### TIME SWITCHES

# Move with the times

AlphaRex time switches make programming even easier than ever before. Units can now be set up by following simple on-screen instructions or, alternatively, using the data key which can be programmed via your PC using its very own USB adaptor.





### ✓ FEATURES

Set up, save, edit and manage your settings using the advanced PC programming software and USB adaptor

- > 24/7 display shows stored programmes at a glance
- Clear back lit display and on-screen instructions for easy identification of status

4 function keys for simple programming if not using data key

- > Finger protection terminals with screws
- > Exceptional accuracy of +/-0.2 seconds per day

### **L**legrand

## AlphaRex time switches





0047 61

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Technical information (p. 366-367)

Conform to EN 60730-1 and EN 60730-2-7 LCD digital display and text based programming for easier use Mount on DIN rail EN 60715  $\rm \_r$ 

047 72

0047 72

Pack	Cat. Nos.	AlphaRex	Pack	Cat. Nos.	AlphaRex DY64
		Accuracy : ± 0·2 second per day Programmable for 1 minute minimum at 1 minute steps either as 24 hour or 7 day using preset groups of days : Mon-Sun, Mon-Fri, Sat-Sun or individual days Programmable either directly on the time switch or			Working reserve : 5 years Accuracy : ±0·2 seconds per day Programmable for 1 second min., either direct or via a PC using the data key and USB adaptor with software (see below)
		via a PC with the Legrand software and data key Data keys can also be used to transfer programmes from one unit to another or used to store data and provide a security back up 1 programme consists of 1 ON and 1 OFF time and the allocation of any day of the week or a combination of days, plus the selected channel			Block programming in preset groups of days or individual days Includes optional Astro function, sunrise - sunset with offset for lighting control A programme consists of an ON/OFF time and their assignment to certain days
		on the two channel version			84 programmes per channel possible : • 28 weekly/astronomical programmes
		Additional features : Built in hour counter up to 65535 hours with reset Back lit display and buttons for easy working during			<ul> <li>28 yearly programmes</li> <li>28 exceptional programmes</li> </ul>
		set up Lithium high temperature battery provides a 6 year			Additional features :
		working reserve EEPROM memory keeps your programme stored indefinitely			Backlit display and buttons Programmes are stored in an EEPROM Programmes are shown as a weekly matrix on the display
		Optional automatic summer/winter time change Manual override (permanent ON or OFF until manual reset) Automatic override, changes contact position until			Optional automatic summer/winter time change (daylight saving) Manual override (ON/OFF/AUTO) for each channel on the front face
		next automatic ON time (ON becomes OFF; OFF becomes ON, till next programmed ON) Sealable transparent cover with or without data key inserted Holiday and random security programmes D21 version includes a PULSE function providing up to 84 starts from 1 second to 59 mins 59 secs duration			Manual switching Sealing cover (lead seal not supplied), with or without the data key inserted Calculation of sunrise and sunset by Astro function, using programming date, time and local co-ordinates - does not require an external light sensor The Astro switching times can be adjusted
	00.17.01	AlphaRex D21 24 hour or 7 day, 56 programmes, 1 channel 1 x 250 V 50 Hz, 16 A voltage free c/o contact			asymmetrically for up to 120 minutes One channel includes an input control enabling remote activation irrespective of the programme setting Option to create a cyclical repetitive programme on
1 1	0047 61 0047 63	230 V 50/60 Hz supply voltage 24 V 50/60 Hz or DC supply voltage			channel 1
1	0047 71	AlphaRex D22 24 hour or 7 day, 2 x 28 programmes, 2 channels 2 x 250 V 50 Hz, 16 A voltage free c/o contacts 230 V 50/60 Hz supply voltage			AlphaRex DY64 – 6 modules 336 programmes total, 4 channels 16 A – 230 V $\sim$ 4 SPDT voltage free contacts, supplied with DY64 data key and software version 3.0
1	6047 72	24 V 50/60 Hz or DC supply voltage	1	0047 70	120/230 V $\sim$ 50/60 Hz supply voltage
		Accessories			Accessories
					Data key
1	0047 72	<b>Data key</b> Enables programmes to be stored and/or transferred from one time switch to another When used with the USB adaptor (Cat. No. 0047 73 below) the data key can be programmed via a PC	1	0047 81	Enables programmes to be stored and/or transferred from one time switch to another When used with the USB adaptor (Cat. No. 0047 73 below) the data key can be programmed via a PC
		· · · ·			

### USB adaptor with software

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0047 73 Enables programmes to be written or read on a PC then transferred using the data key (Cat. No. 0047 72 Above) to the time switch Version 3·0 system requirements : Windows®<sup>(1)</sup> 2000, Windows<sup>®(1)</sup>ME, Windows<sup>®(1)</sup>XP, and Windows<sup>®(1)</sup>98 second edition, 40 MB free disc space Data key box

0057 91 1 module width - mounts on DIN rail to store data keys (1) Windows is a registered trademark of the Microsoft Corporation



