

DP1 F US

DIGITAL RIPPLE CONTROL RECEIVERS WITH SWITCH CLOCK FUNCTION

The digital ripple control receiver **DP1 F US** is a family of low-cost high-performance devices based on flash technology and large scale integration.

Receivers have:

- programmable carrier frequency and threshold voltage;
- operation in wide range of mains and carrier voltages;
- up to three independent output channels;
- direct and addressed reception;
- adjustable real time clock;
- adjustable time dependent switching programs for each output channel;
- remote programming by RCR telegram;
- LCD for time display;
- RCR telegrams registrator.

Receiver **DP1 F US** has IR port for programing by PC software DPFUSServis according to the standard IEC 61107 Mode C 300 Bd /1200 Bd.

Threshold voltage, channel configuration, address, output action, its time delay, time dependent switching programs and real time are user programmable.

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

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

Optionally, receiver **DP1 F US** may have LCD display for date and time presentation.

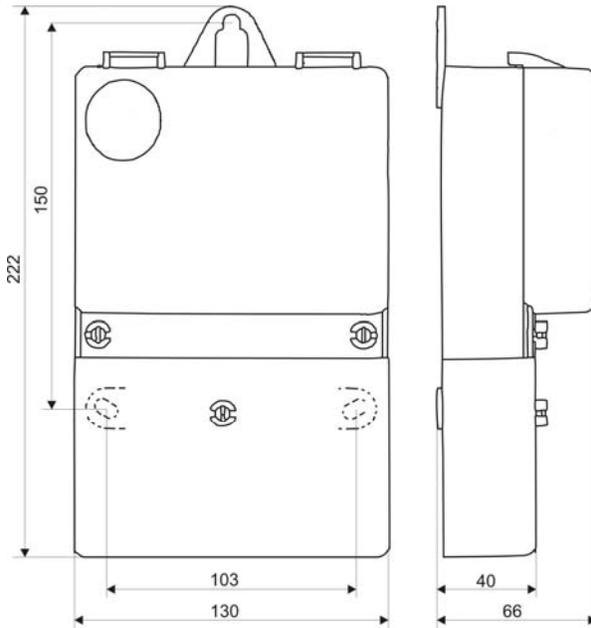
Receiver **DP1 F US** can operate as registrator of RCR telegrams (content, date and time of telegram reception, ripple signal and mains voltage amplitudes).

Technical data

Receiver model	DP1 F US
Mains voltage V_n	58/100V/230V (-30%, +15%)
Mains frequency f_n	50-60Hz (-2%, +1%)
Carrier frequency f_o	on request
Filter Q factor	20
Threshold voltage V_{op} adjustable	$0.1\% V_m - 4.5\% V_n$
Nonoperative threshold voltage V_{on} adjustable	$0.1\% V_m - 4.5\% V_n$
Consumption	< 2W, 10VA
Overvoltage protection	7kV, 1.2/50 μ s
Case test voltage	2kV, 50Hz, 1min

Up to three bistable relays with change over contacts	380V, 16A (20A), $\cos\phi = 1$
Contacts mechanical life	10^7 changes
Impulse telegram	on request
Control of maximum demand indicator:	
- integration time	T_U 0 - 9999s
- reset time	T_I 0 - 9999s
Time delays programmable	1s to 99999s
Operating temperature range	-25°C, +70°C
Ambient relative humidity	20%, 90%
Weight	650 g
Optical infrared port	IEC 61107 Mode C on 1200 Bd or 300 Bd

Assembling data



Ordering information

DP1FUS-283,3-ABC-230V

model	carrier	assembled	operating
	frequency	relays	voltage

Type of telegram should be also specified. Additional data and price list are available upon request.

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DP1 F-M US

DIGITAL RIPPLE CONTROL RECEIVERS WITH SWITCH CLOCK FUNCTION

The digital ripple control receiver **DP1 F-M US** is a family of low-cost high-performance devices based on flash technology and large scale integration.

Receivers have:

- programmable carrier frequency and threshold voltage;
- operation in wide range of mains and carrier voltages;
- one output channel;
- direct and addressed reception;
- adjustable real time clock;
- adjustable time dependent switching programs for output channel;
- remote programming by RCR telegram;

Receiver **DP1 F-M US** has IR port for programing by PC software DPFUSServis according to the standard IEC 61107 Mode C 300 Bd /1200 Bd.

Threshold voltage, channel configuration, address, output action, its time delay, time dependent switching programs and real time are user programmable.

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

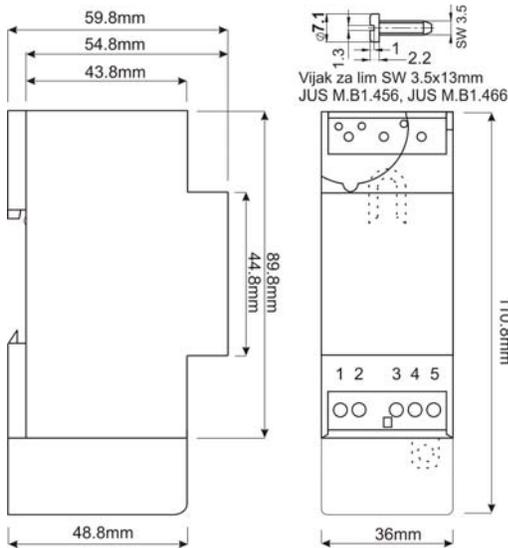
DP1 F-M US is RCR with switch clock function, which provides switching when ripple transmission is omitted or combined with noise. Receiver **DP1 F-M US** can be remote programmed by ripple control transmissions.

Technical data

Receiver model	DP1 F-M US
Mains voltage V_n	58/100V/230V (-30%, +15%)
Mains frequency f_n	50-60Hz (-2%, +1%)
Carrier frequency f_o	on request
Filter Q factor	20
Threshold voltage V_{op} adjustable	$0.1\% V_m - 4.5\% V_n$
Nonoperative threshold voltage V_{on} adjustable	$0.1\% V_m - 4.5\% V_n$
Consumption	< 2W, 10VA
Overvoltage protection	7kV, 1.2/50 μ s
Case test voltage	2kV, 50Hz, 1min

One bistable relay with	
change over contacts	380V, 16A (20A), $\cos\phi = 1$
Contacts mechanical life	10^7 changes
Impulse telegram	on request
Control of maximum demand indicator:	
- integration time	T_U 0 - 9999s
- reset time	T_I 0 - 9999s
Time delays programmable	1s to 99999s
Operating temperature range	-25°C, +70°C
Ambient relative humidity	20%, 90%
Weight	150 g
Optical infrared port	IEC 61107 Mode C on 1200 Bd or 300 Bd

Assembling data



Ordering information

DP1F-M US-283,3-A-230V

model carrier assembled operating

frequency relay voltage

Type of telegram should be also specified. Additional data and price list are available upon request.

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