

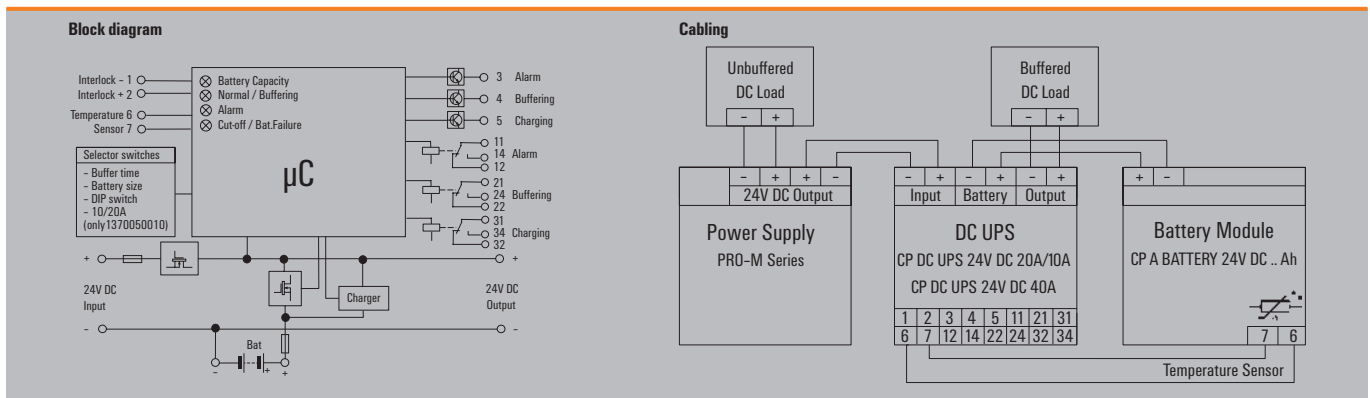
UPS control unit

- Two 24 V models in 10 A/20 A and 40 A
- Temperature-compensated charging feature for long battery life
- Integrated battery diagnostics including continuous availability test
- Status relay and additional transistor outputs for remote monitoring
- Convenient LED displays for easy error analysis

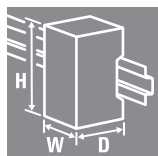


Technical data

Indication	
Status relay (max.load 30 V AC/DC 0.1 A)	Fault (alarm), battery operation (buff.), charging (charg.)
Transistor outputs (24 to 27 V DC max. load 150 mA)	Fault (alarm), battery operation (buff.), charging (charg.)
LED status indicator	Three-colour LED: battery capacities > 85 % green, > 40 % yellow, > 20 % red, < 20 % red (flashing) Green/yellow LED: normal / buffering Yellow/red LED: temperature alarm / alarm Yellow/red LED: switch-off / battery fault
General technical data	
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Max. perm. air humidity	5...95 %
Protection degree	IP 20
Class of protection	3
Pollution severity level	2
Overvoltage category	III
Insulation voltage input/output to housing/ground	1300 V DC 1 min (typetest)
MTBF	> 500,000 hours acc. to IEC 1709
Protection against reverse voltages from the load	32...34 V DC
Parallel connection option	Yes, only with diode module for redundancy
Housing version	Metal, corrosion resistant
Mounting position, installation notice	Horizontal on mounting rail TS 35, 50 mm above and below Space for free movement of air
Overload protection	Yes
Short-circuit protection	Yes
EMC / shock / vibration	
Interference emission	Acc. to EN55022 Class B
Interference immunity tests	Acc. to EN61000-4-2 (ESD), EN61000-4-3 and EN61000-4-8 (fields), EN61000-4-4 (burst), EN61000-4-5 (surge), EN61000-4-6 (conducted), EN61000-4-11 (dips)
Resistance against vibration and shock	Acc. to IEC60954 Vibration: 2.3 g, Acc. to IEC60068-2-31 shock: 30 g in all directions
Electrical safety (applied standards)	
Electrical equipment of machines	Acc. to EN60204
Safety transformers for switch-mode power supplies	Acc. to EN61558-2-17
Machinery with electronic equipment	Acc. to EN50178 / VDE0160
Extra-low voltage protection	SELV acc. to EN60950, PLEV acc. to EN60204