0047 70

0047 81

		Manual switching Sealing cover (lead seal not supplied), with or without the data key inserted Calculation of sunrise and sunset by Astro function, using programming date, time and local co-ordinates - does not require an external light sensor The Astro switching times can be adjusted asymmetrically for up to 120 minutes One channel includes an input control enabling remote activation irrespective of the programme setting Option to create a cyclical repetitive programme on channel 1
		AlphaRex DY64 – 6 modules 336 programmes total, 4 channels 16 A – 230 V $\sim$ 4 SPDT voltage free contacts, supplied with DY64 data key and software version 3.0
1	0047 70	120/230 V $\sim$ 50/60 Hz supply voltage
		Accessories
1	0047 81	<b>Data key</b> Enables programmes to be stored and/or transferred from one time switch to another When used with the USB adaptor (Cat. No. 0047 73 below) the data key can be programmed via a PC
1	0047 73	<b>USB adaptor with software</b> Enables programmes to be written or read on a PC then transferred using the data key (Cat. No. 0047 72 above) to the time switch Version 3·0 system requirements : Windows <sup>® (1)</sup> 2000, Windows <sup>® (1)</sup> MP, Windows <sup>® (1)</sup> XP, and Windows <sup>® (1)</sup> 98 second edition, 40 MB free disc space
		Data key box
1		1 module width - mounts on DIN rail to store data keys
		(1) Windows is a registered trademark of the Microsoft Corporation
		365

### **L**legrand

### AlphaRex time switches

digital for rail 🖵

### Programming

### Just 4 buttons put you in control Simple, easy to set up and easy to use...



With pre-installed English text that can be changed to German, French, Spanish or Italian

Central European time and date have been factory set with European summer/winter time change installed



To set UK time : press MENU button select SET confirm OK; select **TIME/DATE** confirm OK; amend hour to UK hour confirm OK; confirm remainder OK

### Now set your ON/OFF times...

Press the MENU button, select **PROGRAM** from the menu Select the function you need i.e. **NEW, EDIT, CHECK** or **DELETE** 



Example : Select **NEW** confirm OK; Select block or individual days confirm OK; Set ON time Hours and Mins. confirm OK; Set **OFF** time Hours and Mins. confirm OK; Press the MENU button to return to normal operation

You can move forwards or backwards with the -+ buttons

Either programme directly on the time switch or via your PC Using the data key you can transfer the programme to another time switch of the same model

More features than ever before :

- holiday programme
- hour counter with reset
- pulse function
- random function
  contrast control
- more ON/OFF controls

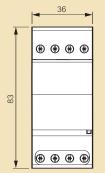
### Technical information

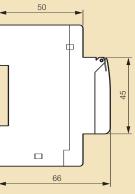
<b>T</b>			
Type Cat. No.	AlphaRex D21 0047 61/0047 63	AlphaRex D22 0047 71/6047 72	
Programme	24 hour or 7 day		
No. of channels	1	2	
No. of ON-OFF actions per day/week	56	2 x 28	
Pulse start times	84	Nil	
Pulse duration	1 second min. to 59 minutes 59 seconds max.	N/A	
Switching capacity : $\cos \phi = 1$ incandescent lamp $\cos \phi = 0.6$	16 A 8 A 10 A		
Contact	1 changeover switch	2 changeover switches	
Terminal capacity	1.5 mm - 4 mm single/1.	5 mm - 2·5 mm stranded	
IP rating	IP 2	20	
Min. prog. time	1 mir	nute	
Switching step	1 mir	nute	
Accuracy	± 0·2 second per day		
Working reserve <sup>(1)</sup>	6 years		
Programme memory	Unlimited (EEPROM)		
Manual switching	Override and permanent		
No. of 17·5 mm modules	2		
Operating temp.	−20 °C +55 °C		
Storage temp.	−20 °C +60 °C		
Weight	130 g 136 g		

(1) For time and date only

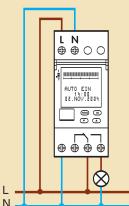
A programme consists of an ON and OFF time and the assigned day(s)

### Dimensions

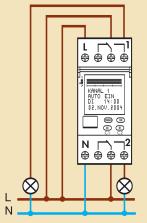




### Wiring diagrams AlphaRex D21



AlphaRex D22



### Programming

### Annual, weekly, DY64 time switch digital for rail - 4 channel

The AlphaRex DY64 time switch provides for annual, weekly and exceptional programming

### Weekly programme menu :

Used to automatically switch on-off simple circuits, such as lighting or boilers. A weekly programme consists of an ON time and an OFF time and the associated switching days.

- MON to SUN : The days are preset, just enter the ON and OFF times. This is used where the same programme is repeated on each day. • INDIVIDUAL : Enter both the ON and OFF time plus the switching
- day(s). This is used where the same programme is only repeated on certain days of the week or different programmes are required on various days.

