

DP1 US

RIPPLE CONTROL RECEIVER WITH SWITCH CLOCK FUNCTION

The ripple control receiver with switch clock function **DP1 US** is a family of low-cost high-performance devices. They have:

- programmable carrier frequency;
- operation in wide range of mains voltages;
- three independent output channels;
- direct and addressed reception;
- available options:
 - M** - maxigraf function;
 - S** - sensitive receiver;
 - US** - intelligent receiver including switch clock device.

RCR software EDIT and INFO provide user friendly programming of ripple control receiver **DP1 US**.

Ripple control is a well-known technique for remote control using audio-frequency signal superimposed on the mains voltage. **DP1 US** is a family of Ripple Control Receivers (RCR) able to switch different energy consumers or control devices on high and low voltages.

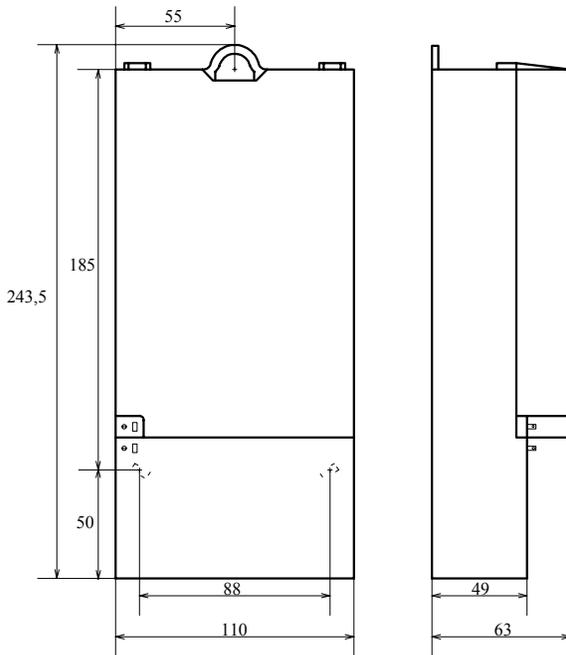
DP1 S receiver is a sensitive device operating reliable when audio-frequency signal has low amplitude. When sensitive receiver **DP1 S** is used, user must provide that no more than one audio signal is produced simultaneously.

DP1 US is RCR with switch clock function, which provides switching when ripple transmission is omitted or combined with noise. Receiver **DP1 US** can be remote programmed by ripple control transmissions.

Technical data

Receiver model	DP1 US	Consumption	< 3W
Mains voltage V_n	58V/100V/230V (-30%,+15%)	Overvoltage protection	7kV, 1.2/50 μ s
Mains frequency f_n	50-60Hz (-2%,+1%)	Case test voltage	2kV, 50Hz, 1min
Real time clock long term stability	+/-1 minute/month	Up to three bistable relays with change over contacts	250V, 20A, $\cos\phi = 1$
Carrier frequency f_o	110Hz - 500Hz	Contacts mechanical life	10 ⁷ changes
Filter Q factor	>20	Impulse telegram	on request
Threshold voltage V_{op} adjustable (S option)	0.5% V_m - 0.9% V_n $V_{op} > 0.1\%V_n$	Time delays programmable	1s to 24 hours
Nonoperative threshold voltage V_{on} (S option)	0.3% V_n 0.05% V_n	Operating temperature range	-25°C, +60°C
Expected battery life (US option)	> 10 years	Ambient relative humidity	20% - 90%
		Weight	650 g

Assembling data



Ordering information

DP1-216,6-ABC-230V- ()

model	carrier	assembled	operating	options:
	frequency	relays	voltage	M-maxigraf
				S-sensitive
				US-clock

Operating voltage, impulse telegram and decoding system should be also specified. Additional data and price list are available upon request.

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