UPS control unit



Technical data

Input	
Rated input voltage	24 V DC
Input voltage range	20...30 V DC
Rated input voltage (up to 60 °C)	≤ 13 A (for 10 A) ≤ 23 A (for 20 A)
Input current, max. (to 45 °C)	≤ 15 A (for 10 A) ≤ 27 A (for 20 A)
Input fuse	Yes, 30 A
Standby current (without battery)	max. 200 mA
Standby current (with fully charged battery)	max. 0.5 A
Reverse polarity protection	Yes
Output	
Rated output voltage	24 V DC
Output voltage, normal operation (I _{max})	V _o = V _{in} - 0.2 V
Output voltage, battery operation (I _{max})	V _o = V _{in} - 0.3 V
Rated output current (up to 60 °C)	10 A / 20 A
Continuous output current (up to 70 °C), derating from 60 °C	7.5 A / 15 A
Continuous output current (up to 45 °C)	12 A / 24 A
Power Boost@24 V DC, 60 °C	12 A / 24 A for 1 min, ED = 5 %
Integrated battery charger	
Charging feature	IU characteristic curve
Charging voltage (temperature compensated)	27, 48 V @ 20 °C
Temperature coefficient	- 48 mV / °C
Charging current	0.15 CA
Battery availability test	Yes, each minute
Battery module	
Rated voltage	24 V DC
Storage medium (AGM battery)	1.3 Ah, 3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah (selectable, with rotary switch)
Parallel connection option	Yes, max. 2
Operating elements and control inputs	
Output current selector switch	10 A / 20 A
Battery in Ah selector switch	1.3 / 3.4 / 7.2 / 12 / 17 / No Battery / Service
Buffer times in minutes selector switch	0.5 / 1 / 3 / 5 / 10 / 20 / 30 / 45 / ∞ / ∞ w/0
DIP switch	Inversion of the transistor outputs; operation without temperature sensor
Remote disconnection (Interlock)	Yes
Temperature sensor connection	Yes, for NTC 10 KΩ
General data	
Buffer times	Depending on the connected battery (adjustable)
Efficiency	≥ 98 % Normal operation, battery charged ≥ 96 % Normal operation, battery charging ≥ 98 % Battery operation
Power loss	<10 W
Depth x width x height	150 / 66 / 130 mm
Weight	0.98 kg
Approvals	
CE, TÜV, cURus, cULus; Pending: GL	
Connection data	
Conductor connection system	Screw connection
Wire cross-section, rigid mm ² (min./max.)	0.5/16
Wire cross-section, flexible mm ² (min./max.)	0.5/16
Wire cross-section, AWG/kcmil (min./max.)	26/6
Stripping length (mm)	10
Tightening torque range (NM)	1.2...1.5

Ordering data

Type	Qty.	Order No.
CP DC UPS 24 V 20 A/10 A	1	1370050010

CP DC UPS 24V 20A/10A



Input	
Rated input voltage	24 V DC
Input voltage range	20...30 V DC
Rated input voltage (up to 60 °C)	≤ 13 A (for 10 A) ≤ 23 A (for 20 A)
Input current, max. (to 45 °C)	≤ 15 A (for 10 A) ≤ 27 A (for 20 A)
Input fuse	Yes, 30 A
Standby current (without battery)	max. 200 mA
Standby current (with fully charged battery)	max. 0.5 A
Reverse polarity protection	Yes
Output	
Rated output voltage	24 V DC
Output voltage, normal operation (I _{max})	V _o = V _{in} - 0.2 V
Output voltage, battery operation (I _{max})	V _o = V _{in} - 0.3 V
Rated output current (up to 60 °C)	10 A / 20 A
Continuous output current (up to 70 °C), derating from 60 °C	7.5 A / 15 A
Continuous output current (up to 45 °C)	12 A / 24 A
Power Boost@24 V DC, 60 °C	12 A / 24 A for 1 min, ED = 5 %
Integrated battery charger	
Charging feature	IU characteristic curve
Charging voltage (temperature compensated)	27, 48 V @ 20 °C
Temperature coefficient	- 48 mV / °C
Charging current	0.15 CA
Battery availability test	Yes, each minute
Battery module	
Rated voltage	24 V DC
Storage medium (AGM battery)	1.3 Ah, 3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah (selectable, with rotary switch)
Parallel connection option	Yes, max. 2
Operating elements and control inputs	
Output current selector switch	10 A / 20 A
Battery in Ah selector switch	1.3 / 3.4 / 7.2 / 12 / 17 / No Battery / Service
Buffer times in minutes selector switch	0.5 / 1 / 3 / 5 / 10 / 20 / 30 / 45 / ∞ / ∞ w/0
DIP switch	Inversion of the transistor outputs; operation without temperature sensor
Remote disconnection (Interlock)	Yes
Temperature sensor connection	Yes, for NTC 10 KΩ
General data	
Buffer times	Depending on the connected battery (adjustable)
Efficiency	≥ 98 % Normal operation, battery charged ≥ 96 % Normal operation, battery charging ≥ 98 % Battery operation
Power loss	<10 W
Depth x width x height	150 / 66 / 130 mm
Weight	0.98 kg
Approvals	
CE, TÜV, cURus, cULus; Pending: GL	
Connection data	
Conductor connection system	Screw connection
Wire cross-section, rigid mm ² (min./max.)	0.5/16
Wire cross-section, flexible mm ² (min./max.)	0.5/16
Wire cross-section, AWG/kcmil (min./max.)	26/6
Stripping length (mm)	10
Tightening torque range (NM)	1.2...1.5