### Annual programme menu :

This permits the input of annual programmes or additional programmes to those above, which are executed during a specific period of time. The annual and weekly programmes on the same channel are integrated together as described. Time periods are set by entering the start date and the end date.

- Select EVERY YEAR if the programme is to be repeated during the same period each year. E.g. Christmas, national holidays, birthdays.
  Select **ONCE** if the programme is to be executed only during a single
- period. E.g. vacation periods, where the start date and end date differ each year

### Exceptional programme menu :

The above preset programmes are replaced by any exceptional programme for as long as the exceptional programme is active. However, other exceptional programmes will be executed while an exceptional programme is active. The various exceptional programmes are integrated together.

Using the exceptional programme :

- The EVERY YEAR option should be selected if the exceptional programme is to be activated for the same period and time every year.
- The ONCE option is used for programmes that only require a single period and where the start and end dates differ each year e.g.
- The **MON** to **SUN** option runs from 00:00 hours on the start date to 24:00 hours on the end date. During this period the output of the related channel only switches the exceptional programme setting.
- The INDIVIDUAL option runs from 00:00 hours on the start date to 24:00 hours on the end date. During this period the output of the related channel switches only as defined in the set exceptional
- programme. The **PROG ON** option enables the user to make the output channel permanently ON during the start (ON) and end (OFF) times entered. The **PROG OFF** option enables the user to make the output channel
- permanently OFF during the start (ON) and end (OFF) times entered.

### **Cycle function for channel 1**

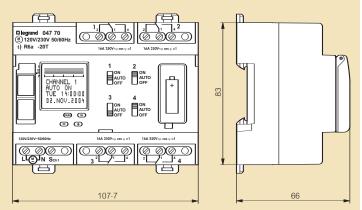
The standard function on channel 1 can be changed into a cycle function to provide on and off cyclically. Setting the **PERIOD** and the **SWITCH ON** times activates this option

	15:00:00	15:10:00 1	5:20:00	15:30:00
	0:10:00	0:10:00	0:10:00	
Programme	PERIOD	PERIOD	PERIOD	15:32:00
channel 1, or				
control signal "S"	SWITCH ON	SWITCH ON	SWITCH ON	
Channel 1 relay	0:04:00	0:04:00	0:04:00	

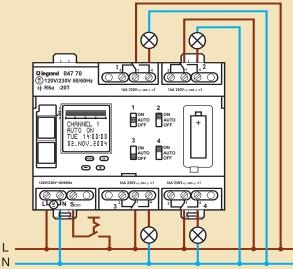
### Technical data

Type Cat. No.	AlphaRex DY64 0047 70
No. of channels	4
Switching capacity : $\cos \varphi = 1$ incandescent lamp $\cos \varphi = 0.6$	16 A 8 A 10 A
IP rating	IP 20
Shortest switching time	1 second
Accuracy	±0·2 seconds per day or frequency
Switch output	4 SPDT
Programmes	3 x 4 x 28 (336)
Control input with delay time	0 min - 23 hr 59 min
Working reserve	5 years
Switching increment	1 second
No. of 17.5 mm modules	6
Operating temperature	−20 °C +55 °C

### Dimensions



### Wiring diagram



### **C**legrand

### MicroRex<sup>™</sup> time switches digital for rail 🖵

Supply vo LCD digita	to EN 6073 Itage : 230 al display	бота анд EN 60730-2-7 0 V ∿ 50/60 Hz N 60715 ⊥г		
Pack	Cat. Nos.	MicroRex D Plus		
		Working reserve : 6 years Accuracy : ±1 second per day Programmable for 1 minute min. at 1 minute steps either as 24 hour/7 day using pre-set groups of days One programme consists of 1 "ON" and 1 "OFF" time and the allocation of any day of the week or a combination of days. Plus the selected channel		
		Example :Prog. 1On 07.00hrsOff 08.15hrsMon-FriCh1Prog. 2On 16.00hrsOff 20.15hrsMon-FriCh2Prog. 3On 10.00hrsOff 16.15hrsSat-SunCh1		
		Additional features : EEPROM memory stores programme indefinitely Optional automatic summer/winter time change Manual override (ON or OFF) Automatic advance (changes contact position until next automatic ON time)		
1	6047 74	MicroRex D21 Plus 24 hour or 7 day, 28 programme, 1 channel 1 x 16 A voltage free c/o contact		
1	6047 77	MicroRex D22 Plus 24 hour or 7 day, 2 x 14 programme, 2 channel 2 x 16 A voltage free c/o contacts		
	MicroRex D			
		Working reserve : 100 hours Accuracy : $\pm 2.5$ seconds per day		
		7 day programme Programmable for 1 minute min. at 1 minute steps		
		Additional features : Manual advance/override (ON-OFF) Automatic override (ON-OFF) for holidays, weekends or bank holidays up to 99 days successively Automatic summer/winter setting		
1/30	0037 00	MicroRex D11 – 1 module 8 programmes, 1 channel 1 x 16 A – 250 V $\sim$ voltage free c/o contacts with 8 "ON-OFF" per day or per week		

