



## Input Data

|  |              |                    |   |          |  |
|--|--------------|--------------------|---|----------|--|
| <b>Rated input voltage</b>                   | 400 - 500VAC |                    | <b>Inrush current time</b>                  | 4 ~ 6 ms |  |
| <b>Voltage range</b>                         |              |                    | <small>Vi nom, Io nom</small>               |          |  |
|  | <b>AC</b>    | 340 - 575VAC MAX * | <b>Power dissipation</b>                    |          |  |
|  | <b>DC</b>    | 480 - 820VDC MAX * | <b>12V Model</b>                            | 20W      |  |
| <b>Input current</b>                         |              |                    | <b>24V Model</b>                            | 16W      |  |
| <small>(Vi: 400VAC / 500VAC, Io nom)</small> | <b>Typ.</b>  | 0.65A / 0.55A      | <b>Frequency range</b>                      | 47-63Hz  |  |
| <b>Rated input current</b>                   |              |                    | <b>Leakage current</b>                      |          |  |
| <small>(Vi: 340VAC, Io nom)</small>          | <b>Max.</b>  | 0.85A              | <b>Input-Output</b>                         | 0.25mA   |  |
| <b>Inrush current</b>                        |              |                    | <b>Input-FG</b>                             | 3.5mA    |  |
| <small>Vi nom, Io nom</small>                | <b>Typ.</b>  | 20A                | <b>*not suitable for 600 V applications</b> |          |  |
|  | <b>Max.</b>  | 25A                |   |          |  |

## Controls and Protections

|   |                          |  |             |             |
|---|--------------------------|--|-------------|-------------|
| <b>Input fuse</b>                                   | 2A/600VAC internal/Phase | <b>Over voltage protection</b>           | <b>VDC</b>  |             |
| <b>Output short circuit</b>                         | Hiccup mode              |  | <b>Min.</b> | <b>Max.</b> |
| <b>Power ready output</b>                           |                          | <b>24V Model</b>                         | 30          | 33          |
| <small>(only 24V model)</small> <b>on threshold</b> | ≥17.6-19.4VDC            | <b>48V Model</b>                         | 60          | 68          |
| <b>Electrical isolation</b>                         | 500VDC                   | <b>Internal surge voltage protection</b> | Varistor    |             |
| <b>Contact rating at 60VDC</b>                      | 0.3A                     | <small>(IEC 61000-4-5)</small>           |             |             |
| <small>1) Fuse not replaceable by user</small>      |                          |  |             |             |

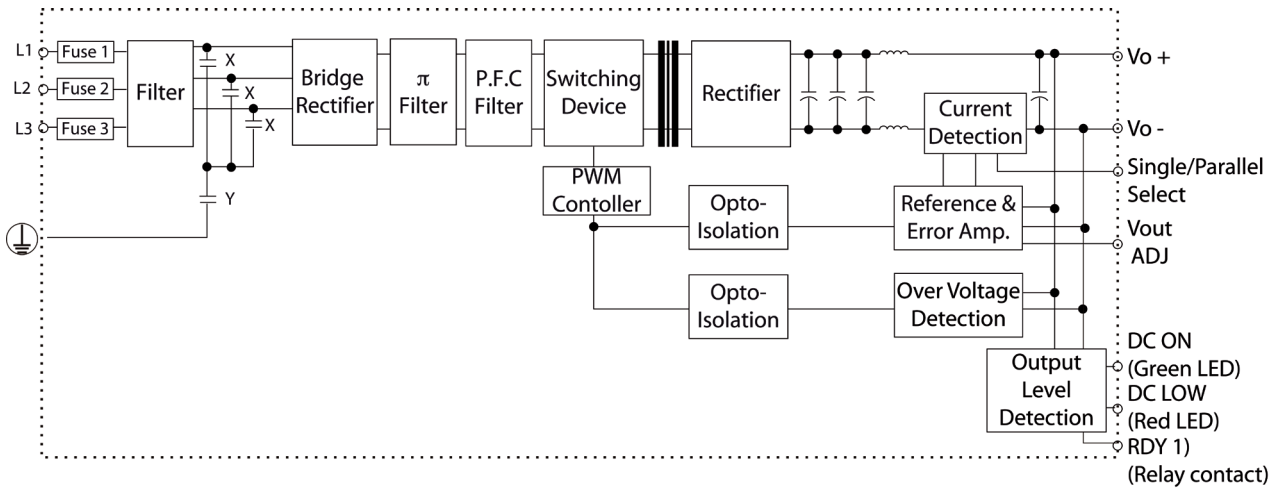
## General Data (@ nominal line, full load, 25°C)

