.0001.1	4010940038007	tactic 371.1 plus	230 V/50 Hz	60
03.62.0002.1	4010940038014	tactic 372.1 plus	230 V/50 Hz	60
03.62.0004.1	4010940038298	SU D120	220-240 V/50-60 Hz	96
03.62.0008.1	4010940038625	tasu 472 plus	230 V/50-60 Hz	88
03.72.0001.1	4010940034078	talento 371 mini plus	230 V/50-60 Hz	10
03.73.0001.1	4010940033910	talento 371 plus	230 V/50-60 Hz	10
03.73.0002.1	4010940033927	talento 372 plus	230 V/50-60 Hz	10
03.73.0003.1	4010940033996	talento 372 plus	12 V AC/DC	10
03.73.0004.1	4010940033989	talento 371 plus	24 V AC/DC	10
03.73.0005.1	4010940033972	talento 371 plus	110-120 V/50-60 Hz	10
03.73.0007.1	4010940034016	talento 372 plus	24 V AC/DC	10
03.73.0008.1	4010940034023	talento 372 plus	110-120 V/50-60 Hz	10
03.74.0001.1	4010940034818	talento 791 plus	230 V/50-60 Hz	14
03.74.0002.1	4010940034825	talento 792 plus	230 V/50-60 Hz	14
03.74.0003.1	4010940034832	talento 791 plus DCF	230 V/50-60 Hz	14
03.75.0001.1	4010940033941	talento 471 plus	230 V/50-60 Hz	12
03.75.0002.1	4010940033958	talento 472 plus	230 V/50-60 Hz	12
03.75.0003.1	4010940033965	talento 671 plus DCF	230 V/50-60 Hz	12
03.75.0004.1	4010940034047	talento 671 plus DCF	110-120 V/50-60 Hz	12
03.75.0005.1	4010940034054	talento 471 plus	110-120 V/50-60 Hz	12
03.75.0006.1	4010940034061	talento 472 plus	110-120 V/50-60 Hz	12
03.87.0001.1	4010940038021	tactic 571.1 plus	230 V/50-60 Hz	60
03.87.0002.1	4010940038038	tactic 571.1 plus	24 V AC/DC	60
03.87.0003.1	4010940038045	tactic 572.1 plus	230 V/50-60 Hz	60
03.87.0004.1	4010940038052	tactic 572.1 plus	110-120 V/50-60 Hz	60
03.87.0005.1	4010940038069	tactic 572.1 plus	24 V AC/DC	60
03.87.0006.1	4010940038076	tactic 572.1 plus	12 V AC/DC	60
03.87.0010.1	4010940038557	tasu 672 plus	230 V/50-60 Hz	88
03.87.0011.1	4010940038588	MIL D150	230 V/50-60 Hz	95
03.87.0012.1	4010940038595	MIL D150	24 V AC/DC	95
04.34.0001.1	4010940020231	famoso 500	230 V/50-60 Hz	74
04.34.0002.1	4010940020224	famoso 550	230 V/50-60 Hz	74
04.34.0005.1	4010940027421	famoso 505	230 V/50-60 Hz	74
04.34.0006.1	4010940027438	famoso 555	230 V/50-60 Hz	74
04.40.0008.1	4010940022709	famoso 601	2 x 1,5 V	76
04.42.0007.1	4010940020187	famoso 800	2 x 1,5 V	74
04.42.0008.1	4010940020194	famoso 850	2 x 1,5 V	74
04.42.0011.1	4010940022716	famoso 801	2 x 1,5 V	76
04.46.0001.1	4010940019167	thermio 513	230 V/50-60 Hz	78
04.46.0005.1	4010940019471	thermio 403	230 V/50-60 Hz	78
04.46.0006.1	4010940019464	thermio 103	230 V/50-60 Hz	78
04.46.0014.1	4010940033231	thermio E	24 V/50-60 Hz	78
04.46.0038.6	4010940035044	Frame	thermio	78
04.50.0001.1	4010940030957	famoso 1000	2 x 1,5 V	76
04.51.0001.1	4010940030964	famoso 1000 rft 1ch	2 x 1,5 V	72
04.51.0002.1	4010940032807	famoso 1000 rf Set	230V/50-60Hz+ 2 x 1,5V	72
04.52.0001.1	4010940031220	RecUNO	230V/50-60Hz	72
04.53.0001.1	4010940037437	famoso 601 rf Set	2 x 1,5 V	72
04.53.0002.1	4010940037444	famoso 601 rf T	2 x 1,5 V	72
04.53.0003.1	4010940037451	famoso 651 rf Set	2 x 1,5 V	72
04.53.0004.1	4010940037468	famoso 651 rf T	2 x 1,5 V	72
05.15.0064.6	4010940002954	Cover Ø 60	for UWZ 60 KE	94
05.15.0065.6	4010940008802	Cover 55 x 55	for taxxo 112	92
05.15.1001.1	4010940001339	taxxo 100	220-240 V/50 Hz	90
05.15.1010.1	4010940001377	taxxo 100	18- 26 V/50 Hz	90
05.15.1016.1	4010940002275	taxxo 112	18- 26 V/50 Hz	90
05.15.1019.1	4010940001407	taxxo 100	110-120 V/50 Hz	90
05.15.1026.1	4010940001438	taxxo 100	110-127 V/60 Hz	90
05.15.1031.1	4010940002299	taxxo 112	110-127 V/60 Hz	90

