NEW TIMES

AlphaRex³ / MicroRex

THE NEW GENERATION
OF PROGRAMMABLE TIME
SWITCH TECHNOLOGY

legrand®

AlphaRex^3 –
The Next Generation

The AlphaRex^3 family of programmable digital time switches make your life easier:

- Unified, simplified, brilliantly conceived – from the standardised design to the high-resolution display.
- One data key for all AlphaRex^3 products for quick and easy transfer of programs to other time switches and/or for creating backup copies.
- This allows you to work efficiently, conveniently and economically.

The time switch technology of the AlphaRex^3 series features first class performance that is suitable for everyday use.

- Programming that is simple and precise to the second with extremely high clock precision.

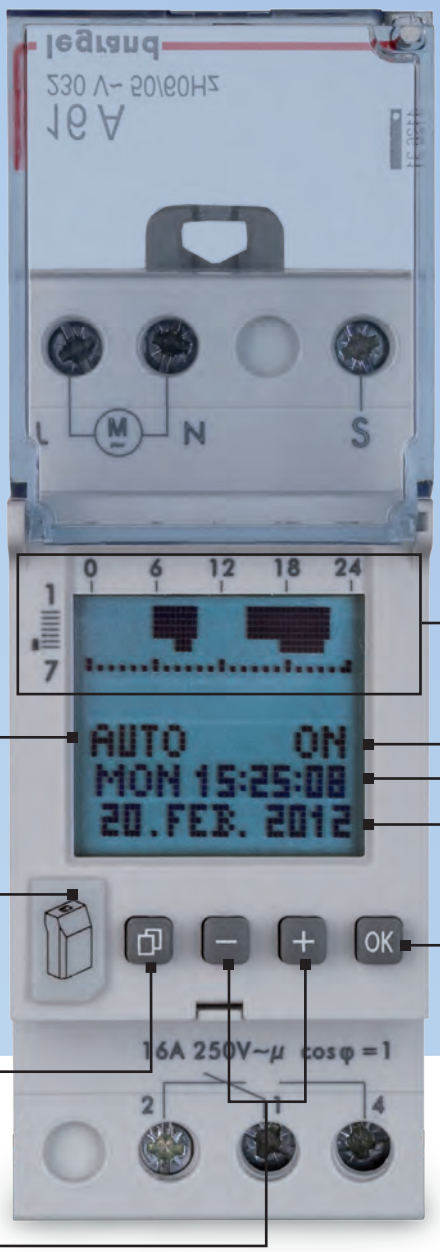
Legrand continues to distinguish itself in the areas of sustainability and resource conservation.

All components including contacts are
100 % cadmium free

Design of the new AlphaRex^3

The function buttons and the clearly arranged display with backlight are the same for all time switches – once you have mastered one, you can operate any model, regardless of which time switch and which application your customers require.

The intuitive menu-based operation is easy to learn and makes programming extremely simple.



Overview of weekly programs

Switching status

Operating mode

Current date and time

Data key slot

"OK" – Confirms the selected program item

"MENU" – Start programming mode

"+/-" – Select the programming menu

One single data key for all AlphaRex^3 programmable time switches

AlphaRex^3 –
The full product range

Advantages of working with the AlphaRex^3 series:

- Same design as all AlphaRex^3 time switches, new user-friendly button layout.
- High-resolution display with backlight.
- Standardised text-guided programming.
- Standard data key for all AlphaRex^3 programmable time switches (transfer and/or backup programs quickly and easily).
- All time switches are equipped with PIN code lock and 1 h test.
- Programming with precision to the second – simple and precise programming directly on the time switch or outside the distribution board using a PC and the AlphaSoft programming software.
- Highest clock precision: +/– 0.1 s/day (with quartz or mains-synchronised in mains-synchronous operation).
- EEPROM memory for back up switching programs.
- Automatic switching for summer/winter time (daylight saving time).
- Changeover contact.
- Zero-crossing switching protects contacts, increases product life time and reduces costs and re-source consumption.
- Barcode on unit.
- In accordance with DIN VDE 0631 Part 1 and Part 2-7, IEC 60730-1 and 60730-2-7, EN 60730-1 and 60730-2-7.

