

## Features

- ◆ Module for true current sharing operation
- ◆ Alarm outputs, redundancy OK signal
- ◆ Hot swappable inputs
- ◆ Remote On/Off
- ◆ International safety approval package
- ◆ 3-year product warranty



With this module and two power supplies of the TSP series (of same type) a highly reliable, redundant power system can be configured without any additional components. This module enforces the equivalent sharing of the output current of the power supplies. In the event of a failed or disconnected power supply, the second unit will automatically supply the full current to the load. The redundancy of the system is monitored and, indicated by an alarm output. The inputs are hot swappable.

| Models      |                   |                     |                        |                        |                   |
|-------------|-------------------|---------------------|------------------------|------------------------|-------------------|
| Order Code  | Input             | Max Power per Input | Output Voltage adjust. | Output Current max. ** | Output Power max. |
| TSP-REM360* | 2 x 24 VDC        | 2 x 360 W           | 24 VDC<br>(24–27 VDC)  | 15.0 A                 | 360 W             |
| TSP-REM600* | 2 x Control input | 2 x 600 W           |                        | 25.0 A                 | 600 W             |

\* For ATEX / IECEx compliant model add appendix -EX to order code.

\*\* Maximum current at nominal V<sub>out</sub>

| Redundancy Module | Possible TSP input source                               |
|-------------------|---------------------------------------------------------|
| TSP-REM360        | TSP 90-124<br>TSP 90-124N<br>TSP 180-124<br>TSP 360-124 |
| TSP-REM600        | TSP 600-124                                             |

## Output Specifications

|                                                    |                |
|----------------------------------------------------|----------------|
| Output Voltage adjustable range with potentiometer | 24 – 27 VDC    |
| Ripple and noise (20 MHz bandwidth)                | 230 mVp-p typ. |
| Capacitive load                                    | unlimited      |

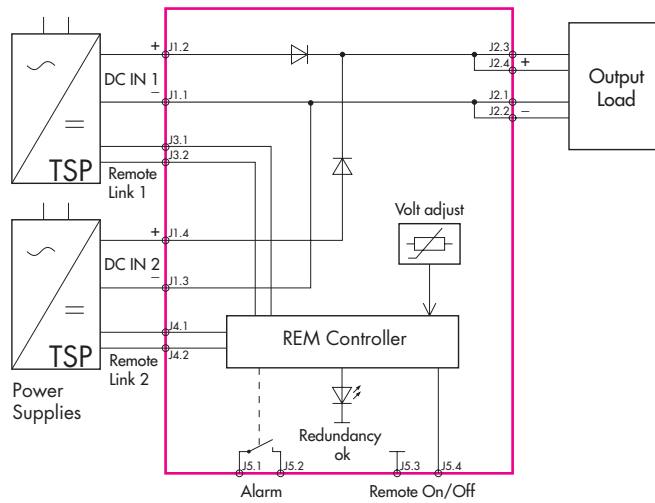
## General Specifications

|                                                         |                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature                                   | –25°C to +70°C max.<br>derating above +40°C : 1.5 %/K                                                                                                                                                                                                                                            |
| Storage temperature                                     | –25°C to +85°C max.                                                                                                                                                                                                                                                                              |
| Temperature coefficient                                 | 0.02 %/K                                                                                                                                                                                                                                                                                         |
| Humidity (non condensing)                               | 5 % to 90 % rel. H max.                                                                                                                                                                                                                                                                          |
| Reliability, calculated MTBF at +25°C acc. to IEC 61709 | – TSP-REM360 >2 Mio h<br>– TSP-REM600 >1.9 Mio h                                                                                                                                                                                                                                                 |
| Remote On/Off                                           | by ext. contact: contact open = On contact closed = Off                                                                                                                                                                                                                                          |
| Alarm relay contact                                     | 30 VDC / 1.0 A                                                                                                                                                                                                                                                                                   |
| Redundancy OK signal (Alarm)                            | trigger threshold at 18...22VDC,<br>contact open one or both                                                                                                                                                                                                                                     |
| Remote link cable (0.5 m)                               | 2 cables included (order code TSPJC)<br><a href="http://www.tracopower.com/products/tsp-jc.pdf">www.tracopower.com/products/tsp-jc.pdf</a>                                                                                                                                                       |
| Degree of protection                                    | IP 20 (IEC/EN 60529)                                                                                                                                                                                                                                                                             |
| Isolation                                               | according to IEC/EN 60950-1, UL 60950-1, UL 508                                                                                                                                                                                                                                                  |
| Altitude during operation                               | tba.                                                                                                                                                                                                                                                                                             |
| Safety standard                                         | IEC/EN 60950-1, UL 60950-, EN60079, UL60079, UL508<br>IEC/EN 61010-1, IEC/EN 61010-2-201                                                                                                                                                                                                         |
| Safety approvals                                        | UL 508<br>⚠ II3G Ex nA nC IIC T4 Gc<br>UL60079-15-2 class 1, division 2<br>IEC 60950-1 (SIQ for EN)<br>IEC/EN 61010-1, IEC/EN 61010-2-201<br><a href="http://www.tracopower.com/overview/tsp">www.tracopower.com/overview/tsp</a><br>– CSA<br>– CB test certificate<br>– Certification documents |
| Electromagnetic compatibility                           | in correspondence to connected units<br>(no internal switching device)                                                                                                                                                                                                                           |
| Environment                                             | – Vibration acc. IEC 60068-2-6;<br>– Shock acc. IEC 60068-2-27<br>3 axis, sine sweep, 10 – 55 Hz, 1 g, 1 oct/min<br>3 axis, 15 g half sine, 11 ms                                                                                                                                                |
| Enclosure material                                      | aluminium (chassis) / stainless steel (cover)                                                                                                                                                                                                                                                    |
| Mounting                                                | – DIN-rail mounting<br>for DIN-rails as per EN 50022-35x15/7.5<br>(snap-on with self-locking spring)<br>– Wall mounting (option)<br>with wall mounting bracket - see page 4                                                                                                                      |
| Connection                                              | detachable screw terminals (plugs included)<br>2 terminals per output                                                                                                                                                                                                                            |
| Installation instructions                               | <a href="http://www.tracopower.com/overview/tsp">www.tracopower.com/overview/tsp</a>                                                                                                                                                                                                             |