## Ordering number directory

Ord.-No	EAN- Code number	Designation	Voltage	Page
05.15.1038.1	4010940002268	taxxo 112	220-240 V/50 Hz	90
05.15.1049.1	4010940001452	taxxo 100	36- 48 V/50 Hz	90
05.15.1089.1	4010940001506	taxxo 100	330-380 V/50 Hz	90
05.15.1090.1	4010940001513	taxxo 212 (UWZ 52 KE)	220-240 V/50 Hz	94
05.15.1105.1	4010940001544	taxxo 212 (UWZ 52 KE)	110-120 V/50 Hz	94
05.15.1108.1	4010940001568	taxxo 332 (UWZ 60 ZKE)	220-240 V/50 Hz	94
05.15.1118.1	4010940002282	taxxo 112	110-120 V/50 Hz	90
05.20.0004.1	4010940001582	taxxo 712	220-240 V/50 Hz	90
05.20.0006.1	4010940001599	taxxo 612	220-240 V/50 Hz	90
05.20.0008.1	4010940001629	taxxo 712	110-127 V/60 Hz	90
05.20.0016.1	4010940001667	taxxo 612	18- 26 V/50 Hz	90
05.20.0018.1	4010940001681	taxxo 712	18- 26 V/50 Hz	90
05.20.0026.6	4010940002961	Spring clip	for taxxo 612	92
05.20.0028.1	4010940001711	taxxo 712	36- 48 V/50 Hz	90
05.20.0029.1	4010940001728	taxxo 712	110-120 V/50 Hz	90
05.20.0033.1	4010940001742	taxxo 612	330-380 V/50 Hz	90
05.21.0001.1	4010940001773	taxxo 403	220-240 V/50 Hz	90
05.21.0002.1	4010940001780	taxxo 403	110-120 V/50 Hz	90
05.21.0003.1	4010940001797	taxxo 403	36- 48 V/50 Hz	90
05.21.0004.1	4010940001803	taxxo 403	18- 26 V/50 Hz	90
05.21.0005.2	4010940011246	Wall installation kit 2TE	for taxxo 403	92
05.21.0009.1	4010940001810	taxxo 403	110-127 V/60 Hz	90
07.01.0028.1	4010940021184	Radio antenna FA DCF 77	-	20
07.01.0028.1	4010940021184	Radio antenna DCF 77	-	28
07.01.0029.1	4010940021634	Set talento taxxi	-	28
07.01.0030.1	4010940021641	talento taxxi	-	28
07.02.0001.1	4010940002671	Sensor LF	2-500 Lux	42
07.02.0003.1	4010940016630	Sensor LF-flush mounting	2-500 Lux	42
07.02.0003.2	4010940029166	Cap LF	500-10.000 Lux	42
07.02.0004.1	4010940027643	Sensor LF	500-10.000 Lux	42
07.75.0001.1	4010940034740	talento VM plus	230 V/50-60 Hz	18
07.75.0002.1	4010940034757	talento VM plus	110-120 V/50-60 Hz	18
07.75.0008.1	4010940034856	Radio antenna FA GPS	-	20
07.75.0011.1	4010940034917	talento taxxi plus	-	20
07.75.0012.1	4010940034924	Set talento taxxi plus	-	20
07.75.0013.1	4010940034931	talento IR plus	-	18
07.75.0014.1	4010940034948	talento VM plus	24 V AC/DC	18
09.02.0005.8	4010940032821	Lithium Battery	3 years running reserve	44
09.02.0007.8	4010940024048	Lithium Battery	6 years running reserve	44
10.01.0001.1	4010940012861	termo 100	230 V / 50-60 Hz	76
10.01.0002.1	4010940029999	Adapterset Oventrop M30x10		76
10.28.0017.4	4010940002930	Median bail	for UWZ 60 KE	94
11.24.0007.8	4010940002978	Sealing	for taxxo 612	92
11.24.0008.8	4010940011253	Sealing IP 54	for taxxo 112	92
14.24.0001.5	4010940002992	Sealing	for taxxo 712	92
14.27.0002.4	4010940002985	Ratchet clamp	for taxxo 712	92
15.27.0011.4	4010940002886	Ratchet clamp	for taxxo 112	92
15.27.0011.4	4010940002886	Ratchet clamp	for UWZ 52 KE	94
15.27.0011.4	4010940002886	Ratchet clamp	for UWZ 45	94
15.92.0021.4	4010940002862	Base	for taxxo 100	92
16.13.0001.1	4010940012328	topica 500	220-240 V/50 Hz	84
16.14.0001.1	4010940034696	topica digi	220-240 V/50 Hz	86
16.25.0008.1	4010940002428	topica 200 S	220-240 V/50 Hz	84
16.26.0006.4	4010940008819	Cover 72 x 72	for taxxo 112	92
16.26.0008.1	4010940002435	topica 400 S	220-240 V/50 Hz	84
16.27.0001.1	4010940016241	topica 410 S	220-240 V/50 Hz	84
16.30.0001.1	4010940031992	tip 100 S	220-240 V/50 Hz	86
16.40.0001.1	4010940003906	topica 450 S	220-240 V/50 Hz	84
16.58.0001.1	4010940003364	Rondomatic 400	230 V/50 Hz	86
16.58.0004.2	4010940024093	Assembly kit	for Rondomatic	86
16.58.0016.6	4010940024086	Attachment bracket	for Rondomatic	86
17.08.0001.1	4010940002169	Power supply EIB		50
17.08.0002.1	4010940002176	Rail EIB	214 mm	48
17.08.0003.1	4010940002183	Coupler EIB		50
17.08.0005.1	4010940002206	Rail EIB	243 mm	48
17.08.0006.1	4010940002213	Rail EIB	277 mm	48