The battery can be removed without uninstalling the AlphaRex^3 from the distribution board.

Overview of the Time Switches

AlphaRex³ programmable weekly time switch

1 channel with 56 programs
2 channels with 28 programs each

AlphaRex³ DY yearly time switch

Yearly and weekly time switch with astronomical function

1 channel with 84 programs

2 channels with 84 programs each,

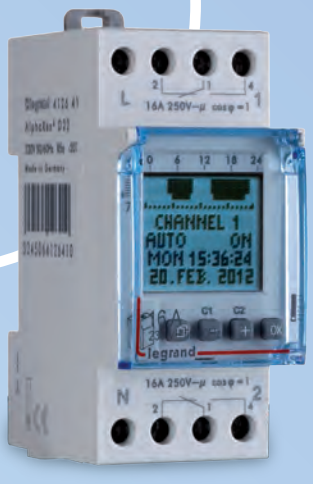
comprising 28 weekly, yearly and special programs each

AlphaRex³ astro astronomical time switch

Switches according to astronomical time or operates as a programmable weekly time switch

1 channel with 56 programs

2 channels with 28 programs each



Technical specifications:

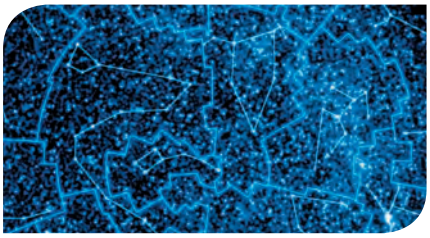
Text-guided and PC-based programming, switching time: 1 s, blocks can be created in programs, automatic switching for summer/winter time (daylight saving time), changeover contact, zero-crossing switching, 5-year running reserve, 2 modules width.

Additional functions:

Holiday program, random function (e.g. for occupancy simulation), 1 h test program for immediate switching simulation, operating hours counter, relay function, PIN code input lock, contrast adjustment.

Expert mode:

Cycle program (for cyclical systems such as animal feed systems), control input, optional mains-synchronous operation, channel-switching function 1<>2 (all 2-channel time switches).



programmable time switches
with digital display

0 037 05

4 126 31 / 4 126 41

For switching an electric circuit (lighting, heating) ON or OFF at selected times during a pre-programmed time period
Temporary (automatic return) or permanent (forced switching ON or OFF) override on output

Pack	Cat.Nos	Standard - daily or weekly programme with 6 years clock working reserve	Number of modules
		Compatible with alternative renewable energy systems such us photovoltaic panels Automatic summer/winter changeover Clock precision: ± 1 sec per day Minimum programme setting: 1 min 28 programmes	
1	0 037 05	Power supply 120/230 V± - 50/60 Hz 1 output 16 A - 250 V± µ cos ϕ = 1 per 1 inverter contact Low consumption: 0.1 W	1

Pack	Cat.Nos	Multiple functions - daily or weekly programme with 6 years clock working reserve	Number of modules
		Programme settings: on daily or weekly basis 15 languages A programme consists of a on and off time and their assignement to certain days Option to suspend the programme for a specific period to set-up with start and date Minimum programme setting: 1 s. High precision clock: ± 0.1 sec per day Particularly suited to irregular cycles: - security installations (access point, alarms, etc.), - industrial installations (pump stations, etc.) Programmed directly on keypad, or using program transfer key Cat.No 4 128 72 Additional functions including random (irregular cycles), hour counters	
1	NEW 4 126 31	Power supply 230 V± - 50/60 Hz 1 output 16 A - 250 V± 56 programmes µ cos ϕ = 1 per 1 inverter contact 84 impulses max.	2
1	4 126 41	2 output 16 A - 250 V± 2 x 28 programmes µ cos ϕ = 1 per 2 inverters contacts	2
1	4 128 72	Programming transfer key Can be used to store programme settings made: - Directly on a multifunction and multi-programme time switch Cat. No. 4 126 31/33/41 (loading on device) - with the programming software installed on a PC running Windows (loading on data loader)	

