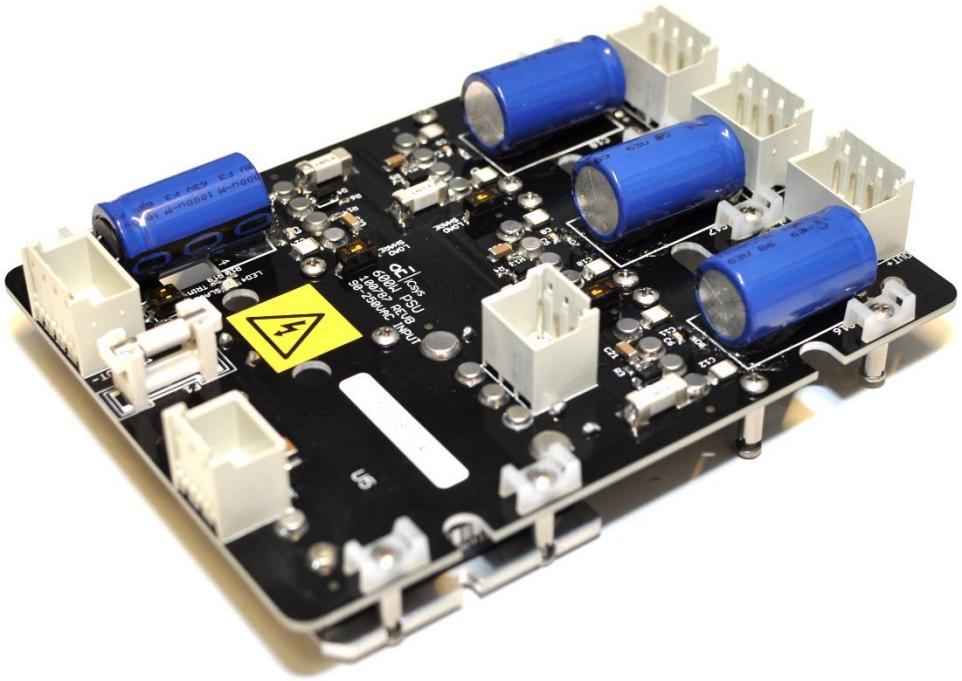
USER MANUAL



Equipment Description	PCB PSU 115-230v 600W 4ch
Ixys Part Number:	100787

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1. INTRODUCTION

1.1. GENERAL NOTES

This document outlines and defines the installation, operation and maintenance procedures for the Ixys 600W PSU. The manual will contain all relevant data and methods to be able to use and maintain the device for its intended purpose.

It will be stated in the manual everything from technical specifications, installation and maintenance to troubleshooting.

1.2. PURPOSE AND SCOPE

The purpose of this manual is to give instructions to install, operate and maintain the 600W PSU supplied by Ixys AS.

The manual is to be used by trained and competent personnel only.

1.3. ABBREVIATIONS

Abbreviation	Description
PCB	Printed Circuit Boards
ESD	Electrostatic Discharge
PSU	Power Supply Unit

1.4. SUPPLIER CONTACT INFORMATION

Ixys AS
Langmyra 11
N-4344 Bryne
Norway

+47 51 42 22 22
post@ixys.no
www.ixys.no

2. HEALTH, SAFETY AND ENVIRONMENT

2.1. GENERAL

Safety Notes and General Precautions shall be presented to all personnel concerned prior to testing, operation, maintenance and repair. The operations shall be performed by the responsible engineer/supervisor. The personnel using this equipment must have knowledge of this type of equipment and have familiarized themselves with the applicable procedures and manuals for this product.

2.2. SAFETY MESSAGE LEVELS

Safety message level		Indication
	**DANGER:**	A hazardous situation which, if not avoided, will result in death or serious injury
	**WARNING:**	A hazardous situation which, if not avoided, could result in death or serious injury
	**CAUTION:**	A hazardous situation which, if not avoided, could result in minor or moderate injury or damage to equipment
	**Electrical Hazard:**	The possibility of electrical risks if instructions are not followed in a proper manner
NOTICE:		A potential situation which, if not avoided, could result in an undesirable result or state A practice not related to personal injury

3. SPECIFICATIONS

3.1. DESCRIPTION

The PCB PSU 600W consist of a PCB with input filter and rectifier module (Vicor FARM) and 4ea output modules that convert the 300VDC internal bus power to selectable output voltages. An external capacitor hub is required.

Multiple output modules can be connected in parallel and a “load share” function can be configured to share the load between the modules.

3.2. TECHNICAL DATA

General	
Manufacturer	Ixys AS
Description	PCB PSU 115-230v 600W 4ch
Weight	~350g
Dimensions	155 x 118 x 33mm

Electrical Data	
Supply Voltage	90-132 or 180-264VAC
Power Consumption	< 600W (dependent on load)
Efficiency	> 94%

Cable Connectors	
Power Connector 3way	Wago 2092-1123
Power Connector 4way	Wago 2092-1124

3.3. WARRANTY CONDITIONS AND GUARANTEE

- Improper use of equipment where use is not reflected in what it was intended to.
- Where general maintenance is not performed leading to defective parts or other type of defect.
- Incorrect handling or use of equipment.
- Packing not carried out in an ESD protective way

