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

CPS20.361
PSU 100-240V ac I/P 36V dc 13.3A 480W O/P

- 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.

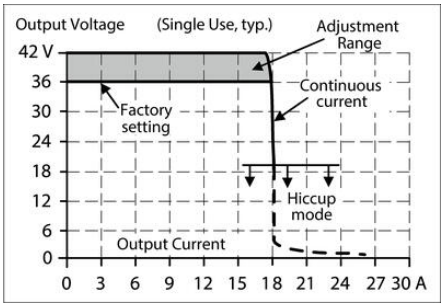
For good ventilation, we recommend a clearance of 40 mm over 20 mm below and 5 mm on the sides. (15 mm on the sides of adjacent product is a heat source, such as another power supply.)

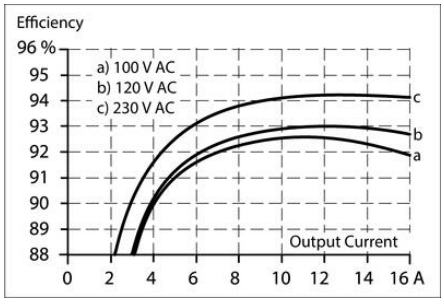
Stripping sec. fuses				
	0.75 mm^2	1.0 mm^2	1.5 mm^2	2.5 mm^2
C-2A	51 m	69 m	100 m	153 m
C-3A	43 m	57 m	83 m	128 m
C-4A	32 m	44 m	64 m	99 m
C-6A	8 m	13 m	19 m	31 m
C-8A	3 m	5 m	7 m	10 m
C-10A	2 m	4 m	6 m	8 m
C-13A	-	1 m	2 m	5 m
B-6A	29 m	39 m	54 m	79 m
B-10A	8 m	11 m	19 m	24 m
B-13A	7 m	9 m	14 m	23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

Specifications

Active Transient	Yes
Approvals	ABS, ATEX, CB, CE, CSA US, cRUus, cULus, GL, IECEx
DC relay output	Yes
Depth	127
Effect	480
Efficiency At 120 V AC, full load. Typical	93
Efficiency At 230 V AC, full load. Typical	94.3
Efficiency At 230 V AC. Typical	93.2
Height	124
Hold-up time at 120 V AC, full load. Typical.	26
Hold-up time at 230 V AC, full load. Typical.	26
Input current at 230 V ac typical	7
Input voltage AC	100-240 V
Input voltage ac max	264
Input voltage ac min	100
Input voltage range	Wide-range
Inrush current at 120 V ac typical	9

IP Class	IP20
Lifetime at 120 V ac, full load and +40 ° C	85000
Lifetime at 230 V ac, full load and +40 ° C	101000
MTBF (IEC 61709) 230 V AC, Maximum Load, 40 ° C	537000
Number of phases	1
Output Current	13.3
Output voltage	36
Output voltage max	42
Output voltage min	36
Power Consumption At 120 V AC	4.36
Power Consumption At 230 V AC	2.33
Power Factor at 120 V AC, full load. Typical	0.99
Power Factor at 230 V AC, full load. Typical	0.95
Power Reduction Of 60 To 70 ° C	12
Ripple. max	100
Series	Dimension C
Supply Frequency	50-60 ±6 %
Temperature Range Without Derating From	-25
Temperature Range Without Derating To	60
Weight	1
Width	65





