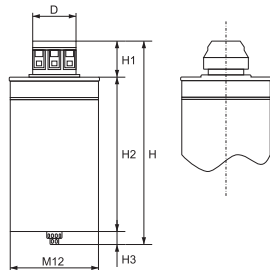
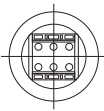


## Complex compensating devices

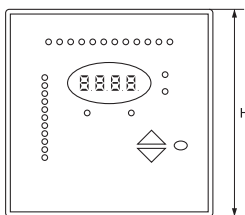
### Documents corresponding to the product:

Standard EN 60831-1  
EN 60831-2



Dimensions (mm)

D	H1	H3
30	35	16



## Capacitor batteries for reactive energy compensation

**3** YEAR WARRANTY

Capacitor batteries HY 111 series are specially designed three phase dry capacitors for compensation of reactive energy and correction of the capacity factor. It represents an aluminum cylindrical body in which a metal polypropylene folio is mounted which does not require special impregnation. The permittivity characteristics are acquired through filling with a special mixture on a vegetable base (resins). The capacitor battery is constructed in such a way that at failure (overload from voltage, current or temperature) breaks the connection to the upper cover where are the connections to the power supply. This is done by a specially constructed valve for overpressure mounted right above the capacitor element. The breaking of the inner couplings provides protection to the staff and environment from damage due to capacitor element failure. There is a three phase capacitor in the cylindrical body with built in resistor for rarefying the capacitors.

The capacitor battery can be used both for passive and active compensation.

### Technical data:

- Rated operating voltage: 450V; 50Hz
- insulation voltage: 690V
- Surge voltage wear resistance: 6kV per minute
- Capacity: from 5,0 to 100,0 kVAr at 450V
- Tolerance:  $\pm 5\%$
- Operating temperature:  $-40^{\circ}\text{C} - +65^{\circ}\text{C}$
- Capacity losses: 0.5W/kVAr
- Built in discharging resistance
- Admissible current overload: twice as much the peak current
- Discharge time: <50V per minute
- Altitude: 2000m

### Mounting:

- With bolt M12 or M16 to a flat horizontal base

Type of the battery	Dimensions H / Ø (mm)	Operating voltage (V)	Battery capacity (kVAr)	Capacity (µF)	Packing/Box (pcs)	Catalogue number
HY 11A5	210/76	450	5.0	3X26.2	6	<b>49005</b>
HY 11A7	210/76	450	7.5	3X39	6	<b>49007</b>
HY 111A10	240/76	450	10.0	3X52.4	6	<b>49010</b>
HY 111A15	240/86	450	15.0	3X78.9	6	<b>49015</b>
HY 111A20	240/116	450	20.0	3X105	6	<b>49020</b>
HY 111A30	280/160	450	30.0	3X157	6	<b>49030</b>
HY 111A50	345/180	450	50.0	3X262	6	<b>49050</b>
HY 111A100	300/300	450	100.0	3X524	6	<b>49100</b>
HY 111A12*	230 / 85	690	12.5	3X27.9	6	<b>49031</b>
HY 11A25*	280 / 115	690	25	3X55.7	6	<b>49032</b>

Note: \*Suitable for wind generators

## Controller for automatic regulation of the capacity factor (cosφ regulator)

**3** YEAR WARRANTY

The automatic regulators of the capacity factor RPCF-xx series are devices for monitoring of low voltage systems and control of switching on of capacitor batteries for the capacity factor compensation. There is possibility for adjustment of the system parameters and control. Manufactured by the latest CMOS technology, they are distinguished with high degree of data security, easy programming and secure control of the outlets. There is possibility for indication and setting the parameters of the power supply system as: capacity coefficient, display of the system parameters such as voltage, current and capacity, losses, protection against overload, overload indication or lack of voltage, etc.

The change of parameters is performed through a combination of buttons on the front panel. There is light diode to indicate which parameter is being displayed on the screen and which outlets are in operation. The display is four digital. There is possibility for choice of the working conditions: manual or automatic.

### Technical data:

- Rated operating voltage: 230/400V
- Operating frequency: 45 – 65Hz
- insulation voltage: 690V
- Surge voltage wear resistance: 6kV per minute
- Measurement range: from 0 to 9999kVAr
- Measurement accurateness:
  - voltage:  $\pm 1.0\%$
  - current:  $\pm 1.0\%$
  - capacity coefficient:  $\pm 1.0\%$
  - reactive energy:  $\pm 2.0\%$
- Operating temperature:  $-10+65^{\circ}\text{C}$
- Humidity: 30 – 60%
- Display: 4 digital
- Responsiveness: 20mA
- Outlet: 7A
- Number of outlets: 12 and 16
- Altitude: up to 2500m

### Mounting:

- On the front panel of the box through cutting an opening

Type	Number of steps	Dimensions H (mm)	Packing/Box (pcs)	Catalogue number
HY-RPCF12	12	122x122	8	<b>49120</b>
HY-RPCF16	16	144x144	8	<b>49160</b>