MicroRex<sup>™</sup> time switches

digital for rail 🖵

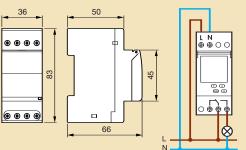
### Technical information

No. of channels121No. of ON-OFF actions per day/week28 $2 \times 14$ 8Switching cap : cos $\varphi = 1$ 16 A16 Aincandescent lamp cos $\varphi = 0.6$ 16 A16 AContact1 c/o2 c/o1 c/oTerminal capacity1.5 - 4 mm single/1.5 - 2.5 mm strandedIP ratingIP 20Min. prog. time1 minuteSwitching step1 minuteAccuracy±1 second per day±2.5 sec/dWorking reserve <sup>(1)</sup> 6 years>100 hrsProg. memoryEEPROM-Manual switchingOverride and permanentNo. of 17.5 mm modules21Operating temp. $-20 ^\circ C \dots +55 ^\circ C$ $-10 ^\circ C \dots +55 ^\circ C$	Type Cat. No.	D21 Plus	D22 Plus	D11
No. of ON-OFF actions per day/week28 $2 \times 14$ 8Switching cap : cos $\varphi = 1$ 	Programme	24 hour	or 7 day	7 day
actions per day/week28 $2 \times 14$ 8Switching cap : cos $\varphi = 1$ 16 A16 Aincandescent lamp cos $\varphi = 0.6$ 5 A4 AContact1 c/o2 c/o1 c/oTerminal capacity1.5 - 4 mm single/1.5 - 2.5 mm strandedIP 20Min. prog. time1 minuteSwitching step1 minuteAccuracy $\pm 1$ second per day $\pm 2.5$ sec/dWorking reserve <sup>(1)</sup> 6 years>100 hrsProg. memoryEEPROM-Manual switchingOverride and permanentNo. of 17.5 mm modules21Operating temp. $-20  ^\circ C \ldots + 55  ^\circ C$ $-10  ^\circ C \ldots + 55  ^\circ C$	No. of channels	1	2	1
$\cos \varphi = 1$ 16 A16 Aincandescent lamp5 A4 A $\cos \varphi = 0.6$ 8 A10 AContact1 c/o2 c/o1 c/oTerminal capacity1.5 - 4 mm single/1.5 - 2.5 mm strandedIP ratingIP 20Min. prog. time1 minuteSwitching step1 minuteAccuracy±1 second per day±2.5 sec/dWorking reserve <sup>(1)</sup> 6 years>100 hrsProg. memoryEEPROM-Manual switchingOverride and permanentNo. of 17.5 mm modules21Operating temp. $-20 ^\circ C \dots +55 ^\circ C$ $-10 ^\circ C \dots +55 ^\circ C$	actions per	28	2 x 14	8
Terminal capacity       1.5 - 4 mm single/1.5 - 2.5 mm stranded         IP rating       IP 20         Min. prog. time       1 minute         Switching step       1 minute         Accuracy       ±1 second per day       ±2.5 sec/d         Working reserve <sup>(1)</sup> 6 years       >100 hrs         Prog. memory       EEPROM       -         Manual switching       Override and permanent         No. of 17.5 mm       2       1         Operating temp.       -20 °C +55 °C       -10 °C +55 °C	cos φ = 1 incandescent lamp	5 A		4 A
IP rating       IP 20         Min. prog. time       1 minute         Switching step       1 minute         Accuracy       ±1 second per day       ±2.5 sec/d         Working reserve <sup>(1)</sup> 6 years       >100 hrs         Prog. memory       EEPROM       -         Manual switching       Override and permanent       No. of 17.5 mm modules         2       1       0         Operating temp.       -20 °C +55 °C       -10 °C +55 °C	Contact	1 c/o 2 c/o		1 c/o
Min. prog. time       1 minute         Switching step       1 minute         Accuracy       ±1 second per day       ±2.5 sec/d         Working reserve <sup>(1)</sup> 6 years       >100 hrs         Prog. memory       EEPROM       -         Manual switching       Override and permanent         No. of 17-5 mm modules       2       1         Operating temp.       -20 °C +55 °C       -10 °C +55 °C	Terminal capacity	1.5 - 4 mm single/1.5 - 2.5 mm stranded		
Switching step     1 minute       Accuracy     ±1 second per day     ±2·5 sec/d       Working reserve <sup>(1)</sup> 6 years     >100 hrs       Prog. memory     EEPROM     -       Manual switching     Override and permanent       No. of 17·5 mm modules     2     1       Operating temp.     -20 °C +55 °C     -10 °C +55 °C	IP rating	IP 20		
Accuracy     ±1 second per day     ±2.5 sec/d       Working reserve <sup>(1)</sup> 6 years     >100 hrs       Prog. memory     EEPROM     -       Manual switching     Override and permanent       No. of 17.5 mm modules     2     1       Operating temp.     -20 °C +55 °C     -10 °C +55 °C	Min. prog. time	1 minute		
Working reserve <sup>(1)</sup> 6 years       >100 hrs         Prog. memory       EEPROM       -         Manual switching       Override and permanent         No. of 17:5 mm modules       2       1         Operating temp.       -20 °C +55 °C       -10 °C +55 °C	Switching step		1 minute	
Prog. memory     EEPROM       Manual switching     Override and permanent       No. of 17.5 mm modules     2     1       Operating temp.     -20 °C +55 °C     -10 °C +55 °C	Accuracy	±1 secon	d per day	±2·5 sec/d
Manual switching         Override and permanent           No. of 17.5 mm modules         2         1           Operating temp.         -20 °C +55 °C         -10 °C +55 °C	Working reserve <sup>(1)</sup>	6 ye	ears	>100 hrs
No. of 17.5 mm modules         2         1           Operating temp.         -20 °C +55 °C         -10 °C +55 °C	Prog. memory	EEPROM		-
modules         2         1           Operating temp.         -20 °C +55 °C         -10 °C +55 °C	Manual switching	Override and permanent		
		2		1
	Operating temp.	–20 °C +55 °C		_10 °C+55 °C
<b>Storage temp.</b> –20 C +60 C –	Storage temp.	−20 °C +60 °C		-
Weight         130 g         100 g	Weight	130 g		100 g