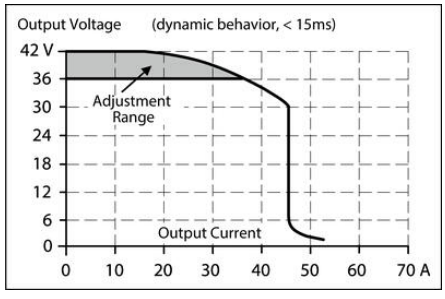


Fig. 15-1 **Output current vs. ambient temp.**

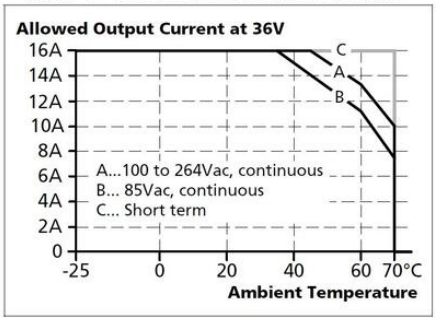
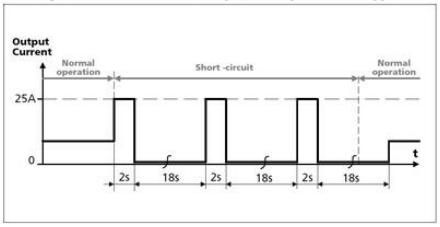


Fig. 6-3 **Short-circuit on output, Hiccup^{PLUS} mode, typ.**



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.**

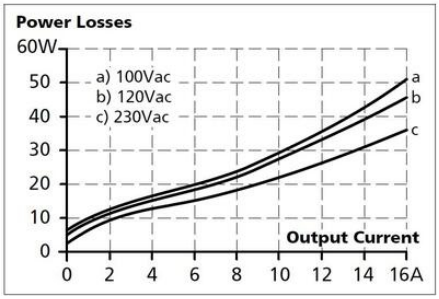
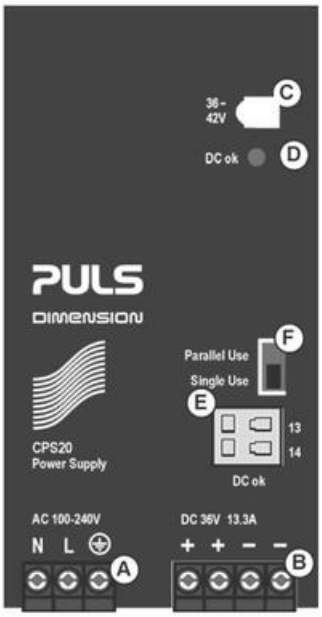


Fig. 13-1 **Front side**



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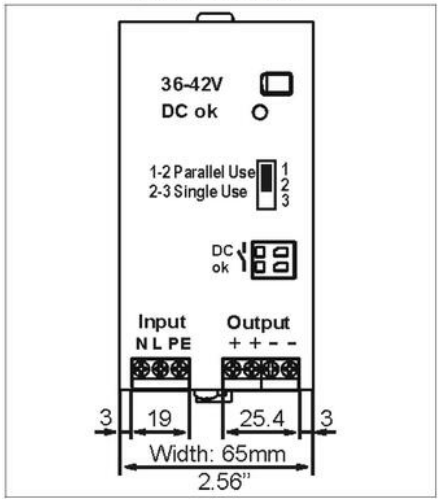
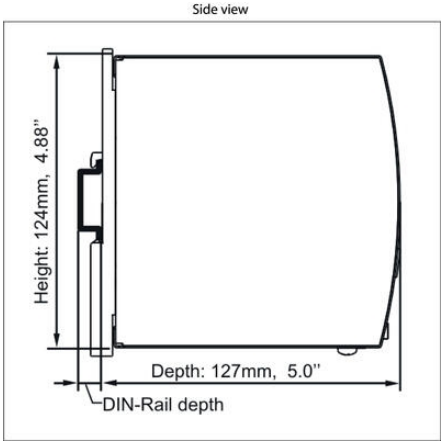
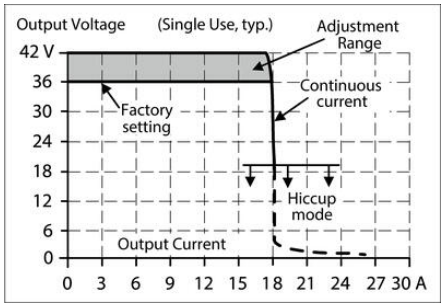
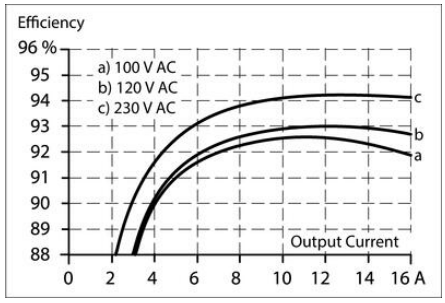