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

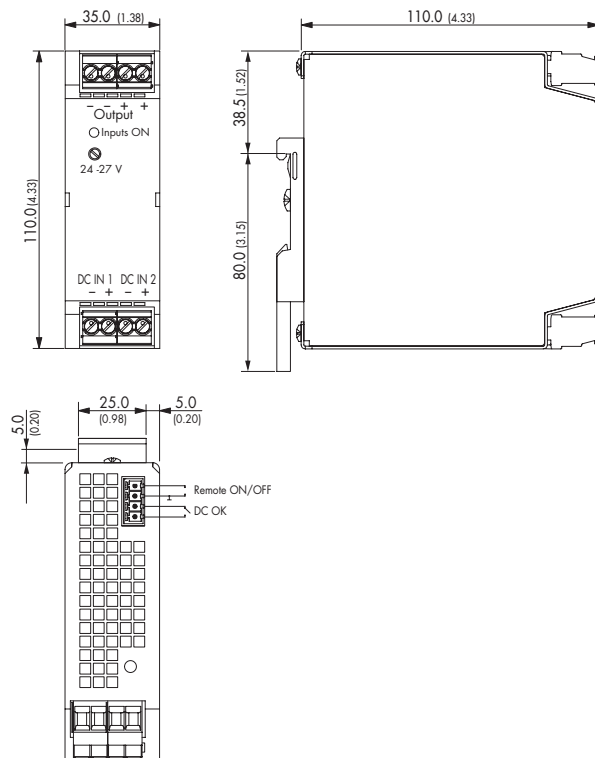
## Function

Function Diagram:

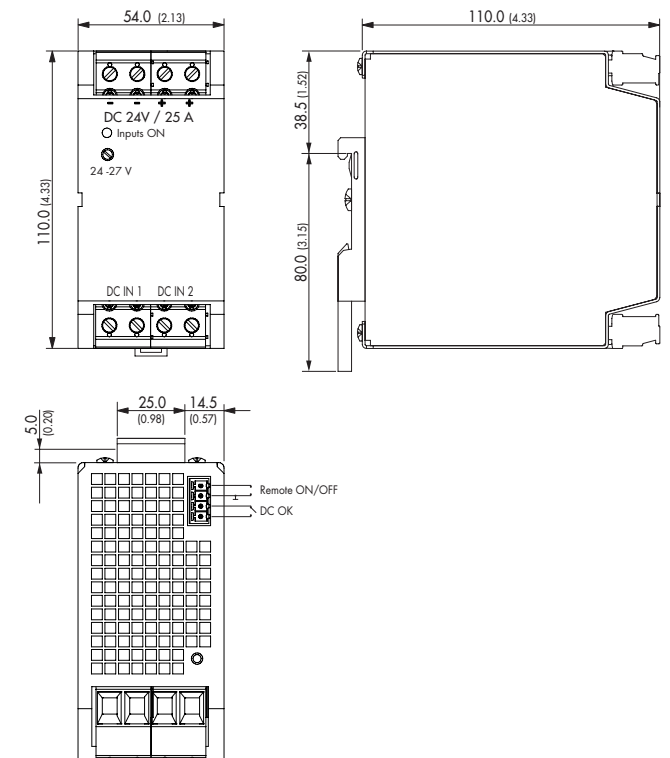


## Outline Dimensions

TSP-REM360



TSP-REM600



TSP-WMK Wall Mounting Bracket

| Ordercode of Kit | For Models             | Content of Kit |
|------------------|------------------------|----------------|
| TSP-WMK03        | TSP-REM360, TSP-REM600 | 1 bracket      |

TSP-WMK03