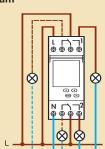
(1) For time and date only

### Dimensions and wiring diagrams

MicroRex D21/D22 Plus Wiring diagram

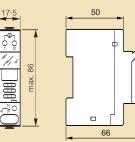


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MicroRex D11

Wiring diagram





### MaxiRex<sup>™</sup> time switches digital surface or 72 x 72 panel mounting



0496 82

5

Conform to EN 60730-1 and EN 60730-2-7 Supply voltage : 230 V  $\sim$  50/60 Hz Accuracy : ±1 second per day LCD digital display Programmable for 1 minute minimum at 1 minute intervals

Pack	Cat. Nos.	MaxiRex D Plus			
		Working reserve : 6 years Accuracy : ±1 second per day Programmable for 1 minute min. at 1 minute steps either as 24 hour/7 day using pre-set groups of days			
		One programme consists of 1 "ON" and 1 "OFF" time and the allocation of any day of the week or a combination of days. Plus the selected channel			
		Example : Prog. 1 On 07.00hrs Off 08.15hrs Mon-Fri Ch1 Prog. 2 On 16.00hrs Off 20.15hrs Mon-Fri Ch2 Prog. 3 On 10.00hrs Off 16.15hrs Sat-Sun Ch1			
		Additional features : EEPROM memory stores programme indefinitely Optional automatic summer/winter time change Manual override (ON or OFF) Automatic advance (changes contact position until next automatic ON time)			
1	0496 80	MaxiRex D72/1 Plus 24 hour or 7 day, 28 programme, 1 channel 1 x 16 A voltage free c/o contact			
1	0496 82	MaxiRex D72/2 Plus 24 hour or 7 day, 2 x 14 programme, 2 channel 2 x 16 A voltage free c/o contacts			

### **Accessories**

0498 32 0044 09 Clip-on support frame for panel mounting DIN rail <u></u> adaptor

### MaxiRex<sup>™</sup> time switches

digital surface or 72 x 72 panel mounting

### Technical information

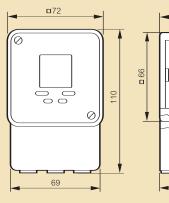
	ination		
Type Cat. No.	MaxiRex D72/1 Plus 0496 80	MaxiRex D72/2 Plus 0496 82	
Programme	24 hour or 7 day		
No. of channels	1	2	
No. of ON-OFF actions per day	28	2 x 14	
Switching capacity : $\cos \phi = 1$ incandescent lamp $\cos \phi = 0.6$	16 A 5 A 8 A	16 A 5 A 8 A	
Contact	1 changeover switch	2 changeover switches	
Min. prog. time	1 minute		
Switching step	1 minute		
Accuracy	±1 second	per day	
Working reserve <sup>(1)</sup>	6 yea	ars	
Programme memory	EEPROM		
Manual switching	Override and permanent		
Operating temp.	–20 °C +55 °C		
Storage temp.	−20 °C +60 °C		
Weight	178 g	204 g	
(1) For time and date only			

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34

(1) For time and date only

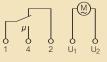
### Dimensions





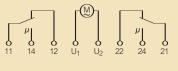
Wiring diagrams

MaxiRex D72/1 Plus

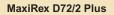


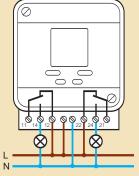
### MaxiRex D72/2 Plus

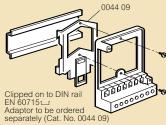
Panel mounting with support 0498 32 to be ordered separately



