

BUFFER MODULE, 24 V DC

UF20.241

BUFFER MODULE 24VDC 20A

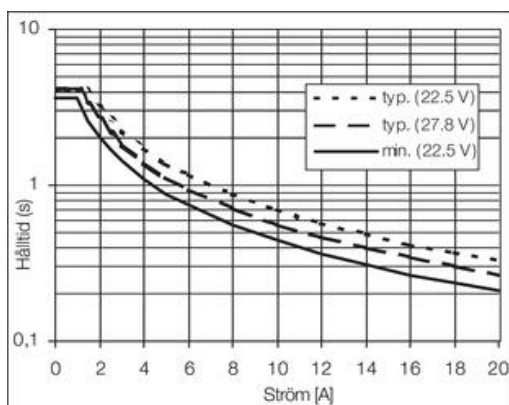
- Overcomes temporary power failures
- Manages 20 A/24 V DC for 200 ms
- Status outputs
- Maintenance-free



PRODUCT DESCRIPTION

The buffer module is connected in parallel with the power supply unit's 24 V dc output and is charged with a capacitor bank. If the primary voltage of the power supply unit falls to zero and the output voltage falls to 22.5 V dc, the buffer module is automatically switched in and overcomes the power failure. The buffer module can supply 20 A/24 V dc for 200 ms; if the load current is lower, the time increases. When connecting two modules in parallel, the time is doubled up to 20 A, alternatively, up to 40 A power supply can be connected for 200 ms. There are two status inputs that indicate when the buffer module is ready to discharge and when it is active. Additionally, there is an input for disconnection of the module for safety circuits and service, for example. A LED on the front shows the status. The buffer module requires no maintenance in that it lacks a battery and fits all applications for which one wants to avoid stops due to temporary power failures. Available for both the Dimension and Silverline series.

V -1 V must be used if working with voltages higher than 24 V dc, such as for compensation of voltage drops in cables. The module will then be activated when the voltage falls -1 V beneath the set voltage, faster than 0.54 V/s. (If the fall time is slower than 0.54 V/s, the buffer module is connected when the voltage reaches 22.5 V dc.)



Discharge curve

TECHNICAL DATA

INPUT DATA

Input current during charging	0,6 A
Input voltage from the unit	24 V DC

OUTPUT DATA

Output current during operation max	20 A
Output voltage at buffering	22,5 V DC
Output voltage normal operation	24 V DC
Output current at 24 V dc	20 A
Output current in buffer mode max	20 A

EFFICIENCY / LIFETIME / MTBF

Life span	166 000 h @ 40 °C, stand-by mode
Efficiency	99 %
MTBF (IEC 61709)	2 327 000 h @ 40 °C, stand-by mode

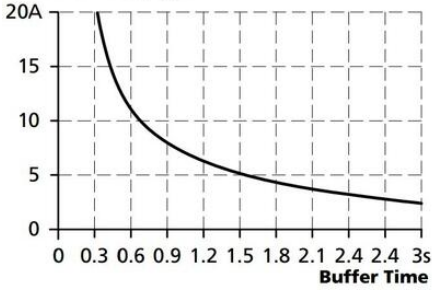
DIMENSIONS

Weight	0,74 kg
Depth	102 mm
Width	64 mm
Height	124 mm

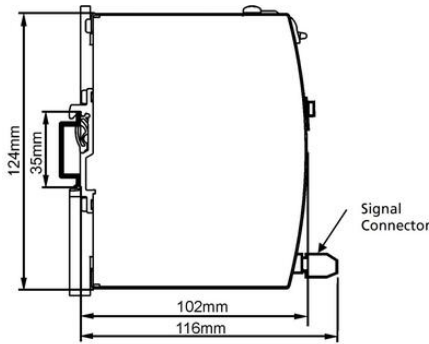
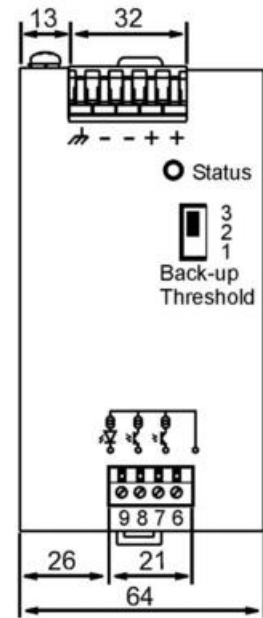
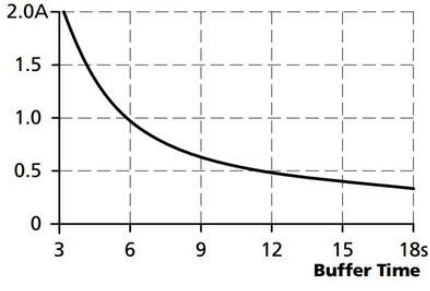
OTHER

Charging the battery type	0,6 A
IP class	IP20
Ripple max	200 mV pp
Voltage level for activating the buffer module	22,5 V DC
Temperature min without derating	-25 °C
Approvals	CB, CE, CSA, CSA US, UL
Temperature max without derating	70 °C
Material protection	Aluminium
Type Power Supply	Buffer Module

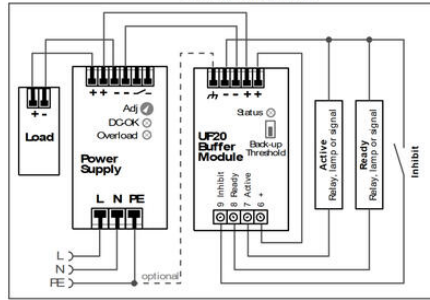
Buffer Current, typ.



