



# Redundancy Panel 1U

Power control of Power supply 24V 15A

350-122

Publication date 2023-11-23



# Table of Contents

1. About .....	3
2. Component overview .....	4
3. Enclosures .....	5
3.1. Installation in 19" rack .....	5
3.2. Mounting .....	5
4. Connection .....	5
5. Connect with Power supply 24BV 15A 1U .....	6
5.1. Input 3 .....	6
6. Connect load .....	7
6.1. Alarm functions .....	7
7. Connect alarm .....	7
8. Commissioning .....	8
9. Panel explanation .....	8
10. Regulations and certifications .....	8
10.1. Requirements that the product meets .....	8
11. Technical data .....	8
12. Technical data enclosures .....	9
12.1. Technical data 1U .....	9
13. Warranty, support, country of manufacture and country of origin .....	9
13.1. Warranty .....	9
13.2. Country of manufacture .....	9
13.3. Designed and produced by: Milleteknik AB .....	9
14. Product life cycle, environmental impact and recycling .....	10
15. About this document .....	10
15.1. About translation of this document .....	10
16. Address and contact details .....	10

## 1. ABOUT

Name	Item number	Email number
Redundancy Panel 1U	1U01K10024P0001	5213523

Redundancy Panel 1U is a rack-mounted unit for power control of Power supply 24V 15A 1UE or battery backups from Milleteknik. Redundancy Panel 1U has three (3) inputs, which means that it is possible to connect up to three (3) power supplies (Power supply 24V 15A 1U). If two of the three power supplies (Power supply 24V 15A 1U) / battery backups stop working as a power source for the system, the third and last functioning power supply covers. Redundancy Panel 1U alerts if one of the power sources stops working or in the event of a load fuse failure.

Area of use: Where there is a need for redundancy in the 24 V power supply.



### READ THIS FIRST!

If possible, leave 100 mm of free space.

The system is intended for use in a controlled indoor environment.

Only authorized persons should install and maintain the system.

It is the installer's responsibility to ensure that the system is suitable for its intended use.

Documents accompanying the system must be kept in or in its immediate vicinity.

Ventilation should not be covered. Mains voltage should be disconnected during installation.

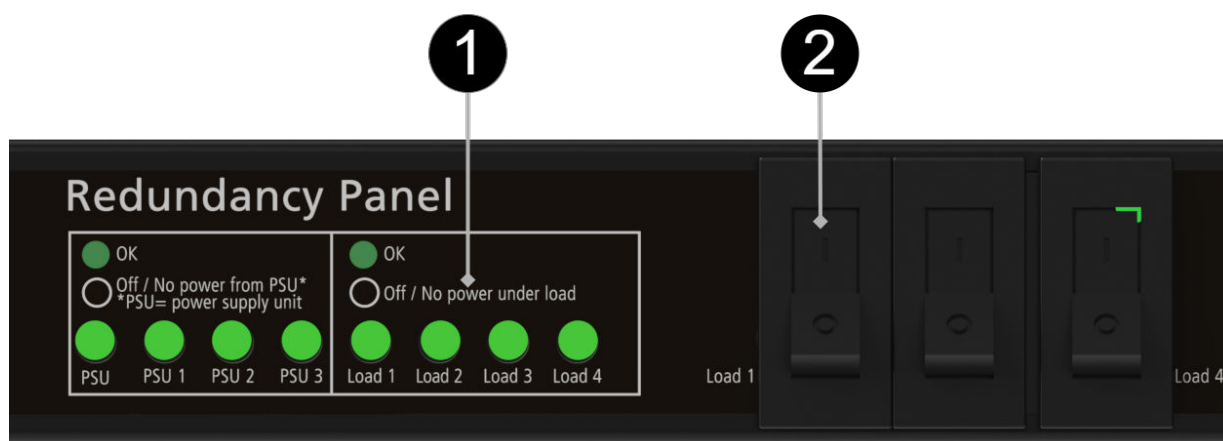
All information subject to change.

Upon installation of this product, the installer acknowledges and accepts the limitations of this product as described in this manual.

Instructions original language: Swedish.