0498 32







### **L**legrand

### **MicroRex<sup>™</sup> time switches** analogue for rail 🖵



1/10





0037 30

0037 52

Conform to EN 60730-1 and EN 60730-2-7 Supply voltage : 230 V  $\sim$  +10% –15% Accuracy :  $\pm 5$  minutes per day^(1) Voltage free contacts with ON-OFF-AUTOMATIC 3 position switch Mount on DIN rail EN 60715 \_\_r

Pack	Cat. Nos.	MicroRex – 1 module

		24 hour programme
Programmable for 15 minutes minir 15 minute intervals		Programmable for 15 minutes minimum at 15 minute intervals
		MicroRex T11
1	0037 30	Without working reserve – 50 Hz
		MicroRex QT11
1/10	0037 40	With 100 hr working reserve – 50/60 Hz

### MicroRex - 3 modules

24 hour programme

Programmable for 30 minutes minimum at 15 minute intervals MicroRex T31

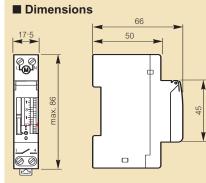
0037 52 Without working reserve – 50 Hz

### MicroRex<sup>™</sup> time switches

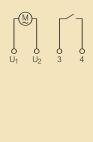
analogue for rail 🖵

### ■ MicroRex – 1 module

	Micro	Rex	
Type Cat. No.	T11 0037 30	QT11 0037 40	
Supply voltage	230 V∿ +	10% –15%	
Frequency	50 Hz	50/60 Hz	
Switching capacity : $\cos \phi = 1$ incandescent lamp $\cos \phi = 0.6$	16 A 4 A 10 A		
Contact	On/	′off	
Working reserve	None 100 hours		
Min. switching time	15 minutes		
Interval	ral 15 minutes		
Operating temp.	−10 °C+55 °C		



### Wiring diagram

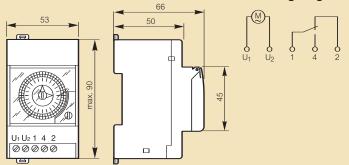


### ■ MicroRex – 3 modules

Type Cat. No.	T31 0037 52	MicroRex QT31 0037 53	QW31 0037 55
Supply voltage	230 V∼ +10% -15%		
Frequency	50 Hz	50/60 Hz	50/60 Hz
Switching capacity : $\cos \varphi = 1$ incandescent lamp $\cos \varphi = 0.6$	16 A 4 A 10 A		
Contact	Changeover switch		
Working reserve	None	100 hours	100 hours
Min. switching time	30 minutes		4 hours
Interval	15 minutes		2 hours
Operating temp.	-10°C+55°C		

### Dimensions

Wiring diagram



(1) Switching accuracy stated, clock accuracy is  $\pm 2.5$  s/d for 'Q' range others subject to frequency



35.5

31.8

### MaxiRex<sup>™</sup> and EconoRex<sup>™</sup> time switches analogue surface or 72 x 72 panel mounting





0497 54

### Pack Cat. Nos. MaxiRex

		Conform to EN 60730-1 and EN 60730-2-7
		Supply voltage : 230 V $\sim\pm$ 10%
		3 position changeover switch With manual override
		Voltage free contacts
		With 72 x 72 mm display to DIN EN 60715 Part C
		<b>24 hour programme</b> Programmable for 30 minutes minimum at 10 minute intervals Accuracy : ±5 minutes per day
		MaxiRex T
1/30	0497 50	Without working reserve – 50 Hz
1/30	0497 54	MaxiRex QT With 100 hr working reserve – 50/60 Hz
1/50	0437 54	5
		7 day programme Programmable for 3 hours minimum at 1 hour intervals Accuracy : ±30 minutes per day
		MaxiRex W
1/30	0497 52	Without working reserve – 50 Hz
		MaxiRex QW
1/30	0497 56	With 100 hr working reserve – 50/60 Hz
		24 hour programme
		Programmable for 1.10 minutes minimum at 1.10 minute intervals
		Accuracy : ±5mins/12:5 secs Other details as Cat. No. 0497 50 except 2 changeover switches and two dials
		MaxiRex TS
1/30	0497 58	Without working reserve – 50 Hz

**Accessories for MaxiRex** 

5 5

### **EconoRex**

Conforms to EN 60730-1 and EN 60730-2-7 Supply voltage : 230 V ±10% 50 Hz With manual override Voltage free contacts

With 72 x 72 mm display to DIN EN 60715 Part C

### 24 hour programme

Programmable for 15 minutes minimum at 15 minute intervals with retained 'pull out' segments Easily programmed, easily read by user Just set actual time to pointer and pull out segments for switch time EconoRex

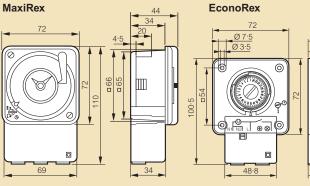
1/30 0499 81 BTAP without working reserve

