

## ***NEW PRODUCTS***



### **Capacitive buffer modules CSB series**

Model	CSB5-480W/024V/AA	CSB5-960W/024V/AA
Code	XCSB5480W024VAA	XCSB5960W024VAA
Description	Capacitive buffer module	Capacitive buffer
Input	23...30 Vdc	23...30 Vdc
Output	24 Vdc 20A	24 Vdc 40A
Buffer time (typ.)	350 ms (20A) / 700 ms (10A)	250 ms (20A) / 500 ms (10A)

To ensure service continuity, in addition to the well-known range of DC-UPS modules and related battery holder modules, Cabur introduces this new series of capacitive buffer modules.

#### **Operation**

Capacitive buffer modules are electronic devices designed to maintain a constant output voltage despite variations in input voltage or load. The operating principle is based on the use of capacitors to store and release electrical energy in a controlled manner. The device can be set to intervene when the supply voltage drops by 1V or is below 22V, releasing the stored energy in the capacitors to keep the output voltage stable. The modules can be remotely monitored (charge status and buffering status) and their operation can be inhibited via an external command.

#### **Applications**

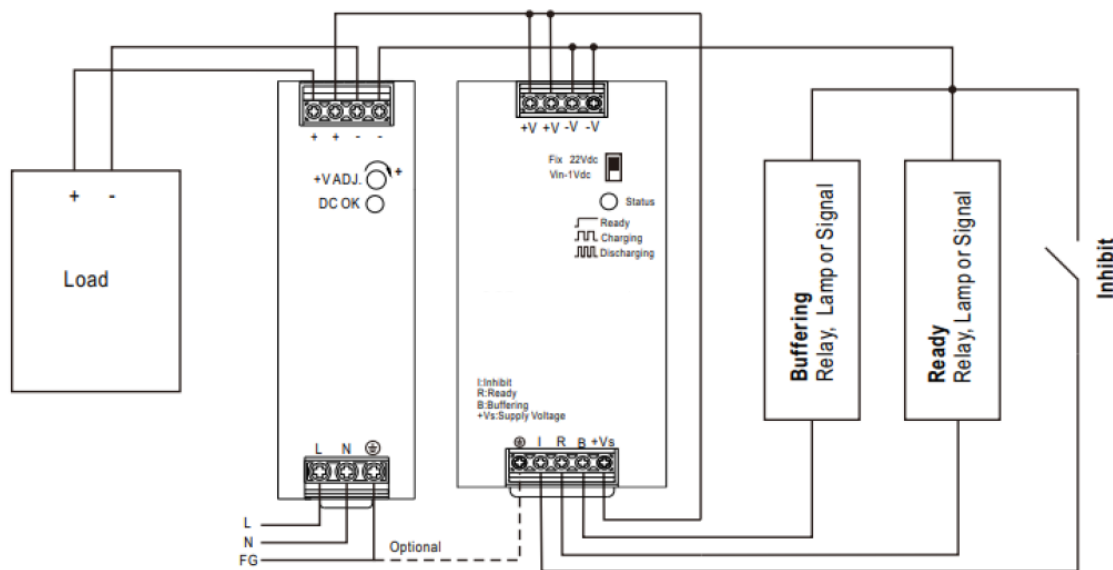
- Industrial automation machines and process control
- Automation and alarm and remote-control installations
- Applications where service continuity prevents problems or downtime costs

### Advantages of Using Capacitive Buffer Modules

- **Protection Against Voltage Interruptions:** Capacitive buffer modules are effective in protecting automation systems against brief voltage interruptions, which can cause onboard computers to restart and disrupt production.
- **Increased Safety and Reliability:** Thanks to their high electrical durability and lack of moving parts, capacitive buffer modules are maintenance-free and enhance the safety and reliability of the system.
- **Reduced Downtime Costs:** By maintaining a stable output voltage, these modules reduce machine downtime and associated costs.
- **Reduced Disposal Costs and Pollution:** Unlike batteries, they do not require periodic replacement, thus reducing disposal costs and contributing to environmental protection.
- **High Availability:** Their reliability and low maintenance contribute to ensuring high availability of automation systems.
- **Compatibility with Industry 4.0:** Capacitive buffer modules are very useful for modern industrial automation systems, which need to keep communication constantly active.