## 2. COMPONENT OVERVIEW

Figure 1. Front

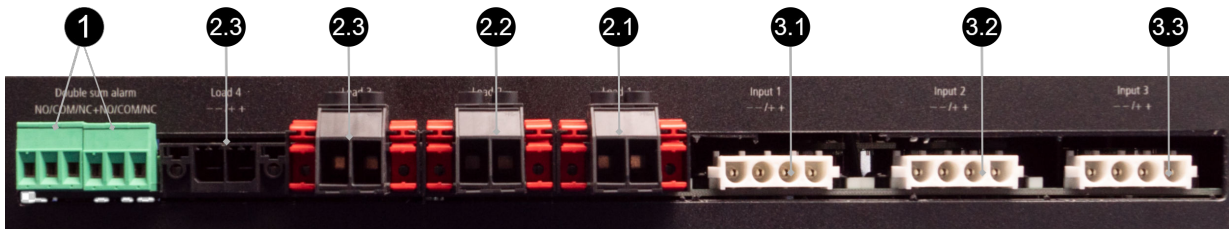


No	Explanation
1	LED for load and connected Power supply 24V 15A 1U
2	Load fuses





Figure 2. Back

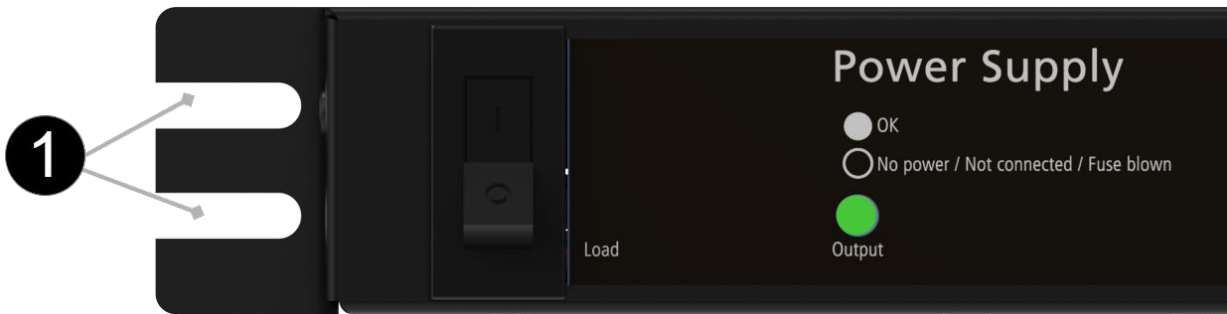


No	Explanation
1	Double sum alarm, NO/COM/NC+NO/COM/NC. Sum alarm: alarm in case of loss of voltage from power supply (Power supply 24V 15A 1U) one, two and three (depending on which are connected), tripped load fuse 1, 2 and 3, (depending on which are connected).
2.1-2.4	Load 1-4, -- / ++
3.1-3.3	Connection of Power supply 24V 15A 1U

## 3. ENCLOSURES

### 3.1. Installation in 19" rack

The unit must be mounted in a 19" rack. Bracket is screwed into rack with M6 screw and basket nut, at least one on each side. Use the appropriate screw and nut for the rack. Screw and nut not included.



No .	Explanation
1	The unit is screwed into a 19" rack.

### 3.2. Mounting

## 4. CONNECTION

Redundancy Panel 1HE is powered by connected power supplies (Power supply 24V 15A 1U. Connect 24 V load to Load 1-4.