Pack	Cat.Nos	Programming Software
1	NEW 4 128 73	Can be used to create, save and transfer program settings for multifunction and multi-program time switches, Cat.Nos 0 047 70, 4 126 31/32/33/41 and 4 126 54 Data is transferred to the program transfer key Cat.No 4 128 72, using the data loader connected to the USB port of the PC Kit comprising software on CD-ROM, data loader and transfer key Windows Vista compatible

Pack	Cat.Nos	For outdoor illuminations	Number of modules
		Astronomical For autonomous control of outdoor illuminations Automatic programming: simply initialise the products for the location with no need to install a photoelectric cell Programmed directly on keypad, or using programme transfer key Cat.No 4 128 27 High precision clock: ± 0.2 sec per day	
1	NEW 4 126 54	Power supply 230 V± - 50/60 Hz 1 output 16 A - 250 V± 28 programmes	2
1	4 126 57	2 output 16 A - 250 V± 2 x 14 programmes	2

Rex - digital time switches

MicroRex Plus 2

6 037 70

According to EN 60730-1 and EN 60730-2-7

Digital weekly DIN rail mounting time switch
1 program consists of 1 ON and 1 OFF time and the allocation of any day of the week or a combination of days and the selected channel (2 channel version)

Example:

1. prog.: ON 07:00h	OFF 08:15h Mo-Fr	CH1
2. prog.: ON 16:00h	OFF 20:15h Mo-SU	CH2
3. prog.: ON 10:00h	OFF 15:15h Fr	CH1+2

Additional features:
- manual override (ON/OFF): permanant ON or OFF
- automatic override (ON/OFF): actual program will be inversed (ON->OFF, OFF->ON) till next programmed ON time
- running reserve of 3 years
- exchangeable battery

Pack	Cat.Nos	
	6 037 70	**MicroRex D21 Plus** **1 channel 230 V, 50/60 Hz** GB version
	6 037 71	**MicroRex D22 Plus** **2 channels 230 V, 50/60 Hz** GB version

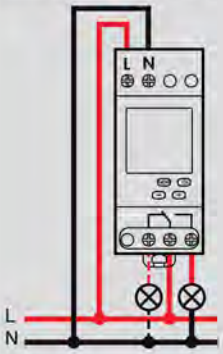
Rex - digital time switches

MicroRex Plus 2

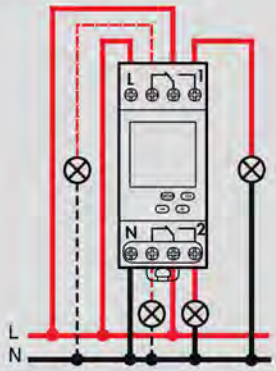
Typ	MicroRex D21 plus 2	MicroRex D22 plus 2
No. of modules (17,5 mm)	2	2
Channels	1	2
Running reserve	3 years	
Switching step	1 min	
Shortest switching step	1 min	
Accuracy	+/- 1 sec/day	
Switching capacity • Resistive 230 V~ cos φ = 1 • Incandescent lamps 230 V~ • Inductive 230 V~ cos φ = 0.6	16 A~ 5 A~ 10 A~	
Contacts	1 SPDT	2 SPDT
No. of programs	28	14/channel
Operating temperature	-10 ... +55 °C	
Protection	IP20	

Wiring diagram

MicroRex D21 Plus 2



MicroRex D22 Plus 2



MicroRex –
Analogue Time Switch Technology

Tried and true analogue time switch technology from the Rex brand: The trusted MicroRex family offers easy operation and programming by setting the analogue switching dial. Automatic and immediate setting of the time during startup as well as automatic switching for summer/winter time (daylight saving time) – not to mention the extremely low clock precision.

