

## LAB/SMS DC Sources 3 – 10 kW



Picture shows a 10 kW Version

### OVERVIEW

- Extremely compact MOS / IGBT
- Active PFC
- CV and CC mode standard
- P constant mode (option)
- R constant mode (option)
- Digital display show all system parameter
- Interface IEEE 488, RS 232 RS 485, USB, LAN
- Analogue Interface 0 - 5 (10) VDC to set and read out
- Available also as ATE Version
- Special versions on request

### TYPES

| Type          | Power W | Voltage V | Current A | Dimensions       |
|---------------|---------|-----------|-----------|------------------|
| LAB/SMS 315   | 3.000   | 0 - 15    | 0 - 200   | 19" x 2U x 440mm |
| LAB/SMS 335   | 3.000   | 0 - 35    | 0 - 90    | 19" x 2U x 440mm |
| LAB/SMS 345   | 3.000   | 0 - 45    | 0 - 70    | 19" x 2U x 440mm |
| LAB/SMS 370   | 3.000   | 0 - 70    | 0 - 45    | 19" x 2U x 440mm |
| LAB/SMS 3150  | 3.000   | 0 - 150   | 0 - 20    | 19" x 2U x 440mm |
| LAB/SMS 3300  | 3.000   | 0 - 300   | 0 - 10    | 19" x 2U x 440mm |
| LAB/SMS 3600  | 3.000   | 0 - 600   | 0 - 5     | 19" x 2U x 440mm |
| LAB/SMS 31000 | 3.000   | 0 - 1000  | 0 - 3     | 19" x 2U x 440mm |
| LAB/SMS 31200 | 3.000   | 0 - 1200  | 0 - 2,6   | 19" x 2U x 440mm |
| LAB/SMS 420   | 4.000   | 0 - 20    | 0 - 200   | 19" x 2U x 440mm |
| LAB/SMS 435   | 4.000   | 0 - 35    | 0 - 115   | 19" x 2U x 440mm |
| LAB/SMS 445   | 4.000   | 0 - 45    | 0 - 90    | 19" x 2U x 440mm |
| LAB/SMS 470   | 4.000   | 0 - 70    | 0 - 60    | 19" x 2U x 440mm |
| LAB/SMS 4150  | 4.000   | 0 - 150   | 0 - 30    | 19" x 2U x 440mm |
| LAB/SMS 4300  | 4.000   | 0 - 300   | 0 - 15    | 19" x 2U x 440mm |
| LAB/SMS 4600  | 4.000   | 0 - 600   | 0 - 7     | 19" x 2U x 440mm |
| LAB/SMS 41000 | 4.000   | 0 - 1000  | 0 - 4     | 19" x 2U x 440mm |
| LAB/SMS 41200 | 4.000   | 0 - 1200  | 0 - 3,4   | 19" x 2U x 440mm |

| Type          | Power W | Voltage V | Current A | Dimensions       |
|---------------|---------|-----------|-----------|------------------|
| LAB/SMS 525   | 5.000   | 0 - 25    | 0 - 200   | 19" x 2U x 440mm |
| LAB/SMS 535   | 5.000   | 0 - 35    | 0 - 150   | 19" x 2U x 440mm |
| LAB/SMS 545   | 5.000   | 0 - 45    | 0 - 120   | 19" x 2U x 440mm |
| LAB/SMS 570   | 5.000   | 0 - 70    | 0 - 75    | 19" x 2U x 440mm |
| LAB/SMS 5150  | 5.000   | 0 - 150   | 0 - 35    | 19" x 2U x 440mm |
| LAB/SMS 5300  | 5.000   | 0 - 300   | 0 - 17    | 19" x 2U x 440mm |
| LAB/SMS 5600  | 5.000   | 0 - 600   | 0 - 8,5   | 19" x 2U x 440mm |
| LAB/SMS 51000 | 5.000   | 0 - 1000  | 0 - 5     | 19" x 2U x 440mm |
| LAB/SMS 51200 | 5.000   | 0 - 1200  | 0 - 4,2   | 19" x 2U x 440mm |
|               |         |           |           |                  |
| LAB/SMS 615   | 6.000   | 0 - 15    | 0 - 400   | 19" x 2U x 600mm |
| LAB/SMS 620   | 6.000   | 0 - 20    | 0 - 300   | 19" x 2U x 600mm |
| LAB/SMS 635   | 6.000   | 0 - 35    | 0 - 175   | 19" x 2U x 600mm |
| LAB/SMS 645   | 6.000   | 0 - 45    | 0 - 140   | 19" x 2U x 600mm |
| LAB/SMS 670   | 6.000   | 0 - 70    | 0 - 90    | 19" x 2U x 600mm |
| LAB/SMS 6150  | 6.000   | 0 - 150   | 0 - 40    | 19" x 2U x 600mm |
| LAB/SMS 6300  | 6.000   | 0 - 300   | 0 - 20    | 19" x 2U x 600mm |
| LAB/SMS 6600  | 6.000   | 0 - 600   | 0 - 10    | 19" x 2U x 600mm |
| LAB/SMS 61000 | 6.000   | 0 - 1000  | 0 - 6     | 19" x 2U x 600mm |
| LAB/SMS 61200 | 6.000   | 0 - 1200  | 0 - 5     | 19" x 2U x 600mm |
|               |         |           |           |                  |
| LAB/SMS 820   | 8.000   | 0 - 20    | 0 - 440   | 19" x 2U x 600mm |
| LAB/SMS 825   | 8.000   | 0 - 25    | 0 - 320   | 19" x 2U x 600mm |
| LAB/SMS 835   | 8.000   | 0 - 35    | 0 - 230   | 19" x 2U x 600mm |
| LAB/SMS 845   | 8.000   | 0 - 45    | 0 - 180   | 19" x 2U x 600mm |
| LAB/SMS 870   | 8.000   | 0 - 70    | 0 - 115   | 19" x 2U x 600mm |
| LAB/SMS 8150  | 8.000   | 0 - 150   | 0 - 55    | 19" x 2U x 600mm |
| LAB/SMS 8300  | 8.000   | 0 - 300   | 0 - 30    | 19" x 2U x 600mm |
| LAB/SMS 8600  | 8.000   | 0 - 600   | 0 - 15    | 19" x 2U x 600mm |
| LAB/SMS 81000 | 8.000   | 0 - 1000  | 0 - 8     | 19" x 2U x 600mm |
| LAB/SMS 81200 | 8.000   | 0 - 1200  | 0 - 6,7   | 19" x 2U x 600mm |
|               |         |           |           |                  |
| LAB/SMS1020   | 10.000  | 0 - 20    | 0 - 500   | 19" x 2U x 600mm |
| LAB/SMS1035   | 10.000  | 0 - 35    | 0 - 350   | 19" x 2U x 600mm |
| LAB/SMS1045   | 10.000  | 0 - 45    | 0 - 250   | 19" x 2U x 600mm |
| LAB/SMS1070   | 10.000  | 0 - 70    | 0 - 175   | 19" x 2U x 600mm |
| LAB/SMS10150  | 10.000  | 0 - 150   | 0 - 75    | 19" x 2U x 600mm |
| LAB/SMS10300  | 10.000  | 0 - 300   | 0 - 40    | 19" x 2U x 600mm |
| LAB/SMS10600  | 10.000  | 0 - 600   | 0 - 17    | 19" x 2U x 600mm |
| LAB/SMS101000 | 10.000  | 0 - 1000  | 0 - 10    | 19" x 2U x 600mm |
| LAB/SMS101200 | 10.000  | 0 - 1200  | 0 - 8,4   | 19" x 2U x 600mm |