## Ordering number directory

Ord.-No	EAN- Code number	Designation	Voltage	Page
17.08.0007.1	4010940004071	Rail cover EIB	240 mm	48
17.08.0016.1	4010940013035	Dual connector EIB		50
17.08.0048.1	4010940028015	ticlo 851.1 EIB		52
17.08.0051.1	4010940029814	ticlo 632.1 EIB		52
17.08.0052.1	4010940029821	ticlo 632.0 EIB		52
17.08.0053.1	4010940029838	ticlo 642.1 EIB		52
17.08.0054.1	4010940029845	ticlo 642.0 EIB		52
17.08.0055.1	4010940029920	ticlo 632.5 EIB		52
17.08.0056.1	4010940029937	ticlo 642.5 EIB		52
17.12.0002.1	4010940017217	tempic 500 EIB		48
17.13.0001.1	4010940014032	termo 500 EIB		48
17.13.0002.1	4010940017989	Adapterset Danfoss RA 2000		48/76
17.13.0003.1	4010940017996	Adapterset Overtrop M30x10		48
17.13.0007.1	4010940027490	Adapterset Velta		48/76
17.13.0008.1	4010940028404	Adapterset TA TRV / Comap		48
17.13.0009.1	4010940028411	Adapterset Danfoss RAV		48/76
17.13.0010.1	4010940028428	Adapterset Vaillant		48/76
17.13.0012.1	4010940028442	Adapterset Giacomini		48/76
17.23.0001.4	4010940002947	Knurled screw	for UWZ 60 KE	94
18.01.0004.2	4010940002657	Wall installation kit 1 TE	talento, trealux, turnus	44
18.13.0006.1	4010940023225	trealux 710	230 V/50-60 Hz	38
18.13.0007.1	4010940023232	trealux 610	230 V/50-60 Hz	38
18.13.0009.1	4010940024789	trealux 210	230 V/50 Hz	38
18.17.0001.1	4010940018986	turnus 200	220-240 V/50-60 Hz	40
18.18.0001.1	4010940023249	turnus 501 A	220-240 V/50-60 Hz	40
18.18.0002.1	4010940023256	turnus 502 A	230 V/50-60 Hz	40
18.18.0003.1	4010940023973	turnus 502.1	230 V/50-60 Hz	40
18.18.0006.1	4010940024031	turnus 501 E	220-240 V/50-60 Hz	40
18.19.0001.1	4010940023263	turnus 771	230 V/50-60 Hz	42
18.19.0002.1	4010940023270	turnus 772	230 V/50-60 Hz	42
44.27.0001.4	4010940002763	Frame	for tactic plus	66
46.13.0001.4	4010940002787	Glass	for tactic	66
46.13.0002.4	4010940003210	Sealing glass	for tactic	66
50.12.0001.4	4010940002879	Surface mounting housing	for taxxo 100	92
50.13.0001.3	4010940003302	Glass	for UWZ 45	94
50.13.0002.4	4010940003272	Frame	for UWZ 45	94
50.22.0001.5	4010940003296	Attachment screw	for UWZ 45	94
50.92.0013.4	4010940003265	Base	for UWZ 45	94
85.13.0001.3	4010940017323	Glass	for Rondomatic	86
85.15.0006.4	4010940024079	Plug-in riders	for Rondomatic	86
85.21.0002.4	4010940017316	Food container	for Rondomatic	86

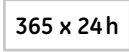

