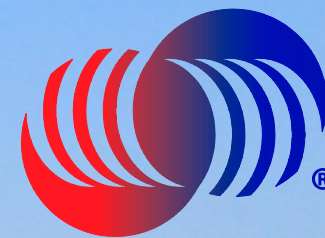


# Magtech Stabilisers

Solutions for more green electric power



**Magtech™**

# Magnetic Stepless Self-regulating Distribution Transformer

## REDUCES COST

- Doubling the capacity on existing cables

## INTELLIGENT AND STEPLESS

- Intelligent voltage reduction when required
- Continuous fast self-regulating
- Magnetic control - no voltage steps

## FLEXIBLE

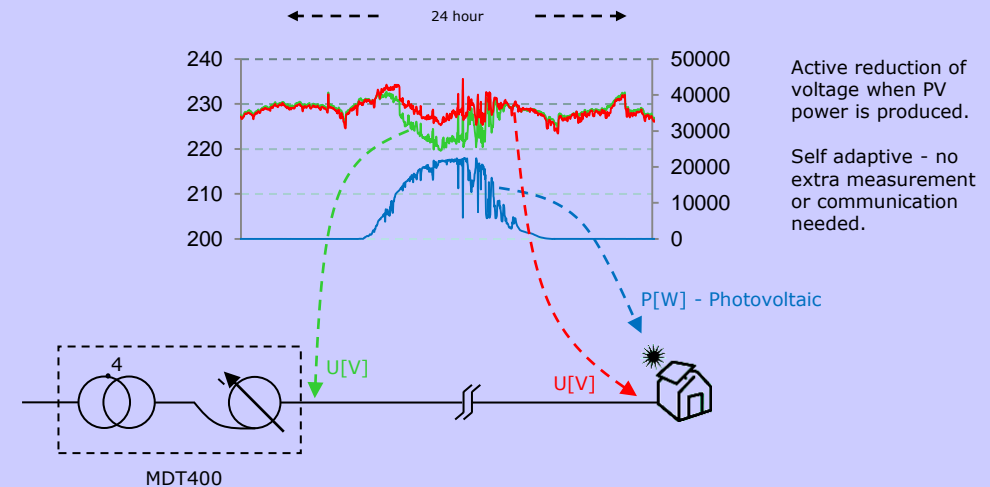
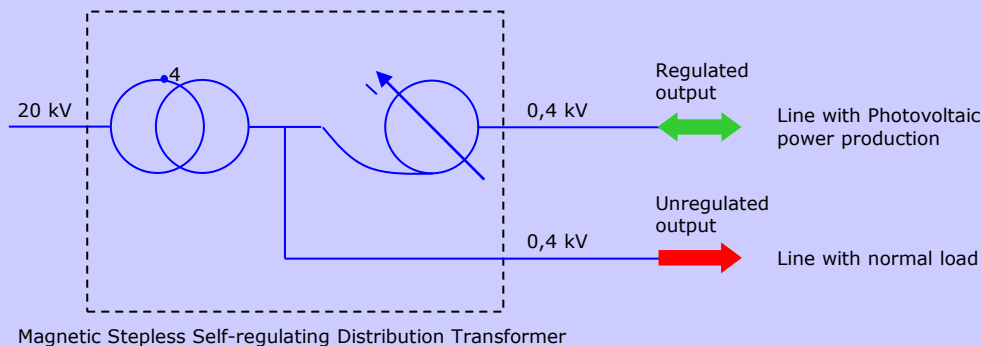
- Separate connections for regulated and unregulated power outputs
- Automatic bypass function
- Off load tap changing possible
- Fits in standard compact station housing
- No need for adjustments, continuous fast self-regulating

## ROBUST

- Lifetime as standard transformer, no moving parts, no semiconductors

## HIGH EFFICIENCY

- Low losses in operation, bypassed when no voltage correction needed





# Magnetic PV Voltage Stabiliser

## REDUCES COST

- Doubling the capacity on existing cables

## INTELLIGENT AND STEPLESS

- Intelligent voltage reduction when required
- Continuous fast self-regulating
- Magnetic control - no voltage steps

## FLEXIBLE

- Automatic bypass function
- Fits in standard compact station housing
- No need for adjustments, continuous fast self-regulating