MicroRex T31/W31 Su/Wi

- Extremely easy plug-and-play installation
- Automatic setting of the time using fast-run mode
- Automatic switching for summer/winter time (daylight saving time)
- LED status indicator
- Precision clockwork: +/- 0.2 s/day clock precision
- Captive switching segments
- Manual switching: ON/automatic/OFF
- Sealable cover
- Changeover contact as switch output
- Normally open contact as switch output (single-module time switches) [1]
- Removable battery [1]
- Barcode on unit
- In accordance with DIN VDE 0631 Part 1 and Part 2-7, IEC 60730-1 and 60730-2-7, EN 60730-1

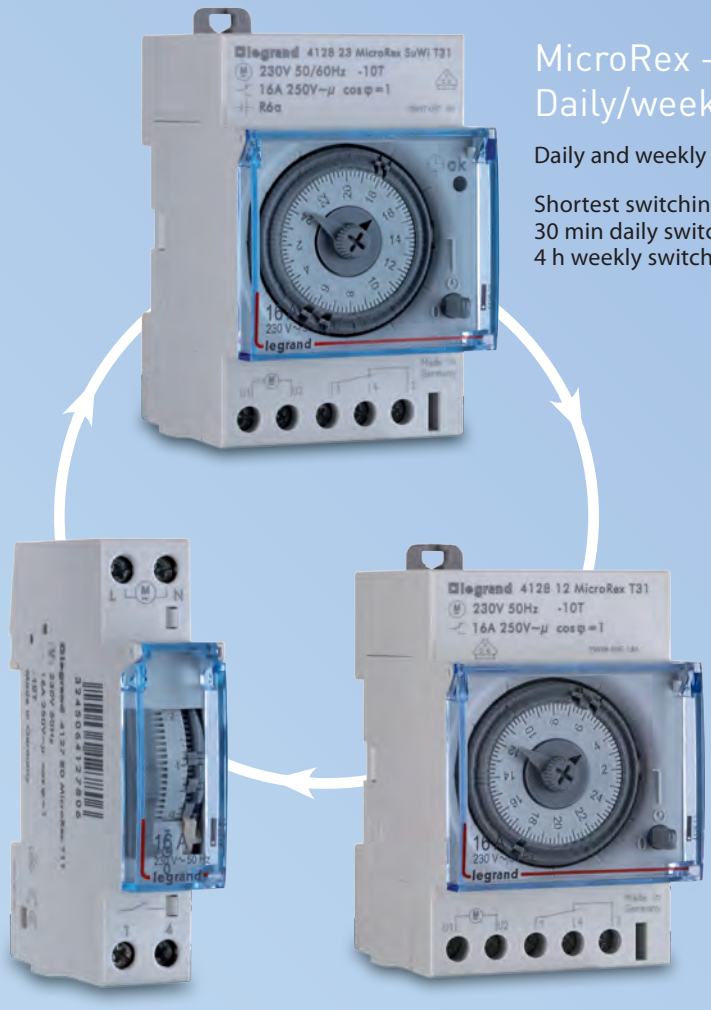
1) Not for MicroRex T31/W31 Su/Wi

MicroRex T31/W31 Su/Wi

- Automatic setting of the time during startup
- Automatic switching for summer/winter time (daylight saving time)
- Automatic time reset after a power failure.

With the highest clock precision and a running reserve of 6 years.

