

## Data Sheet VS-80W30V-01

Part No.: AA-10299-001



## Power supply for IGCT

### Features

- High output power up to 80W
- AC or DC input
- Convection Cooling
- No minimum load required
- Short circuit proof (continuous trip and restart)
- Robust aluminum housing

Rev.	Remarks / changes	created		checked		released	
01	Initial	AST	10.05.12				
02	Changed product number	AST	17.05.12				

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## 1. Introduction

### 1.1.Description

The VS-80W30V is a power supply especially designed for powering IGCT gate driver. It has a constant output voltage of 30V DC and a power up to 80W. The output is short circuit proof. See also Order code.

### 1.2.Electrical interfaces

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Input voltage AC	$V_{supAC}$	-	34	40	46	$V_{AC}$
Frequency	$F_{in}$	-	50	-	60	Hz
Input voltage DC	$V_{supDC}$	-	46	-	65	$V_{DC}$
Output voltage	$V_{out}$	Full load	28.8	30	31.2	$V_{DC}$
Power consumption	P	No load	-	3.6	-	W
Power consumption	P	Full load	-	96	-	W
Short circuit trip current	-	-	-	3	-	A

### 1.3.Environmental conditions

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Ambient temperature	$T_{amb}$	-	-20	-	+70	°C
Storage temperature	$T_{store}$	-	-40	-	+85	°C
Humidity	Hum	Non condensing	-	-	95	% RH
Operating altitude	Alt	-	-	-	3000	m

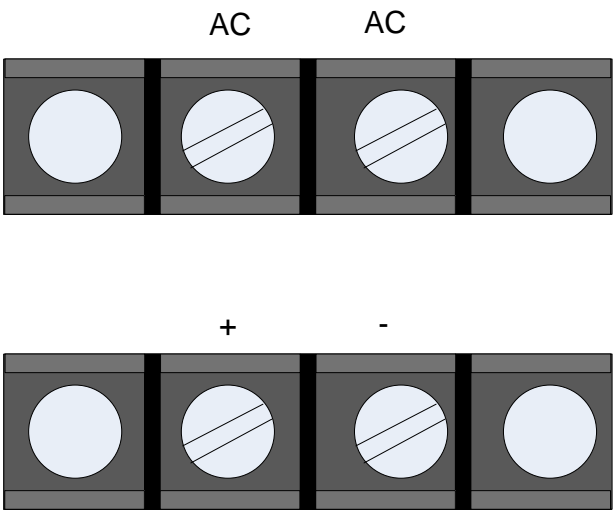


If the power supply is used below or above the specified input voltage, serious damage to the device can occur.

## 2. Connectors and indicators

### 2.1.Power supply

The connectors for the AC input and DC output voltage are WECO 983-SMF-4,8/02.



### 2.2.LED indicators

On the front side there are two groups of three LED indicators. The indicators on the left will show the actual state of the input voltage.

Parameter	LED will be lit when
Red LED	Input voltage below 34VAC
Green LED	Input voltage above 34VAC and below 46VAC
Yellow LED	Input voltage above 46VAC