|                                     |                     |  |                                      |
|-------------------------------------|---------------------|--|--------------------------------------|
| <b>Ambient temperature</b>          | -40°C to +71°C      | <b>MTB</b> (Bellcore issue 6 @ 40°C, GB) |                                      |
| <b>Derating (&gt;61°C to +71°C)</b> | 2.5%/C              | <b>24V Model</b>                         | 488000 Hours                         |
| <b>Ambient humidity</b>             | 20 ~ 90% RH         | <b>48V Model</b>                         | 519000 Hours                         |
| <b>Storage</b>                      | -25°C to +85°C      | <b>Case material</b>                     | Metal                                |
| <b>Protection degree</b>            | IP20                | <b>Dimensions LxWxD mm(inch)</b>         | 124 (4.88) x 89 (3.5) x 118.8 (4.68) |
| <b>Cooling</b>                      | Free air convection | <b>Weight</b>                            | 1100 g                               |
| <b>Pollution degree</b>             | 2                   |  |                                      |

## Norms and Standards

|                             |   |            |  |
|-----------------------------|---|------------|--|
| <b>Vibration resistance</b> | meet IEC 60068-2-6<br>(Mounting by rail: 10-500Hz,<br>2G, along X, Y, Z each Axis,<br>60 min for each Axis) | <b>CQC</b> | GB4943.1-2011,<br>GB9254-2008,<br>GB17625.1-2012   |
| <b>Shock resistance</b>     | meet IEC 60068-2-27<br>(15G,11ms, 3 Axis, 6 faces,<br>3 times for each face)                                | <b>CE</b>  | EN 61000-6-3, EN 55022<br>Class B, EN 61000-3-2,<br>EN 61000-3-3, EN 61000-6-2,<br>EN 55024, EN 61000-4-2<br>Level 4, EN 61000-4-3<br>Level 3, EN 61000-4-4<br>Level 4, EN 61000-4-5 Level 3,<br>L/N-FG Level 4, EN 61000-4-6<br>Level 3, EN 61000-4-8 Level 4,<br>EN 61000-4-11, ENV 50204<br>Level 2, EN 61204-3 |
| <b>UL/cUL</b>               | UL508 listed, UL60950-1,<br>Recognized, ISA 12.12.01<br>(Class 1, Division 2, Groups<br>A, B, C and D)      |            |  |
| <b>TUV</b>                  | EN 60950-1, CB scheme<br>EN 61558-1, EN 61558-2-<br>17 (meet EN 60204)                                      |            |  |

