

WESTERSTRAND TIME SYSTEM Section QW-Time III



QW-TIME III is the complete line of products for operating, controlling and regulating TIME.



QW-TIME comprises a wide range of Master Clocks (WDPQ), Master Clock Programmers (WDP-Y) and Programmers (WYP) for operation and control of Slave Clocks and Digital Clocks and, for controlling and regulating energy and consumers.

Example shown is the Master Clock Programmer WDP-Y2 with minute impulse output and 2 relay outputs.

CHARACTERISTICS AND ADVANTAGES

General

- Fully automatic correction of summer/winter time and preprogrammed calendar.
- Easy to program by simple YES/NO instructions over the easy to read LCD display.
- For extra high accuracy there are signal receivers for time signal type DCF-77, (Germany) GPS or MSF Rugby (Great Britain)
- Electronic short circuiting protection which resets automatically, transient protection, as well as protection against overload.
- LED-indication of power on, minute impulse output, activated relay output, alarm and receipt of time code signal.
- Impulse system, impulse duration and type of time selectable.
- Built in serial communication port type RS232/485 for computer time and remote control.
- Relay output for alarm (only Programmers and Master Clock Programmers.)

Master Clocks and Master Clock Programmers

- Minute impulse output, seconds impulse output with high and reliable accuracy.
- 72 hours impulse memory.
- After a power failure the connected slave clocks are automatically reset by rapid impulses.
- In case of short circuiting on the slave clock line, resetting of the connected Slave Clocks are automatically made.

Master Clock Programmers and Programmers

- From 2 up to 8 relay outputs, with expansion up to 64 relay outputs.
- Manual 3-pos switch for relay output, ON / OFF / AUTOMATIC.
- 800 signal points (control functions) can be programmed over the relay outputs. Repeating daily function on a certain output only requires 1 signal point.
- ON/OFF and signal/pulse 1-99 secs. can be programmed for day, week, year or to follow a schedule.
- ON/OFF and signals can be programmed for one or several schedules for example school- and working hours.
- Astronomic twilight function for controlling of illumination without separate sensor.
- Programming of seconds.

WDP-Q = Master Clock, WDP-Y = Master Clock Programmer, WYP = Programmer

Type	Art. No:	Imp.	Max load	Relay	Connection	Dim WxHxD	Weight (kgs)
WDP-Q	123317-00	MIN	1 A	-	24 V DC	200X160X103	0,9
	123312-00	MIN	1 A	-	230 V AC		1,3
WDP-Q2	123320-00	<input type="checkbox"/>	2 A	-	24 V DC	290x217x143	1,0
	123322-00	<input type="checkbox"/>	2 A	-	230 V AC		1,4
WDP-Y2	123340-00	MIN	1 A	2•	24 V DC	200X160X103	1,0
	123342-00	MIN	1 A	2•	230 V AC		1,4
WDP-Y4	123345-00	MIN	1 A	4•	24 V DC	290x217x143	1,1
	123347-00	MIN	1 A	4•	230 V AC		1,5
WDP-Y8	123350-00	MIN	1 A	8(4•+4 ^o)	24 V DC	290x217x143	1,2
	123352-00	MIN	1 A	8(4•+4 ^o)	230 V AC		1,7
WDP-M+S	123360-00	<input type="checkbox"/>	2 A	8(4•+4 ^o)	24 V DC	290x217x143	1,3
	123362-00	<input type="checkbox"/>	2 A	8(4•+4 ^o)	230 V AC		2,5
WYP-4-MINI	124306-00	-		4(2•+2 ^o)	24 V DC	200X160X103	0,9
	124308-00	-		4(2•+2 ^o)	230 V AC		1,1
EXPANSION*	124330-00	-		8(4•+4 ^o)**	24 V DC	290x217x143	1,0
	124332-00	-		8(4•+4 ^o)**	230 V AC		1,4
WDP-WT	123369-00	6 impulse outputs			24 V DC	290x217x143	1,9
	123369-10	1 impulse output +1 digital output (max 8 zones)			230 V AC		
WDP-C	123369-00				230V AC	290x217x143	1,7
	123369-10						

•) = Potential free relay contacts(changing) *) = Only for WDP-Y8 and WDP-M+S
 °) = Potential free relay contacts(closing)***) = Expansion up to 64 relay outputs

- Min.-min.
- Min.- sec
- Sec.-sec

Accessories / Options:

- Running reserve 500mAh, approx 7 hours (built in) *Cannot be combined with Ethernet adapter in master clock WDP-Q and WDP-Y2*
- Running reserve 2,0Ah (separate case)
- Radio synchronization GPS
- Radio synchronization DCF-77
- Radio synchronization MSF
- QW 3 Control-remote and relay control
- Ethernet adapter (built in) *Cannot be combined with running reserve 500mAh in master clock WDP-Q and WDP-Y2*

Technical datas:

Crystal frequency	4,915200 MHz
Accuracy	0,1 sek/24 hours (at +20 C ^o)
Microprocessor	HD6412394, RAM-memory 32kB, flash memory 512 kB
Impulse output:	
• Impulse system	1/1 min, 1/2 min, sek, time code (TC), time code pol (TC)
• Type of time	LT,UTC,NT
• Impulse duration	Min 0,1-9,9 sek. Sek 0,1-1 sek.
Signalpoints	800
Running reserve-impulse	72 hours (impulse memory with rapid impulsing after a power (failure))
Relay outputs	2,4 or 8 potential free relay contacts
Max load/relay output	230V AC, 6A
Total load/relay outputs	Number of relay outputs x 6A
Connection voltage	230 V 50 Hz-5%+10% or 24 V DC-5%+20%
Memory reserve	> 100 years
Max ripple (24 V DC)	0,7V RMS
Connection effect	10-60 VA depending on model
Ambient temperature	0°C up to +40°C
Relative humidity	Max 85% non-condensing
Case	IP 65, light grey ABS plastic with transparent protection cover
CE-approval EMC	Emission according to EN61000-6-3, immunity according to EN61000-6-2
Synchronization	1/1 min, 1/2 min, sek time code(TC),time codepol(TC)

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