## OPTIONS

| Suffix      | Description   | Remarks            |
|-------------|---|--------------------|
| ../ 3P+N    | i/p 3 x 400 VAC plus N                                    | Standard 3 - 10 kW |
| ../ 3P      | i/p 3 x 400 VAC   |                    |
| ../ 3P208   | i/p 3 x 208 / 187 - 229 VAC                               |                    |
| ../ 3P400   | i/p 3 x 400 / 360 - 440 VAC                               |                    |
| ../ 3P480   | i/p 3 x 480 / 432 - 528 VAC                               |                    |
| ../ ATE     | Only ATE mode, no frontpanel                              |                    |
| ../ ATI5    | Isolated analogue interface 0 - 5 VDC to set and monitor  |                    |
| ../ ATI10   | Isolated analogue interface 0 - 10 VDC to set and monitor |                    |
| ../ LT      | Interface IEEE 488, 12 Bit                                |                    |
| ../ LTRS485 | Interface RS485, 12 Bit                                   |                    |
| ../ LTRS232 | Interface RS232, 12 Bit                                   |                    |
| ../ LAN     | Interface LAN   |                    |
| ../ USB     | Interface USB   |                    |
| ../ R       | Constant resistive mode                                   |                    |
| ../ P       | Constant power mode                                       |                    |
| ../ KFZ12   | car starting curve 12 V                                   |                    |
| ../ KFZ24   | car starting curve 24 V                                   |                    |
| ../ OPT     | Outputcurves on request                                   |                    |

## TECHNICAL DATAS

|                             |                                |
|-----------------------------|--------------------------------|
| Input voltage               | see options                    |
| Input Frequency             | 47 - 63 Hz                     |
| Safety                      | EN 60950                       |
| Emission                    | EN 61000-6-4                   |
| Immunity                    | EN 61000-6-2                   |
| Input voltage               | 230 VAC +/-10 %                |
| Input voltage               | 3 x 400 VAC +/- 10 % 3 - 10 kW |
| Input regulation            | +/-0.05 %+2 mV                 |
| Voltage regulation          | +/-0.1 %+2 mA                  |
| Regulation time             | <0.5 mS                        |
| Ripple                      | <0.2 %                         |
| Stabilty                    | 0.05 %                         |
| Overvoltage protection      | 0 -120 % Vmax                  |
| Display                     | 3.5 digits for U and C         |
| Protection                  | OC / OV / OT / OP              |
| Interface analogue          | 0 - 5 (10) V see options       |
| Interface analogue isolated | 0 - 5 (10) V see options       |
| Interface RS 232            | see options 12 Bit             |
| Interface RS 485            | see options 12 Bit             |
| Interface IEEE 488          | see options 12 Bit             |
| Operating temperature       | 0 - 50°C                       |
| Operating Humidity          | 30 - 90 % (no dewdrop)         |
| Power derating              | 50 - 70°C -2 %/°C              |
| Cooling 500/750 W           | force air front to back        |
| Cooling 1 kW                | Force air back to back         |
| Cooling 2 - 14 kW           | Force air front to back        |
| Storage temperature         | -45 – +85°C                    |
| Storage humidity            | 10 - 95 % (no dewdrop)         |
| Vibration                   | 10 - 55 Hz / 1 min/2G XYZ      |
| Shock                       | Less than 20 G                 |