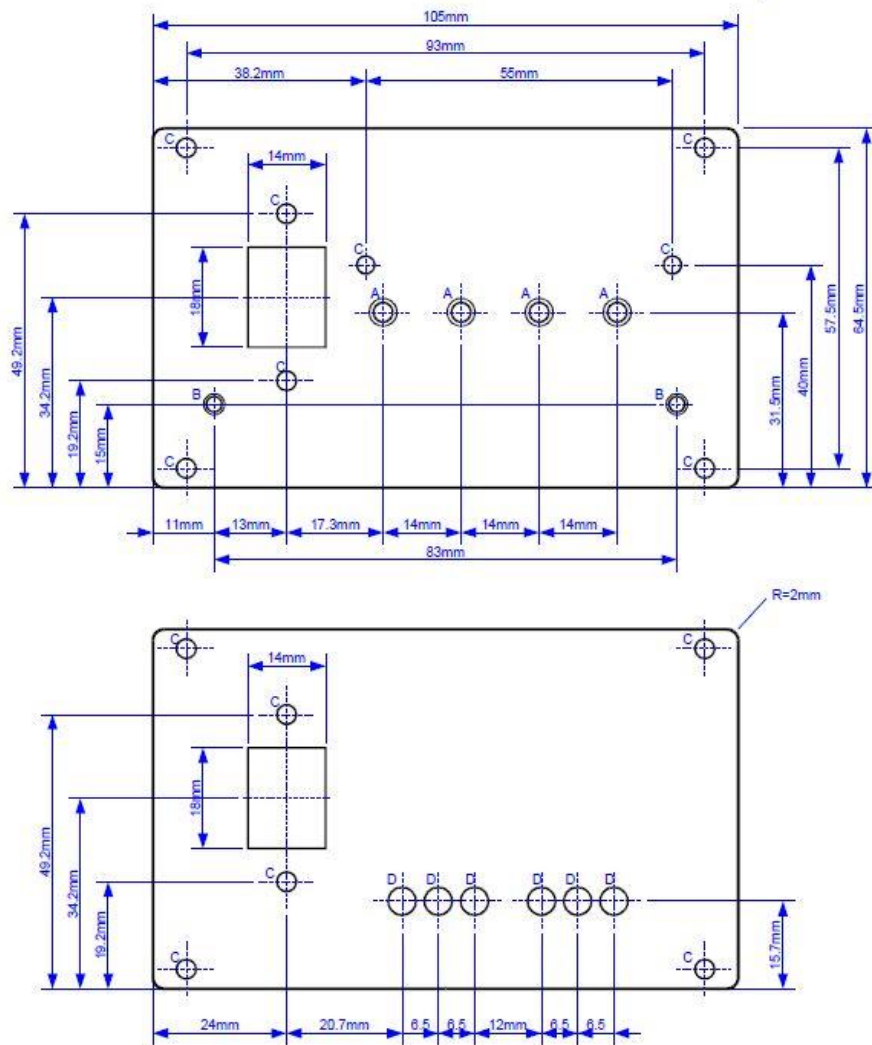
The indicators on the right will show the state of the output voltage

Parameter	LED will be lit when
Red LED	output voltage below 28.8V <sub>DC</sub>
Green LED	output voltage above 29V <sub>DC</sub> and below 31.2V <sub>DC</sub>
Yellow LED	output voltage above 31.2V <sub>DC</sub>