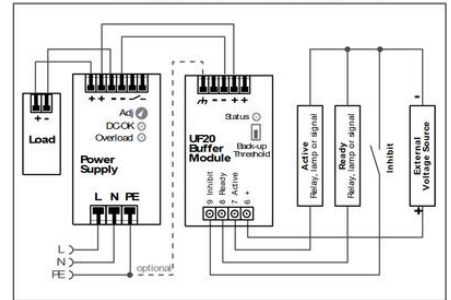
Buffer Current, typ.



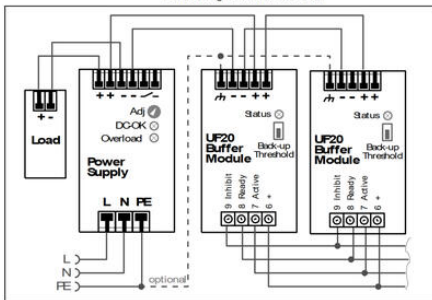
General wiring diagram



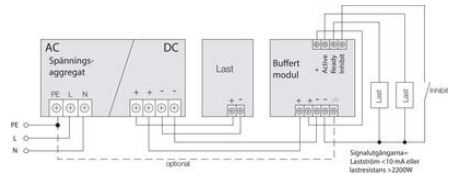
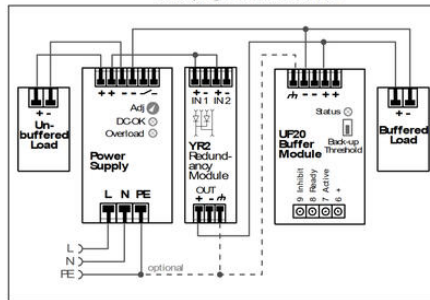
Signals supplied from an external voltage source



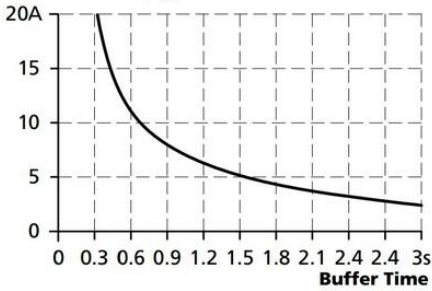
Paralleling of buffer modules



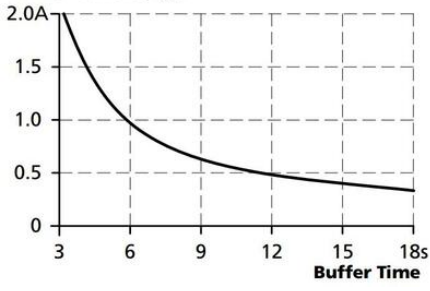
Decoupling of buffered branches

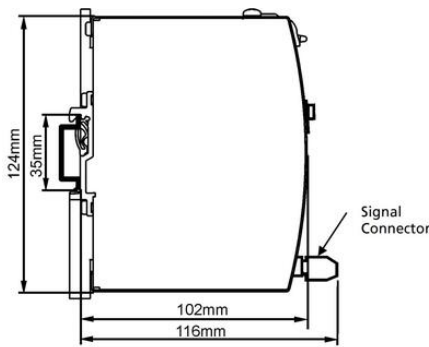
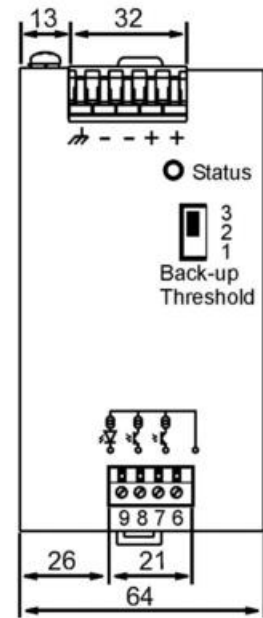


Buffer Current, typ.

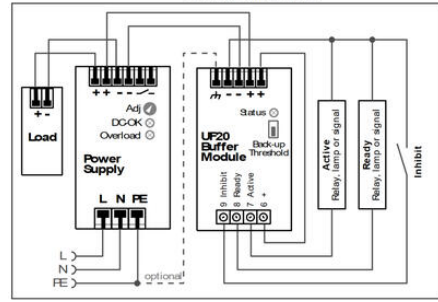


Buffer Current, typ.

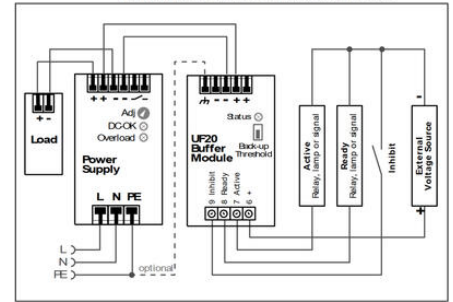




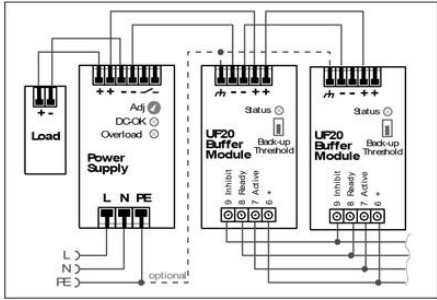
General wiring diagram



Signals supplied from an external voltage source



Paralleling of buffer modules



Decoupling of buffered branches