## 5. CONNECT WITH POWER SUPPLY 24V 15A 1U

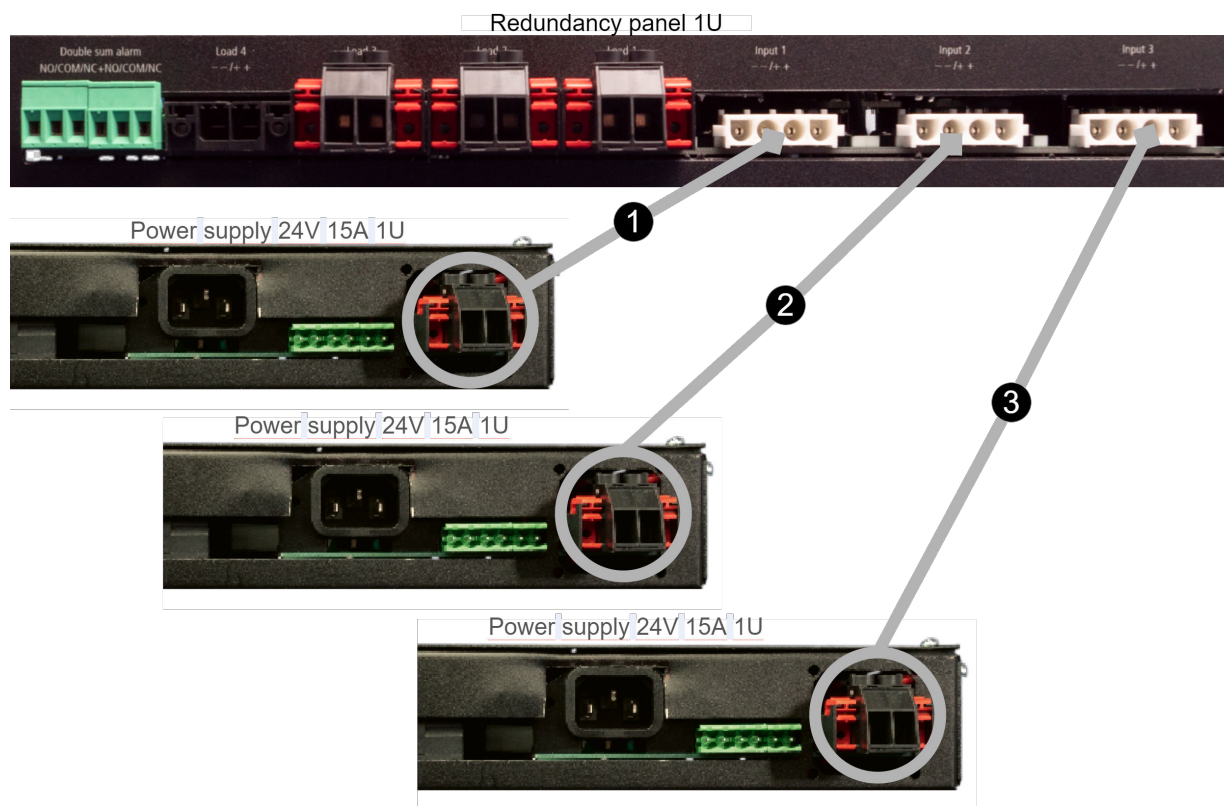


Table 1. Connect Redundancy panel 1U with Power supply 24V 15A 1U

No	Explanation
1	Connect the first Power supply 24V 15A 1U to Input 1.
2	Connect the other Power supply 24V 15A 1U to Input 2.
3	Connect the third Power supply 24V 15A 1U to Input 3. See input 3 [6]IN

### 5.1. Input 3



#### IMPORTANT

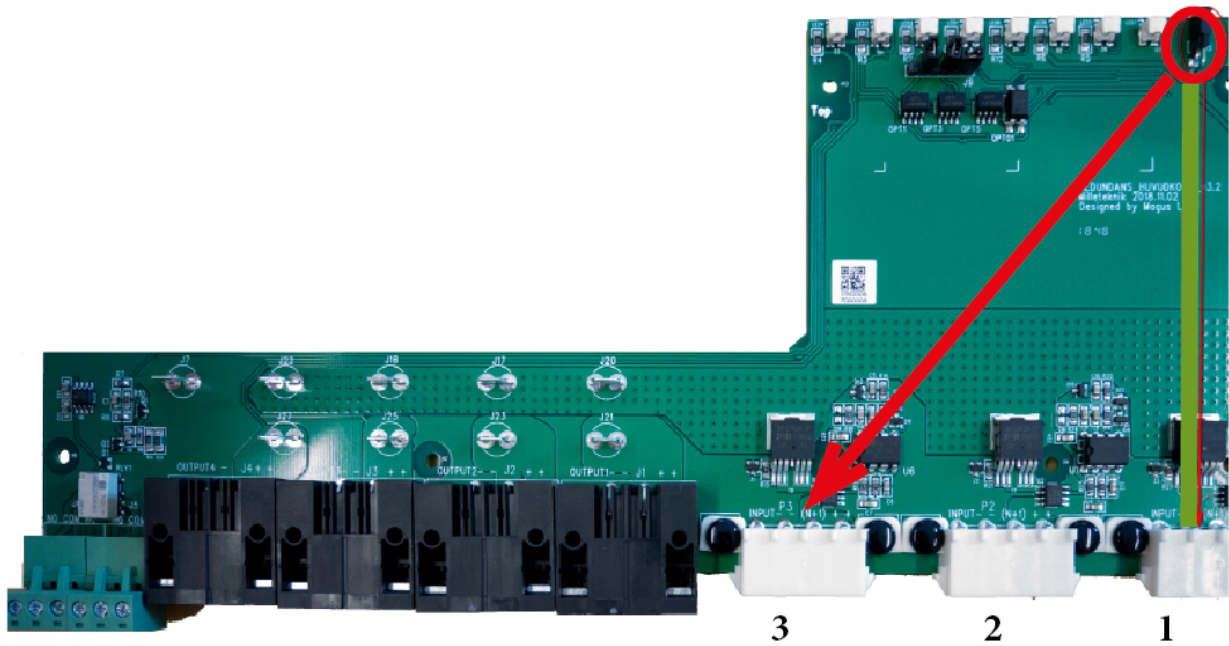
This section only applies if three Power supply 24V 15A 1U are to be used with Redundancy panel 1U.

If three Power supplies 24V 15A 1U are to be used, the jumper on Input 3 must be removed.

If two Power supply 24V 15A 1U are to be used together with the Redundancy panel 1U, the jumper (red circle) must be fitted (it is fitted from the factory). Should three Power supply 24V 15A 1U jumper, (red circle) should not be mounted.

Unscrew the cover and adjust the bracket.





Unscrew the cover and adjust the bracket.