Type	Qty.	Order No.
CP DC UPS 24 V 20 A/10 A	1	1370050010

CP DC UPS 24V 40A



Input	
Rated input voltage	24 V DC
Input voltage range	20...30 V DC
Rated input voltage (up to 60 °C)	≤ 43 A
Input current, max. (to 45 °C)	≤ 51 A
Input fuse	Yes, 60 A
Standby current (without battery)	max. 200 mA
Standby current (with fully charged battery)	max. 0.5 A
Reverse polarity protection	Yes
Output	
Rated output voltage	24 V DC
Output voltage, normal operation (I _{max})	V _o = V _{in} - 0.2 V
Output voltage, battery operation (I _{max})	V _o = V _{in} - 0.3 V
Rated output current (up to 60 °C)	40 A
Continuous output current (up to 70 °C), derating from 60 °C	24 A
Continuous output current (up to 45 °C)	48 A
Power Boost@24 V DC, 60 °C	48 A for 1 min, ED = 5 %
Integrated battery charger	
Charging feature	IU characteristic curve
Charging voltage (temperature compensated)	27, 48 V @ 20 °C
Temperature coefficient	- 48 mV / °C
Charging current	0.15 CA
Battery availability test	Yes, each minute
Battery module	
Rated voltage	24 V DC
Storage medium (AGM battery)	3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah (selectable, with rotary switch)
Parallel connection option	Yes, max. 2
Operating elements and control inputs	
Output current selector switch	No
Battery in Ah selector switch	3.4 / 7.2 / 12 / 17 / No Battery / Service
Buffer times in minutes selector switch	0.5 / 1 / 3 / 5 / 10 / 20 / 30 / 45 / ∞ / ∞ w/0
DIP switch	Inversion of the transistor outputs; operation without temperature sensor
Remote disconnection (Interlock)	Yes
Temperature sensor connection	Yes, for NTC 10 KΩ
General data	
Buffer times	Depending on the connected battery (adjustable)
Efficiency	≥ 98 % Normal operation, battery charged ≥ 96 % Normal operation, battery charging ≥ 98 % Battery operation
Power loss	<10 W
Depth x width x height	150 / 66 / 130 mm
Weight	1.0 kg
Approvals	
CE, TÜV, cURus, cULus; Pending: GL	
Connection data	
Conductor connection system	Screw connection
Wire cross-section, rigid mm ² (min./max.)	0.5/16
Wire cross-section, flexible mm ² (min./max.)	0.5/16
Wire cross-section, AWG/kcmil (min./max.)	26/6
Stripping length (mm)	10
Tightening torque range (NM)	1.2...1.5

Type	Qty.	Order No.
CP DC UPS 24 V 40 A	1	1370040010

Small metal foot



Type	Order No.
MTA 30 MF	1251320000

Large metal foot



Type	Order No.
MTA 45 MF	1251310000

Small plastic foot



Type	Order No.
MTA 30 BK	1168970000

Large plastic foot



Type	Order No.
MTA 45 BK	1962250000

Small wall mounting



Type	Order No.
CP A WALLADAPTER 30 MM	1461870000

Large wall mounting



Type	Order No.
CP A WALLADAPTER 45 MM	1461850000

Temperature probe



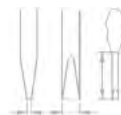
Type	Cable length	Order No.
CP DC UPS TF25	2.5 m	1444540000
CP DC UPS TF05	0.5 m	1444480000

Small screwdriver



Type	Blade type	Size/AF	a	b	c	Order No.
SDIS 0.5X3.0X100	B		0.5	3	100	9008380000

Large screwdriver



Type	Blade type	Size/AF	a	b	c	Order No.
SDIS 1.0X5.5X125	B		1	5.5	125	9008410000

Markers



Type	Colour	Qty.	Order No.
SM 18/9.5 K MC NE WS	white	200	1248580000

End bracket

For DIN rail TS 35



Type	Colour	Torque	Qty.	Order No.
WEW 35/1 SW	black	1.2 Nm	50	1162600000