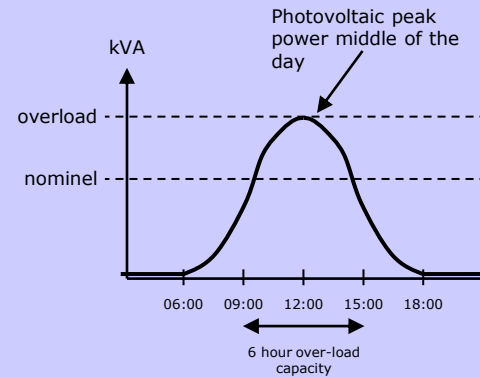
## ROBUST

- Lifetime as standard transformer, no moving parts, no semiconductors

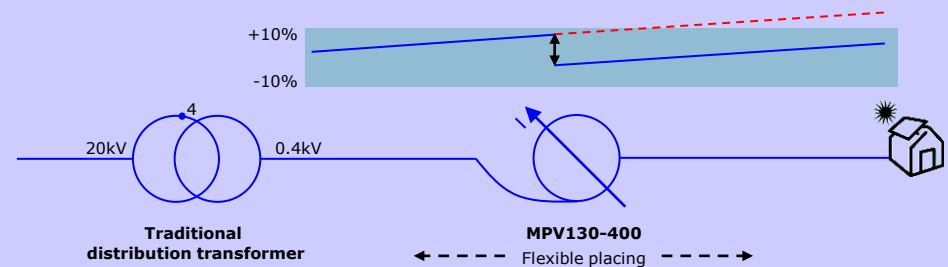
## HIGH EFFICIENCY

- Low losses in operation, bypassed when no voltage correction needed

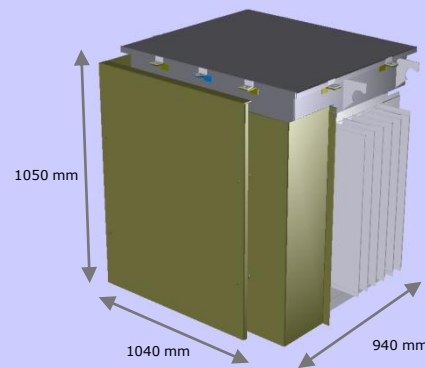
## OVER-LOAD CAPACITY



**MPV130-400**  
Indoor version, 130 kVA, 850 kg

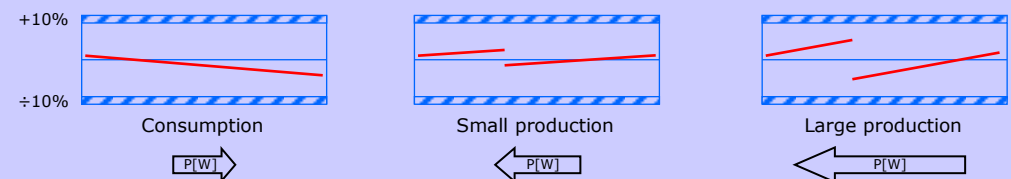


3 pcs MPV130-400 outdoor version ready for delivery



**MPV130-400**  
Outdoor version, 130 kVA, 850 kg

## VOLTAGE PROFILE



|  | Magnetic PV Voltage Stabiliser |                   |                   | Magnetic Stepless Self-regulating Distribution Transformer |                   |                   |
|--|--------------------------------|-------------------|-------------------|--|-------------------|-------------------|
| Model 3~                                   | MPV130-400                     | MPV260-400        | MPV400-400        | MDT250   | MDT400            | MDT630            |
| Connection                                 | TN / TT                        | TN / TT           | TN / TT           | Dyn5   | Dyn5              | Dyn5              |
| Frequency [Hz]                             | 50                             | 50                | 50                | 50   | 50                | 50                |
| Input voltage [kV]                         | 0.4                            | 0.4               | 0.4               | 20   | 20                | 20                |
| Output voltage [volts]                     | 0.4                            | 0.4               | 0.4               | 0,4  | 0,4               | 0,4               |
| Load, nominal [kVA]                        | 130                            | 260               | 400               | 250  | 400               | 630               |
| Overload, 6 hours @20°C [kVA]              | 208                            | 416               | 640               | *  | *                 | *                 |
| Current nominal [A]                        | 188                            | 375               | 577               | 361  | 577               | 909               |
| Current, 6 hours, @20°C [A]                | 300                            | 600               | 924               | *  | *                 | *                 |
| Stepless voltage reduction [%]             | 0...-7                         | 0...-7            | 0...-7            | 0...-7   | 0...-7            | 0...-7            |
| Dynamic response [ms] <sup>1</sup>         | 300                            | 300               | 300               | 300  | 300               | 300               |
| No-load loss [W] <sup>2</sup>              | 250                            | 350               | 400               | 650  | 850               | 1050              |
| Efficiency [%] <sup>3</sup>                | 98                             | 98                | 98                | 97-99  | 97-99             | 97-99             |
| Power factor [cos φ] <sup>3</sup>          | 0,98-0,99                      | 0,98-0,99         | 0,98-0,99         | 0,98-0,99  | 0,98-0,99         | 0,98-0,99         |
| Total Harmonic Distortion [%] <sup>3</sup> | 0,5-2,8                        | 0,5-2,8           | 0.5-2.2           | 0,5-2,2  | 0,5-2,2           | 0,5-2,2           |
| <b>Mechanical dimensions</b>               |                                |                   |                   |  |                   |                   |
| Width x Height x Depth [mm]                | 1040 x 1050 x 940              | 1040 x 1350 x 940 | 1040 x 1350 x 940 | 1300 x 1500 x 855  | 1312 x 1623 x 855 | 1300 x 1800 x 900 |
| Weight [kg]                                | 850                            | 1050              | 1050              | 1700   | 2600              | 4000              |
| Cable connection [Copper mm <sup>2</sup> ] | 150                            | 150               | 150               | -  | -                 | -                 |
| Oil filled [liters]                        | 200                            | 260               | 260               | 300  | 400               | 550               |
| Enclosure oil filled                       | Galvanized                     | Galvanized        | Galvanized        | Painted  | Painted           | Painted           |
| <b>Features</b>                            |                                |                   |                   |  |                   |                   |
| Bypass @ no reverse power feedback         | √                              | √                 | √                 | √  | √                 | √                 |
| No moving parts in the power circuit       | √                              | √                 | √                 | √  | √                 | √                 |
| Off load tap changer (± 2 x 2.5%)          |                                |                   |                   | √  | √                 | √                 |
| Maintenance free                           | √                              | √                 | √                 | √  | √                 | √                 |
| 40 years designed lifetime                 | √                              | √                 | √                 | √  | √                 | √                 |
| Quick installation < one day               | √                              | √                 | √                 | √  | √                 | √                 |

FR3 = Environmental friendly organic oil. \* same as standard oil-filled transformers  
<sup>1</sup> – voltage correction to maintain correct voltage reduction    <sup>2</sup> – zero voltage reduction or bypass (nighttimes)    <sup>3</sup> nominal load  
Note! Technical data are preliminary. Magtech reserves the right to make changes without notice