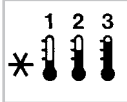




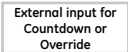

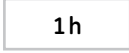

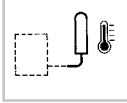
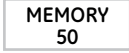

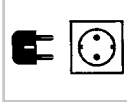
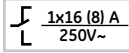
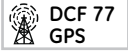
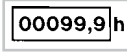


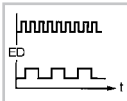


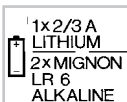
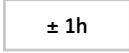
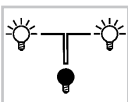
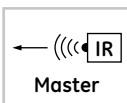

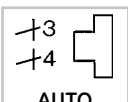



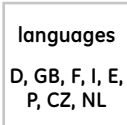

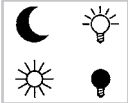




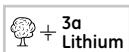











## Pictogram explanation

	Annually, weekly and daily program		Automatic determination of the times for sunrise and sunset		Levels of temperature
	weekly and daily program		Offset ASTRO		Temperature range
	daily program		External input		2-wire connection
	Short time program		Holiday program Date program		External temperature sensor
	Memory spaces		Radio interface DCF 77		Plug-in time switches
	Switching capacity		Radio interface DCF 77 and GPS		Hour meter
	Switching capacity		Staircase lighting time switches		ED-on-time (setting of switching cycle)
	Automatic summer time/winter time changeover		Staircase lighting time switches Half-time switching		Battery handling
	Manual summer time/winter time changeover		Staircase lighting time switches with impulse pre-warning		IR-Transmitter
	Switching state Fix ON / Fix OFF		3- and 4-wire connection		IR-Receiver
	Switching preselection (Override)		Photo electric switches, process and time controlled		Available languages for menu navigation
	Switching state Fix ON / Fix OFF		Photo electric switches, process controlled		RJ45 Interface
	Fix ON/ timer handling / Fix OFF		Adjustment range Lux		Protection type
	Running reserve Lithium-Battery				
	Running reserve 150 h				
	Impulse / Cycle sec./min./day				
	Random generator				



# GRÄSSLIN

## **Grässlin GmbH**

Bundesstraße 36  
D-78112 St. Georgen / Schw.

Postfach 1232  
D-78104 St. Georgen / Schw.

Telefon +49 (0) 7724 / 933-0  
Teleax +49 (0) 7724 / 933-240

[www.graesslin.de](http://www.graesslin.de)  
[info@graesslin.de](mailto:info@graesslin.de)