POWER SUPPLY 1-PHASE, 36 V DC DIMENSION C SERIES

CPS20.361
SPÄNN.AGG.115/230V, 36VDC/13A

- Output current of 13.3 A
- Up to 94.2% accuracy
- Active PFC
- High short-circuit currents
- Hiccup Plus

PRODUCT DESCRIPTION

Puls Dimension C-series stands for cost optimization without compromising quality, reliability or performance. CPS20.361 high efficiency over a wide load range, which results in reduced power consumption and longer life regardless of load current. An average efficiency is 93.2% with a peak value of 94.3%. In addition, power losses very low at idle, only 2.8 W at 230 V ac.

Short-circuit currents. CPS20 can leave short-circuit currents which is 4 times the nominal current for 15 ms, which helps secondary fuses and achieve selectivity.

Hiccup Plus**.**

With new pulse short circuit protection you get optimum protection. The unit leaves a very high short circuit that solves fuses and provides sufficient starting current for example DC motors. If the output voltage drops below 20 V dc will be left 2x rated current for 2 seconds, then close the unit by the end to make a new restart attempts after about 18 seconds. This feature ensures a high short-circuit/overload current while avoiding a constant high current that can lead to heat and component damage.

Technical advantages. CPS20 has active power factor correction (PFC) and active power inrush protection that effectively reduces start currents which are ideal if several units are connected in the same phase or if the supply is current limited through example. AC UPS. The protection is always active, regardless of the temperature. DC-OK output, wide temperature range, a large number of approvals and transient filter which ensures operation in interference prone electrical environment makes the unit suitable for virtually all installations.

For good ventilation, we recommend a clearance of 40 mm over 20 mm below and 5 mm on the sides. (15 mm on the sides of adjacent product is a heat source, such as another power supply.)

Stripping sec. fuses				
	0.75 mm^2	1.0 mm^2	1.5 mm^2	2.5 mm^2
C-2A	51 m	69 m	100 m	153 m
C-3A	43 m	57 m	83 m	128 m
C-4A	32 m	44 m	64 m	99 m
C-6A	8 m	13 m	19 m	31 m
C-8A	3 m	5 m	7 m	10 m
C-10A	2 m	4 m	6 m	8 m
C-13A	-	1 m	2 m	5 m
B-6A	29 m	39 m	54 m	79 m
B-10A	8 m	11 m	19 m	24 m
B-13A	7 m	9 m	14 m	23 m
B-16A	1 m	1 m	2 m	4 m

SPECIFICATIONS

Input voltage range	Wide-range
Number of phases	1
Input voltage AC	100-240 V
Input voltage ac min	100 V AC
Input voltage ac max	264 V AC
Inrush current at 120 V ac typical	9 A
Input current at 230 V ac typical	7 A
Power Factor at 120 V AC, full load. Typical	0,99
Power Factor at 230 V AC, full load. Typical	0,95
Supply Frequency	50-60 ±6 %
Power Consumption At 120 V AC	4,36 A
Power Consumption At 230 V AC	2,33 A
Type Power Supply	AC-DC

Output voltage	36 V DC
Output voltage min	36 V DC
Output voltage max	42 V DC

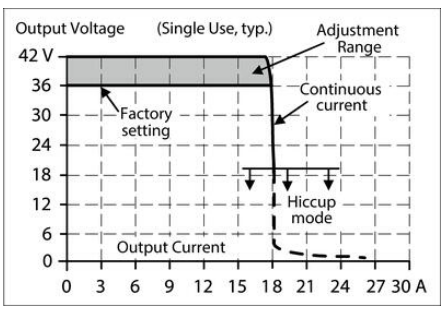
Output Current	13,3 A
Effect	480 W
Power Reduction Of 60 To 70 ° C	12 W/°C
Ripple. max	100 mV pp
Temperature Range Without Derating From	-25 °C
Temperature Range Without Derating To	60 °C

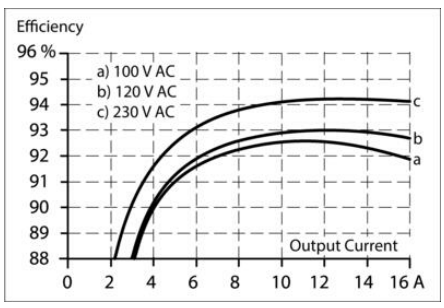
Efficiency At 120 V AC, full load. Typical	93 %
Efficiency At 230 V AC. Typical	93,2 %
Efficiency At 230 V AC, full load. Typical	94,3 %
Lifetime at 120 V ac, full load and +40 ° C	85000 h
Lifetime at 230 V ac, full load and +40 ° C	101000 h
MTBF (IEC 61709) 230 V AC, Maximum Load, 40 ° C	537000 h