3.4. ORDERING

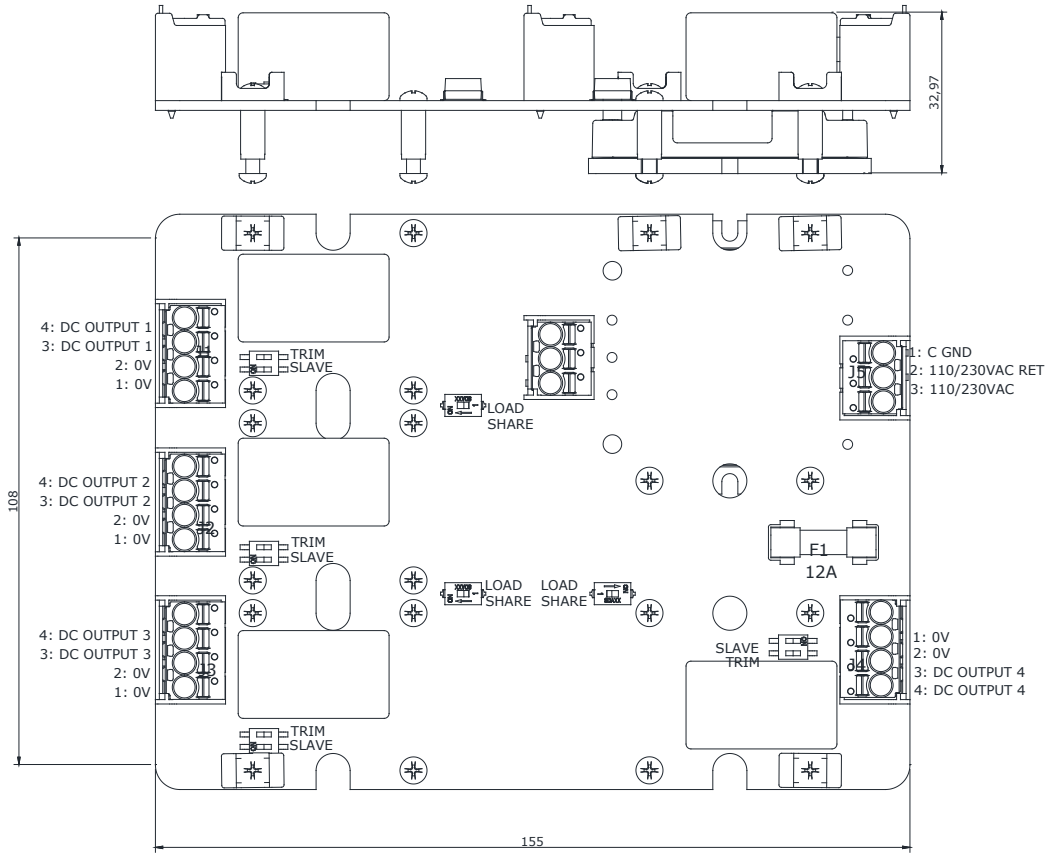
Ixys Part Number	Description
100787	PCB PSU 115-230v 600W 4ch

3.5. ACCESSORIES

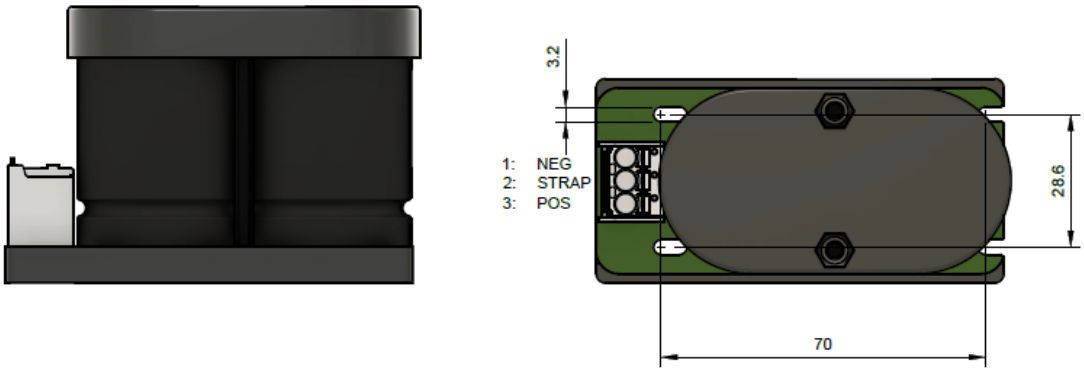
Ixys Part Number	Description
112074	Power Connector 3way
112075	Power Connector 4way
117280	Capacitor Hub
101441	5VDC 100W Output Module
101442	12VDC 150W Output Module
100779	24VDC 150W Output Module
100780	48VDC 150W Output Module

4. DRAWING

4.1. PSU PCB



4.2. CAPACITOR HUB



5. OPERATION

5.1. LOAD SHARING

Switch the “Load Share” DIP switch between two or more modules to enable load sharing. For each “Load Share” circuit, all modules except one must have the “Slave” switch set to “On”.

The modules configured for load share must also be wired in parallel externally.

5.2. VOLTAGE TRIM

The voltage trim function can individually be activated on each module by flipping the DIP switch to “On”. The trim function adds 10% extra voltage to the output.

5.3. TROUBLESHOOTING / FAULTFINDING

Preliminary fault isolation Check

- ✓ The electrical connections are correct as described in drawing in chapter 4.

Trouble shooting		
Symptom	**Possible Causes**	**Remedy**
No power from any modules	• Input voltage not within limits	• Verify the input voltage

	**Electrical Hazard:**	Be aware of 300VDC on the bus voltage between the input module, capacitor**,** and the output modules. Be careful to not touch anything while power is applied.