Remove jumper when using three Power supply 24V 15A 1U.



### **WARNING**

The unit must not be energized when bridging.

## 6. CONNECT LOAD

24 V load is connected show quick contact. [4]

### 6.1. Alarm functions

Double total alarm: Alarm in the event of loss of voltage from the power supply after load protection.

## 7. CONNECT ALARM

Alarm is connected on the back. NO/CO/NC. Use any connection, the alarms are duplicated.

Total alarm: alarm in the event of loss of voltage from power supplies one, two and three (depending on which are connected), tripped load fuse 1, 2, 3 and 4, (depending on which are connected).



## 8. COMMISSIONING

After connection, startup must take place in the following steps:

1. Connect power supply (should not be live during installation) and load.
2. Check that the fuse(s) on the front is ON.
3. Voltage set mains.
4. The device works normally when the indicator diode lights up with a solid green light.

## 9. PANEL EXPLANATION

Table 2.

Led for	Status	Explanation
Alarm	Turned off	Normal operation.
Alarm	RED	Alarm for PSU Error / fault on or triggered load fuse.
PSUs 1-3	Green	Normal operation - Power supply 24V 15A 1U is connected.
PSUs 1-3	Turned off	Error on Power supply 24V 15A 1U.
Loads 1-4	Green	Normal operation.
Loads 1-4	Turned off	Load fuse has tripped.

## 10. REGULATIONS AND CERTIFICATIONS

### 10.1. Requirements that the product meets

EMC:	EMC Directive 2014 / 30EU
Electricity:	Low voltage directive: 2014/35 / EU
CE:	CE directive according to: 765/2008

CE



## 11. TECHNICAL DATA

Table 3. Circuit board Redundancy 19R2

Info	Explanation
Article name	Circuit board Redundancy 19R2
Power supply	The product is powered by connected power supplies (Power supply 24V 15A 1U).
Load outputs	Four pieces, --/++
Entrances	Three pieces, -- / ++ quick connector.
Alarm	Double total alarm: alarm in case of loss of voltage from power supplies one, two and three (depending on which are connected), tripped load fuse 1, 2 and 3, (depending on which are connected).







Info	Explanation
Fuses (load).	Automatic fuses 10 A

## 12. TECHNICAL DATA ENCLOSURES

### 12.1. Technical data 1U

Info	Explanation
Name	1U
Enclosure class	IP 20
Measure	Height: 44 mm, width: 244 mm, depth: 280 mm.
Height units	1
Mounting	19 "rack
Ambient temperature	+ 5 ° C - + 40 ° C. For best battery life: + 15 ° C to + 25 ° C.
Environment	Environmental class 1, indoors. 20% ~ 90% relative humidity
Material	Powder coated sheet metal
Color	Black
Cable glands, number	8

## 13. WARRANTY, SUPPORT, COUNTRY OF MANUFACTURE AND COUNTRY OF ORIGIN

### 13.1. Warranty

The product has a two-year warranty, from the date of purchase (unless otherwise agreed). Support during the warranty period can be reached at [support@milleteknik.se](mailto:support@milleteknik.se) or telephone, +46 31-34 00 230. Compensation for travel and / or working hours in connection with locating faults, installing repaired or replaced goods is not included in the warranty. Contact Milleteknik for more information. Milleteknik provides support during the product's lifetime, however, no later than 10 years after the date of purchase. Switching to an equivalent product may occur if Milleteknik deems that repair is not possible. Support costs may (at Milleteknik's discretion) occur after the warranty period has expired.

### 13.2. Country of manufacture

Country of manufacture / country of origin is Sweden. For more information, contact your seller.

### 13.3. Designed and produced by: Milleteknik AB

Designed and produced by Milleteknik AB



## 14. PRODUCT LIFE CYCLE, ENVIRONMENTAL IMPACT AND RECYCLING

The product is designed and constructed for a long service life, which reduces the environmental impact. The product's service life depends on, among other things, environmental factors, mainly ambient temperature, unforeseen load on components such as lightning strikes, external damage, handling errors, and more. Products are recycled by being handed over to the nearest recycling station or sent back to the manufacturer. Contact your distributor for more information. Costs that arise in connection with recycling are not reimbursed.



## 15. ABOUT THIS DOCUMENT

Article number of the document:

This document is subject to change without prior notice.

All information is published with reservation for printing errors.

### 15.1. About translation of this document

User manual and other documents are in the original language in Swedish. Other languages are machine translated and not reviewed, errors may occur.

## 16. ADDRESS AND CONTACT DETAILS

Milleteknik AB  
Ögärdesvägen 8 B  
S-433 30 Partille  
Sweden  
+46 31 340 02 30  
info@milleteknik.se  
www.milleteknik.com



This page is intentionally left blank.

This page is intentionally left blank.