Side view







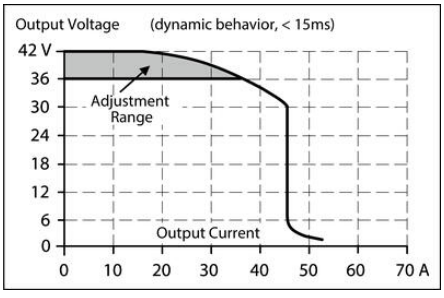
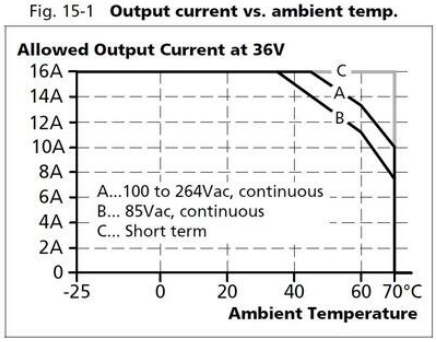


Fig. 15-1 **Output current vs. ambient temp.**



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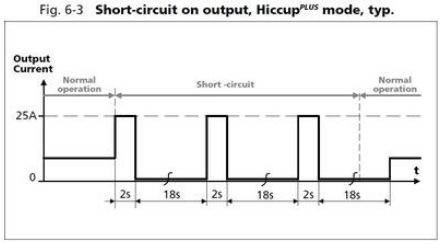

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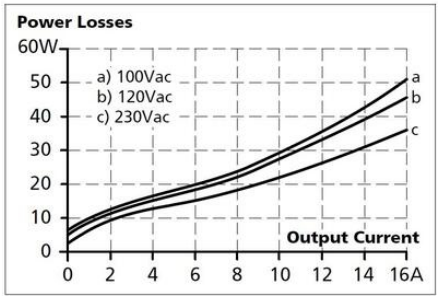

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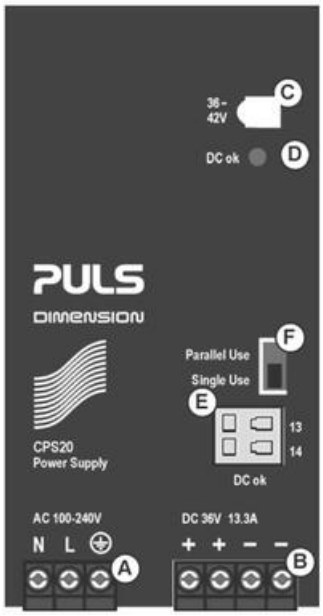

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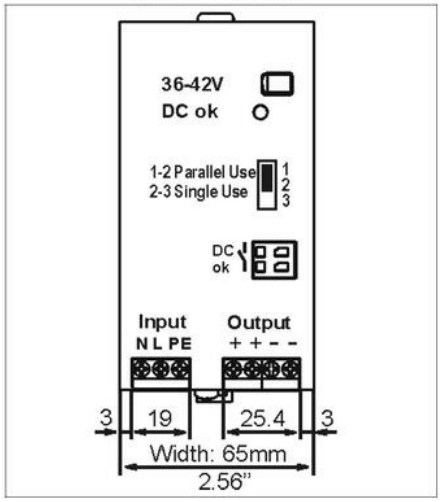

Side view