Overview of the Time Switches



MicroRex – Plug&Play Daily/weekly time switch

Daily and weekly time switch with quartz motor

Shortest switching step:
30 min daily switching dial
4 h weekly switching dial

MicroRex Daily/weekly time switch 1 module

Daily time switch:
With synchronous or quartz motor
Weekly time switch:
With synchronous or quartz motor

Shortest switching step:
15 min daily switching dial
2 h weekly switching dial
Running reserve: 100 h (quartz motor)

MicroRex Daily/weekly time switch 3 module

Daily time switch:
With synchronous or quartz motor, with or without manual switch
Weekly time switch:
With synchronous or quartz motor

Shortest switching step:
30 min daily switching dial
4 h weekly switching dial
Running reserve: 100 h (quartz motor)

Installation:

Plug-and-play technology makes installation of the MicroRex Su/Wi time switch quick and easy: just unpack it, set the switching times, connect it and you're finished! The MicroRex Su/Wi time switch now automatically sets the correct time and day in fast-run mode.

Summer/winter time:

The automatic summer/winter time (daylight saving time) switching function is as reliable, convenient and practical as the startup. Using plug-and-play technology, the MicroRex time switch automatically sets itself to the current time.

Time reset:

As soon as the mains voltage returns after a power failure, the time switch resets itself to the correct time automatically and with quartz-controlled precision. The internal precision clockwork has a clock precision of +/- 0.2 s/day.

programmable time switches
with analogue dial

NEW


4 127 90


4 127 95

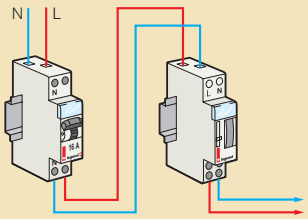
Programmed via captive segment
1-module device: min. 1 segment
3-module device: min. 2 segments
Power supply: 230 V± - 50/60 Hz
3-position override switch "ON-AUTO-OFF" on front panel
Manual changeover to summer/winter time
1 outlet 16 A - 250 V± - μ cos ϕ = 1

Pack	Cat.Nos	Daily programme	Number of modules
		1 segment = 15 minutes Accuracy: ± 5 minutes	
		Vertical dial Minimum switching time: 15 minutes N/O contact	
1	4 127 80	Without working reserve	1
1	4 127 90	With 100 h working reserve	1
		Horizontal dial Minimum switching time: 15 minutes Changeover switch	
1	4 128 12	Without working reserve	3
1	4 128 13	With 100 h working reserve	3
		Weekly programme	
		1 segment = 2 hours Accuracy: ± 30 minutes	
		Vertical dial Minimum switching time: 2 hours N/O contact	Number of modules
1	4 127 94	With 100 h working reserve	1
		Horizontal dial Minimum switching time: 4 hours Changeover switch	
1	4 127 95	With 100 h working reserve	3

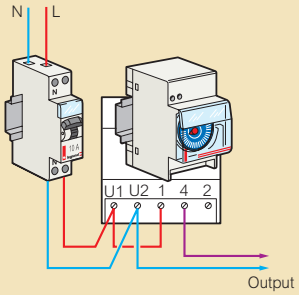
programmable time switches
with analogue and digital dial

n Diagrams

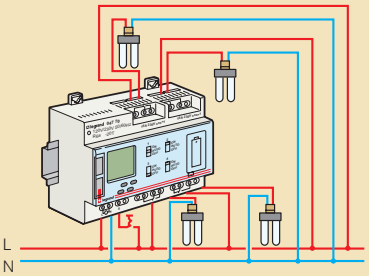
Cat.Nos 4 127 80/90/94



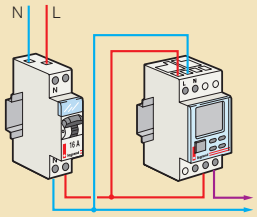
Cat.Nos 4 128 12/13/95



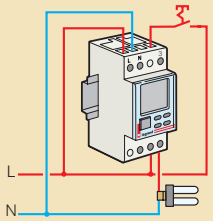
Cat.No 0 047 70



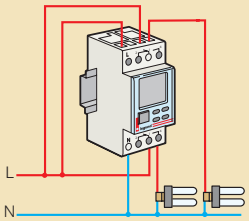
Cat.Nos 4 126 31/32/33



Cat.No 4 126 54



Cat.No 4 126 57



Output closing and breaking times are calculated based on the date, the actual time when the device was switched and on geographical coordinates of the actual location