Width	65 mm
Height	124 mm
Depth	127 mm
Weight	1 kg

Clamp type	Screw on

Series	Dimension C
Approvals	ABS, ATEX, CB, CE, CSA US, cRUus, cULus, GL, IECEx
DC relay output	Yes
Material Protection	Aluminium
Hold-up time at 120 V AC, full load. Typical.	26 ms
Hold-up time at 230 V AC, full load. Typical.	26 ms
IP Class	IP20
Active Transient	Yes





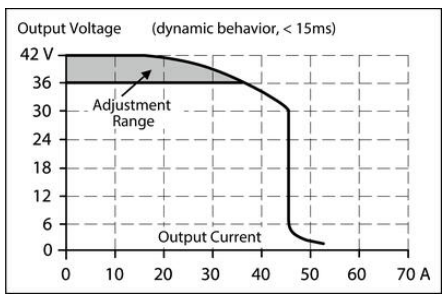


Fig. 15-1 **Output current vs. ambient temp.**

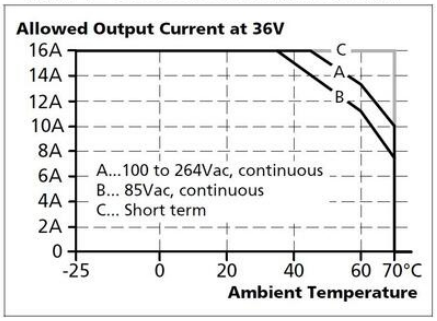
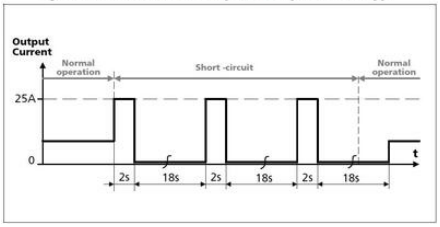


Fig. 6-3 **Short-circuit on output, Hiccup^{PLUS} mode, typ.**



Maximal wire length*) for a fast (magnetic) tripping:

	0.75mm²	1.0mm²	1.5mm²	2.5mm²
C-2A	51m	69m	100m	153m
C-3A	43m	57m	83m	128m
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Fig. 9-2 **Losses vs. output current at 36V, typ.**

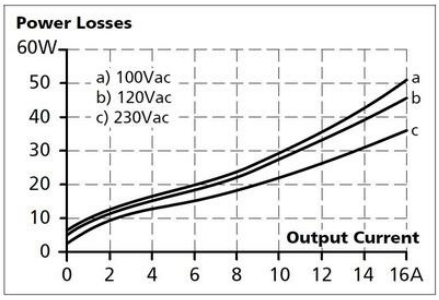


Fig. 13-1 **Front side**

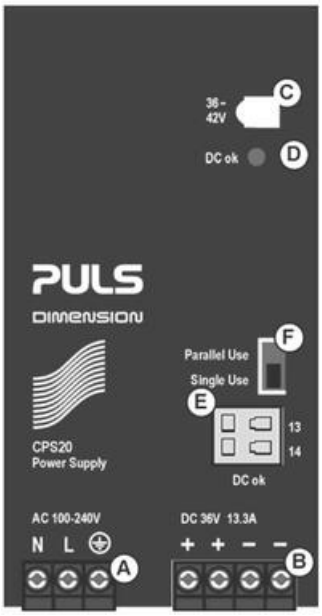
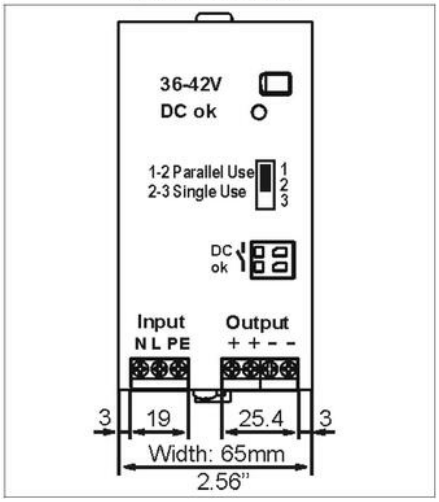
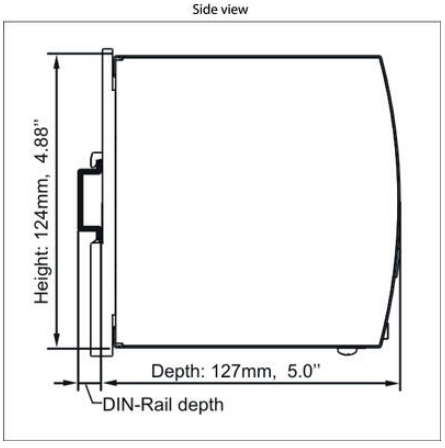
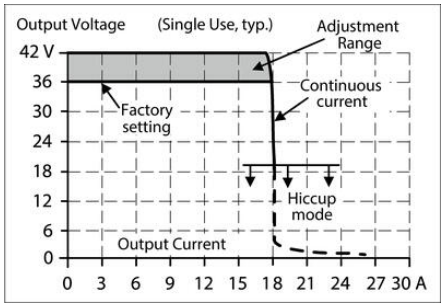
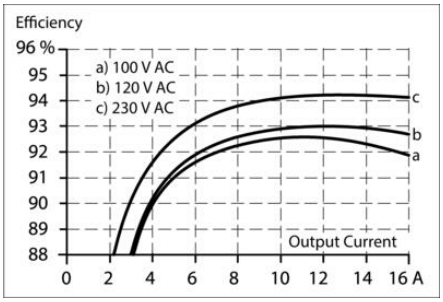