### 3. Mechanical

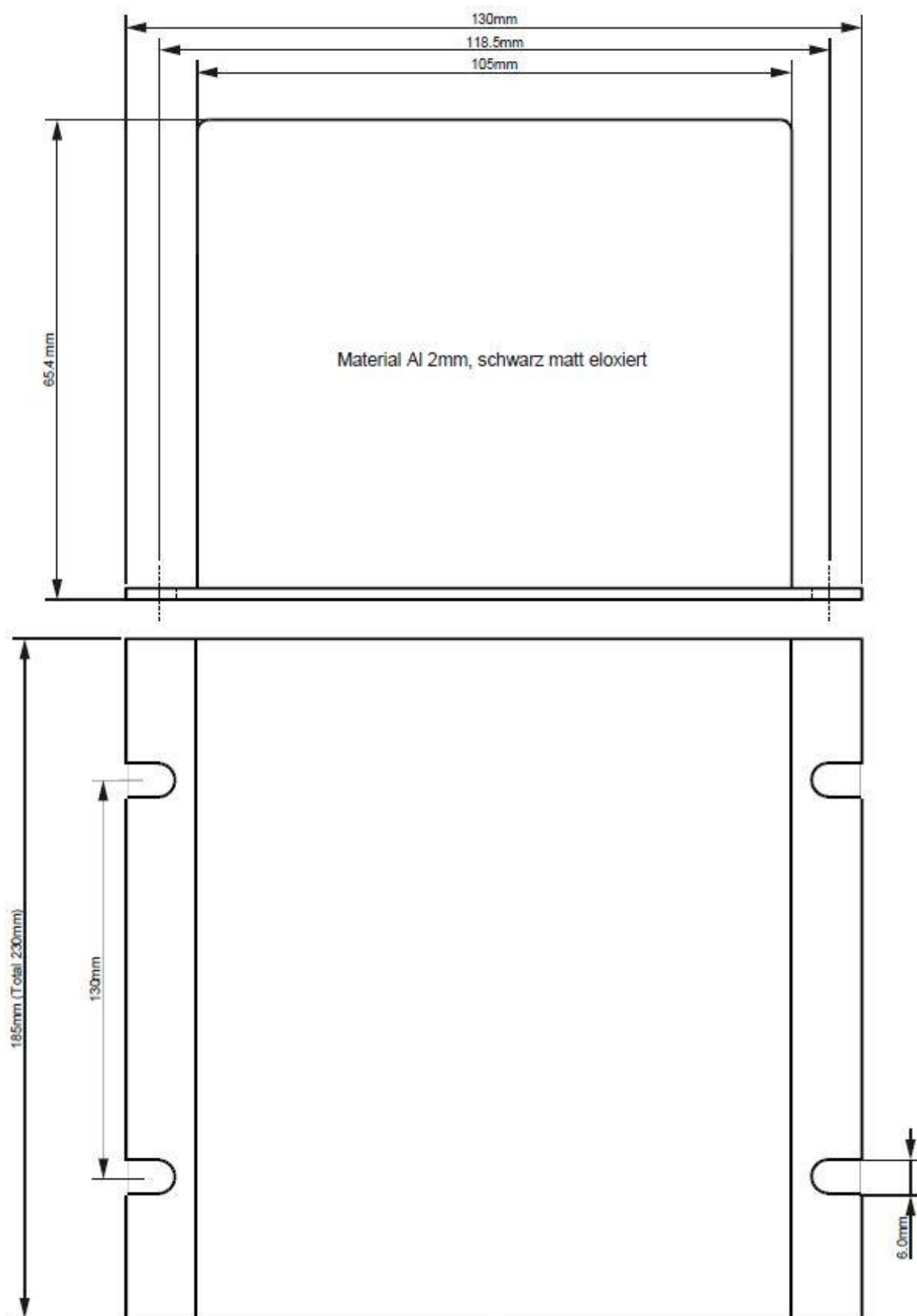
#### 3.1.Housing

##### 3.1.1. Front and Rear Side



### 3.1.2. Mechanical Dimension

The power supply has the dimension 185x130x65mm. The housing can be connected to  $V_{Out+}$  potential or can be left open. Please contact Astrol Electronic AG for more information. Normally it is left open.



### 3.1.3. Weight

The total weight of the complete power supply is approx. 1.1Kg.

## 3.2.Labels

### 3.2.1. Front side

- Power supply connector (input)

### 3.2.2. Rear side

- Power supply output

### 3.2.3. Bottom side

- Type label serial number

### 3.2.4. Top side

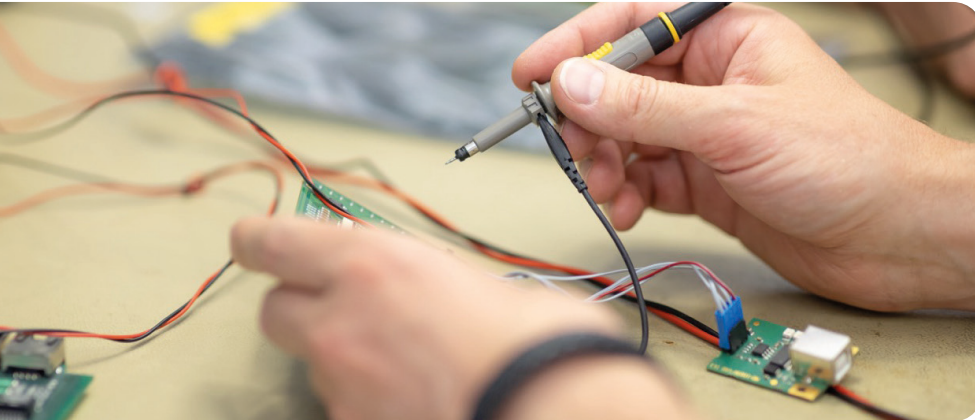
- Nothing

## 4. Order code

AA-10299-001

VS-80W30V-01

# About Astrol



## Technology leader in pulsed power switches and solid-state circuit breakers

Astrol is a Switzerland based innovator and manufacturer of state-of-the-art power control and switching solutions. We design and produce electronic parts for technical high demanding industries such as medical, energy distribution and pulsed power applications since 1996. In our 25-year history we have developed from a designer of custom-built electronics to a technology leader in pulsed power switches and solid-state circuit breakers with a wide range of products and a world-wide customer base consisting of operating companies and research institutes.

Our main focus lies on power switching in the medium voltage range, from optimized gate drive units to fully integrated solutions of up to 100kV. Our products are designed, manufactured and tested in our production location and high voltage test laboratory in Othmarsingen and therefore are able to withstand harsh environments, extended temperatures and have a long lifetime.

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