n Technical characteristics

Cat.Nos	Prog. time	Min. programme settings	Working reserve	Summer/ winter time	Outputs 16 A	Nb of prog.	Nb of modules
0 037 05	7 d	1 min	6 years	auto	1	28	1
4 126 31	24 h/7 d	1 s	6 years	auto	1	56	2
4 126 32	24 h/7 d	1 s	6 years	auto	1	56	2
4 126 33	24 h/7 d	1 s	6 years	auto	1	56	2
4 126 41	24 h/7 d	1 s	6 years	auto	2	2 x 28	2

Cat.Nos	Programme	Segment	Min. switching time	Working reserve	16 A output via contact		Nb of modules
					N/O	Chang. S.	
4 128 12	24 h	15 min	30 min	without	-	1	3
4 128 13	24 h	15 min	30 min	100 h	-	1	3
4 127 80	24 h	15 min	15 min	without	1	-	1
4 127 90	24 h	15 min	15 min	100 h	1	-	1
4 127 94	7 d	2 h	2 h	100 h	1	-	1
4 127 95	7 d	2 h	4 h	100 h	-	1	3

analogue time switches

6 499 14

0 499 26

Power supply 230 V±
Override switching "ON" or "OFF" in front face
Working reserve: 500 h with quartz controlled motor (except Cat.No 0 499 26)
1 output via changeover contact
(2 changeover contacts for Cat.No 0 499 26)

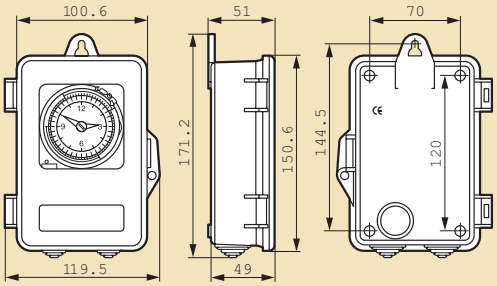
Pack	Cat.Nos	Daily programme
1	6 499 14	20 A - 250 V± - μ cos ø = 1 Shortest switching time: 30 minutes (1 segment = 10 minutes) Switching accuracy: + 5 minutes

Pack	Cat.Nos	Weekly programme
1	0 497 56	16 A - 250 V± - μ cos ø = 1 Shortest switching time: 3 hours (1 segment = 1 hour) Switching accuracy: + 20 minutes
1	0 044 09	Adaptor for fixing time switch on rail EN 50022 4

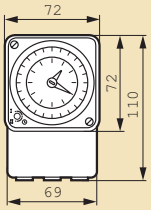
Pack	Cat.Nos	Defrosting time switch
1	0 499 26	Time switch for short periods for control of defrosting, regularly repeated switching of pumps, feed conveyors, sprinkler systems, periodic lubrication of machines 16 A - 250 V± μ cos ø = 1 IP 30 Daily programme The timer can repeat one or two settable short programmes within 24 hours Shortest switching sequence 2.5 hours - up to 9 times 1 switching step = 1 segment = 30 min. 50 Hz Defrosting time from 1 to 60 minutes per contact

n Dimensions

Cat.No 6 499 14



Cat.No 0 497 56



n Technical Characteristics

Analogue time switches 20 A
Conform to EN 50022, EN 55014-1, EN 55014-2, IEC 60730-1, IEC 60730-2-7, VDE 0631-1 and VDE 0631-2-7

For special applications with heavy loads like controlling:
- the lighting of commercial boards / sign boards
- water heaters
- air conditioners
- hydrochlorinators
- heating / ventilation systems
- street lighting
- blowers
- pool heaters
- electric fences
- filters, pumps and conveyers