Fig. 20-1 **Front view**









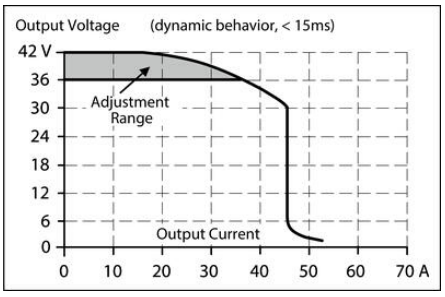
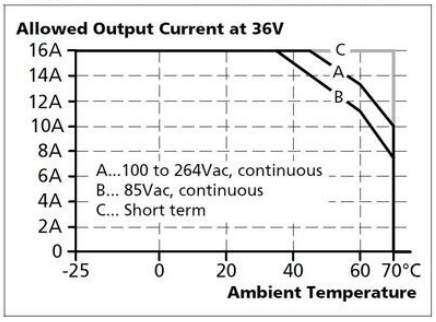


Fig. 15-1 **Output current vs. ambient temp.**



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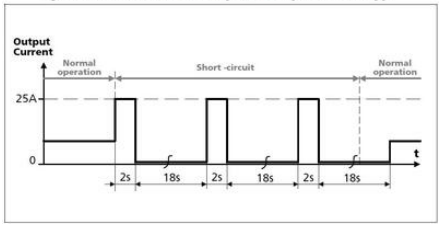

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Fig. 9-2 **Losses vs. output current at 36V, typ.**

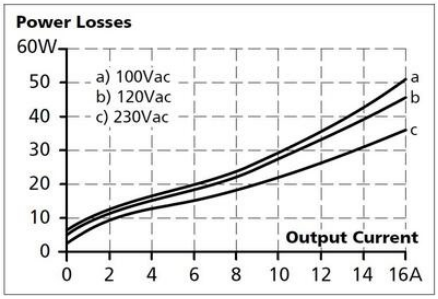
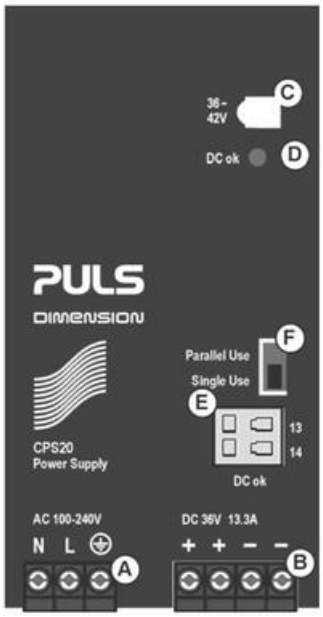


Fig. 13-1 **Front side**



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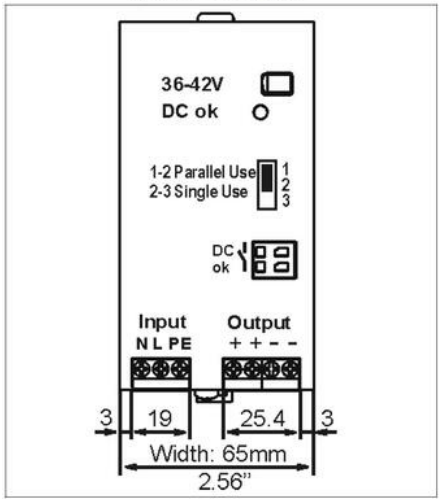

Side view