### MaxiRex<sup>™</sup> and EconoRex<sup>™</sup> time switches analogue surface or 72 x 72 panel mounting

### Technical information

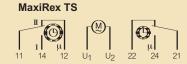
	MaxiRex				EconoRex	
Туре	т	QT	W	QW	TS	BTAP
Cat. No.	0497 50	0497 54	0497 52	0497 56	0497 58	0499 81
Supply voltage	230 V∼+10% -15%					
Frequency	50 Hz	50/60 Hz	50 Hz	50/60 Hz	50 Hz	50 Hz
Switching capacity : $\cos \varphi = 1$ $\cos \varphi = 0.6$ incand. lamp	16 A 10 A 1 000 W			16 A 8 A 1 000 W		
Contact	1 c/o SPDT	1 c/o SPDT			0499 81 1 c/o	
Working reserve	None	100 hrs	None	100 hrs	None	None
Min. switching time	30 m	nins 3 hrs 30 mins 112-5 secs		15 mins		
Interval	10 m	hins 1 hr 10 mins 37.5 secs			15 mins	
IP rating	IP 30					
Storage temp.	−10 °C +60 °C					
Operating temp.	0 °C +55 °C					

Dimensions



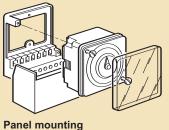
### Wiring diagrams

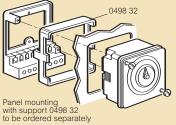
MaxiRex (except TS) and EconoRex 0499 81



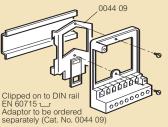
### MaxiRex mounting

### Wall mounting





**DIN rail mounting** 



### **C**legrand

### AstroRex light control time switches digital for rail 🖵



Set-up and features (p. 373)

(+)

Conform to IEC/EN 60730-1 and IEC/EN 60730-2-7 LCD digital display and text based programming for easier use Mount on DIN rail EN 60715  $\rm \_r$ 

Pack	Cat. Nos.	AstroRex
		Accuracy : ± 0.2 second per day Programmable for 1 minute minimum at 1 minute steps by day(s) or week blocks, either directly or via a PC with Legrand software and data key Programmable either directly on the time switch or via a PC with the Legrand software and data key For switching lights or other equipment in accordance with sunrise/sunset ± 120 mins without the need of an external light detector Accepts additional switch programmes for energy saving 1 programme consists of 1 ON and 1 OFF time and the allocation of any day of the week or a combination of days, plus the selected channel on the two channel version
		Additional features :
		Back lit display 6 year working reserve for date and time EEPROM memory keeps your programme stored indefinitely Optional automatic summer/winter time change Holiday programme, 1 hour text function Built-in hours counter, pin coded input Manual switching possible Sealable transparent covers
1	0047 64	AstroRex D21 7 day, 1 channel 1 changeover 16 A voltage free contact 250 V 50 Hz 1 x 28 programmes with control input, delay-time 0 min - 23h 59 min 230 V 50/60 Hz supply voltage
		AstroRex D22 7 day, 2 channels 2 changeover 16 A voltage free contacts 250 V 50 Hz 2 x 14 programmes
1	0047 67	230 V 50/60 Hz supply voltage
		Accessories
1	0047 72	<b>Data key</b> Enables programmes to be stored and/or transferred from one time switch to another When used with the USB adaptor (Cat. No. 0047 73 below) the data key can be programmed via a PC
		USB adaptor with software
1	0047 73	Enables programmes to be written or read on a PC then transferred using the data key (Cat. No. 0047 72 above) to the time switch Version 3·0 system requirements : Windows <sup>® (1)</sup> 2000, Windows <sup>® (1)</sup> ME, Windows <sup>® (1)</sup> XP, and Windows <sup>® (1)</sup> 98 second edition, 40 MB free disc space
		Note : AlphaSoft version 2.1 will programme both AstroRex and AlphaRex time switches
		Contact our technical team if you have a

previous version

(1) Windows is a registered trademark of the Microsoft Corporation

# AstroRex light control time switches

Tables		inform	
lecni	ncar	Intorn	ation

Type Cat. No.	AstroRex D21 0047 64	AstroRex D22 0047 67	
Programme	24 hour or 7 day		
No. of channels	1 2		
Programmes <sup>(1)</sup>	28	2 x 14	
Switching capacity : • ohmic 230 V∿ cos = 1 • incandescent 0.6 lamp 230 V • inductive 230 V∿ cos = 0.6	16 Aへ 8 Aへ 10 Aへ		
Voltage free contact(s)	1 SPDT 2 SPDT		
IP rating	IP 20		
Min. programme time	1 minute		
Switching step	1 minute		
Accuracy	$\pm 0.2$ second per day		
Working reserve <sup>(2)</sup>	6 years		
Control input with delay-time	0 min - 23h 59min –		
Programme memory	Unlimited (EEPROM)		
No. of 17·5 mm modules	2		
Operating temperature	_20 °C +55 °C		