These advantages make capacitive buffer modules an ideal solution for improving the performance and reliability of industrial automation systems.

### Block diagram



### Signals and External Commands

- **Buffering:** Indicates that the device is supplying current to the load.
- **Ready:** Indicates that the capacitors have been fully charged and the device is ready.
- **Inhibit:** Allows the device's operation to be inhibited via an external command.

**Technical data sheet**

SERIES	CSB	CSB
Code	<b>XCSB5480W024VAA</b>	<b>XCSB5960W024VAA</b>
Type	<b>CSB5-480W/024V/AA</b>	<b>CSB5-960W/024V/AA</b>
<b>INPUT TECHNICAL DATA</b>		
Input rated voltage	24 Vdc	24 Vdc
Input voltage DC	23... 30 Vdc	23... 30 Vdc
Current consumption	100 mA (no load) / 900 mA (charging)	100 mA (no load) / 900 mA (charging)
<b>OUTPUT TECHNICAL DATA</b>		
Output voltage range	24 Vdc (depending by input voltage)	24 Vdc (depending by input voltage)
Continuous current	20 A	40 A
Ripple @ nominal ratings	200 mVpp	350 mVpp
Status indication	LED "Status" (Charging/Charging complete/Discharging/Discharging complete) 3 digital signals (Inhibit/Ready/Buffering)	LED "Status" (Charging/Charging complete/Discharging/Discharging complete) 3 digital signals (Inhibit/Ready/Buffering)
Battery type	electrolytic capacitors	electrolytic capacitors
Activation threshold	22 Vdc or Vin-1Vdc selectable	22 Vdc or Vin-1Vdc selectable
Charging time	15 s typ. / 25 s max.	25 s typ. / 35 s max.
Buffer time	Typ. :350 ms (20 A), 700 ms (10 A) Min: 250 ms (20 A), 500 ms (10 A)	Typ. :250 ms (40 A), 500 ms (20 A) Min: 160 ms (40 A), 320 ms (20 A)
Protection	reverse polarity/overload (105-125%)/short circuit	reverse polarity/overload (105-125%)/short circuit
Parallel connection	yes, for increasing buffer time and redundancy	yes, for increasing buffer time and redundancy
<b>GENERAL TECHNICAL DATA</b>		
Operating temperature range	-25...+75°C	-25...+75°C
EMC Standard	EN/IEC 62368-1, EN 55032, EN61000-4-2,3,4,5,6,8	EN/IEC 62368-1, EN 55032, EN61000-4-2,3,4,5,6,8
Oversoltage category / pollution degree	II / 2	II / 2
Protection degree	IP 20	IP 20
Connection terminal	4 mm <sup>2</sup> / 4 mm <sup>2</sup>	4 mm <sup>2</sup> / 4 mm <sup>2</sup>
Housing material	aluminium, steel	aluminium, steel
Dimensions (LxHxD)	63 x 125 x 115 mm	63 x 125 x 115 mm
Approximate weight	0.95 Kg	1 kg
Mounting information	vertical on a rail, 10 mm from adjacent components	vertical on a rail, 10 mm from adjacent components
<b>ACCESSORIES</b>		
Mounting rail (IEC60715/TH35-7.5)	PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB	PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB
Mounting rail (IEC60715/TH35-15)	PR/3/PP, PR/3/PP/ZB, PR/3/PA, PR/3/PA/ZB	PR/3/PP, PR/3/PP/ZB, PR/3/PA, PR/3/PA/ZB

**Cabur: Reliable Since 1952**

For over 70 years, Cabur has been developing and manufacturing a wide variety of products for the electronics and electrotechnical industries, renowned for their reliability even under extreme conditions. In addition to the production of terminal blocks, the company's core business, Cabur has expanded over time to include products for automation and control, installation, industrial marking systems, and innovative solutions for photovoltaic systems and energy transition. Today, the company offers over 4,000 products and features a skilled technical team dedicated to customer service.