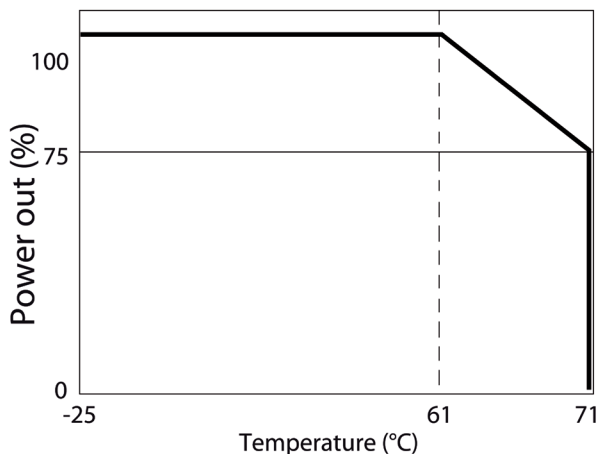
## Block Diagram



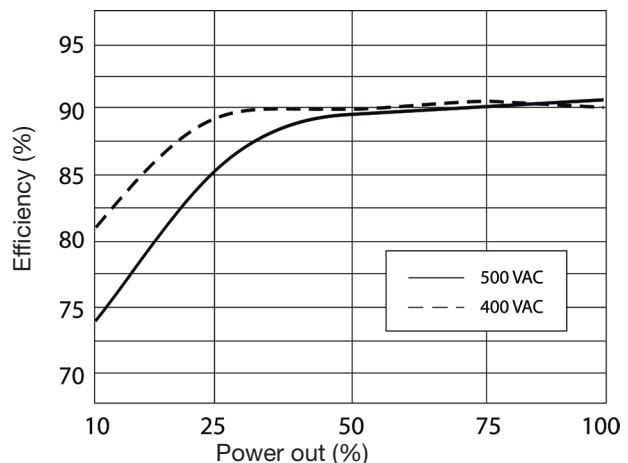
## Pin Assignment and Front Controls

| Pin No. | Designation | Description   |
|---------|-------------|---|
| 1, 2    | V-          | Negative output terminal                                  |
| 3, 4    | V+          | Positive output terminal                                  |
| 5       | L3          | Input terminals   |
| 6       | L2          | Input terminals   |
| 7       | L1          | Input terminals   |
| 8       | ⊥           | Ground this terminal to minimize high-frequency emissions |
| 9       | RDY         | A normal open relay contact for DC ON level control       |
| 10      | RDY         | (Never connect except 24V model)                          |
|         | DC ON       | Operation indicator LED                                   |
|         | DC LO       | DC LOW voltage indicator LED                              |
|         | Vout ADJ    | Trimmer-potentiometer for Vout adjustment                 |
|         | S/P         | Single / Parallel select switch                           |

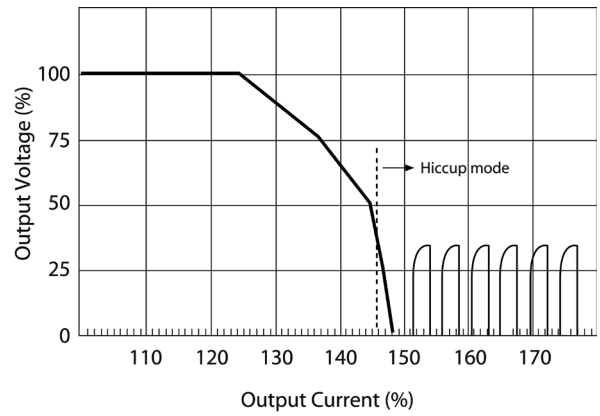
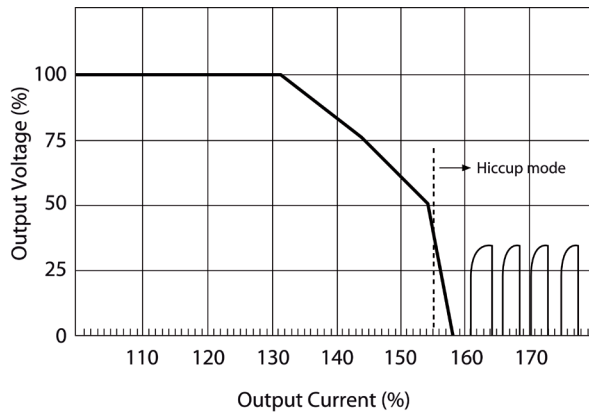
## Derating Diagram



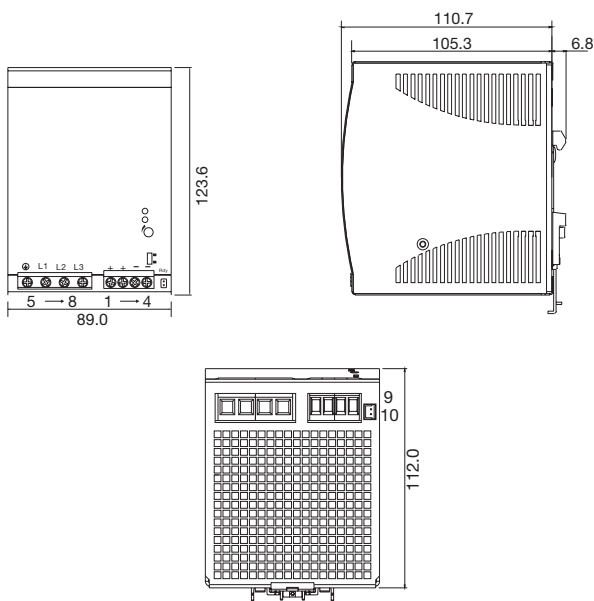
## Typ. Efficiency Curve



## Typ. Current Limited Curve



## Mechanical Drawings mm (inches)



## Installation

### Ventilation and cooling

Normal convection All sides  
 25mm free space for  
 cooling is recommended.

### Screw connections

10-24AWG flexible or solid  
 cable 8mm stripping  
 recommend.

### Max. torque for screws terminals Input terminal Output terminal

1.008Nm (9.0lb-in)  
 0.616Nm (5.5lb-in)