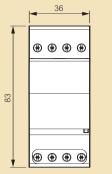
Each programme comprises a switch-on and switch-off time and the associated on and off days or day blocks
 For time and date only

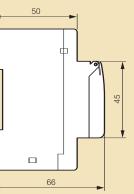
### Simple to use 4 button control

MENU Menu selection, back in menu Actuated > 1 second = operating display

- Confirm selection or adopt parameters
- Select menu items or set parameters, also selection of channel in 2-channel time switch (channel 1 channel 2)

### Dimensions



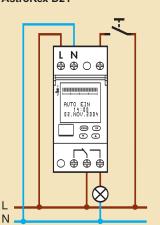


### Wiring diagrams AstroRex D21

AstroRex D22

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372 ibemo Kazakhstan - 09302nRekaziakbstkazat0302nRekjestikaźakazatahs0201ast/esktsaizaRhatazo00blast/KSkosficeRcamplene, BKKS office complex Phone: +7 71133 93077P;hloaux: +7+71718839399077;4F;dx:Mait/7in7648293080744;deMail: info-kz@ibemo.de



#### Basic set up



The AstroRex will guide the user through the set up and programming in English – this can be changed to another language via the "MENU" button. Every step is shown on the backlit display. Illuminated buttons make operation easy in poor visibility.

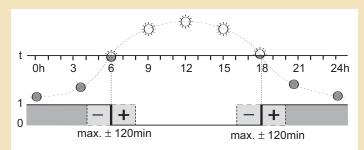
Time, date, summer/winter time changes are preset at the factory to reduce the installation time. These can be easily amended using "MENU + SET"

Sunrise and sunset are preset for the area of SOEST in Germany. These settings are easily changed to the required location by selecting "MENU", "SET" and "ASTRO" to either the option "POSITION" or "COORDINATES".

"POSITION" = The town and country closest to the location can be

selected. "COORDINATES" = The actual coordinates for the location can be set, using the information found in the time zone map provided with the

product. The useful option of "OFFSET" enables the switching to be set back or brought forward by up to 120 minutes in relation to sunrise or sunset.



Example : If an offset of +30 minutes is entered the time switches 30 minutes after sunrise and 30 minutes after sunset. If an offset of -30 minutes is entered the time switches 30 minutes before sunrise and 30 minutes before sunset.

All these settings can easily be made directly into the time switch using the four button control. The Legrand "AlphaSoft" software and data transfer key provide an easy and comfortable method of programming the time switches without site constraints. See p. 372 Data Key Cat. No. 0047 72 and USB adaptor with software Cat. No. 0047 73.

Complete reset possible - see instructions for information.

#### Special features

Not only will AstroRex provide the opposite basic settings but it is also packed with other useful functions. You can... change the relay settings, input holiday schedules, count the hours and reset the hour counter, set a security PIN code, make a 1 hour test, change the contrast and on the one channel version programme a delay time from an input.

### **Relay settings**

These can be changed via "MENU" and "FUNCTIONS". The default is "AUTO" (it switches as programmed). Other options are "CONST ON", "CONST OFF", and "EXTRA". When "EXTRA" is selected, the switch contact position is reversed until the next switch command.

### **Holidavs**

The start and end times of holidays are entered in the holiday programme and activated by the command "ACTIVE" and deactivated with the command "PASSIVE" If the holiday programme is active then the time switch will not execute any of the normal programmed settings but remains either "CONST ON" or "CONST OFF" as selected and set during the holiday period, after which it returns to the normal programmed settings.

### 1 hour test

The function "1H-TEST" can be used to simulate switching. When activated the switch outputs are switched for one hour, after which it returns to the normal programmed settings.

#### PIN code

Input and programming can be disabled and reactivated using a four digit "PIN code" The inhibit can be cancelled using another means should the code be lost.

### Hour counter

The hour counter displays the relay total on time, in hours, since the last reset (max. 65,535 hours).

### Contrast

Enables the display contrast to be adjusted to suit the conditions.

### Delay-Time (D21 only)

A controlled input terminal with a delay time from 0 min to 23hrs 50min is provided. The delay time begins as soon as the voltage at the control input drops.

#### Data key

The menu "KEY"- "READ"- "WRITE", is automatically activated when power is connected and the key is inserted. It can be used to store a programme from the time switch or copy the same programme to another like time switch or used with the AlphaSoft software via a PC to provide a comfortable and easy set up of the Alpha Rex light control switch. Data already saved on the key is overwritten by new data being input using the "READ" command.

The time switch can be programmed without mains voltage and the data key programmed to accept the data by selecting the "KEY" function from the "MENU". This does not work automatically when the data key is inserted and must be selected manually.

### PC programming

Using the Legrand AlphaSoft software the time switch can be easily and comfortably programmed in your office and the data transferred to the data key, which can in turn be used to programme the time switch in the workshop or on site or kept as a back up.

System requirements : USB port, Windows® 98 second edition, Windows® 2000 or Windows® XP. 40MB free memory capacity on the system drive.

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