

## POWER SUPPLY 1-PHASE, 36 V DC DIMENSION Q SERIES

36-42 V DC, 13,3 A

QS20.361  
 PSU 100-240V ac I/P 36V dc 13.3A 480W O/P

- Width 82mm
- 94% efficiency
- 50 % Bonuspower 4s
- DC-OK relay and active PFC



### PRODUCT DESCRIPTION

## TECHNICAL DATA

### INPUT DATA

Input voltage ac	100-240 V
Input voltage ac min	85 V AC
Input voltage ac max	276 V AC
Input voltage dc	110-150 V
Input voltage dc min	88 V DC
Input voltage dc max	187 V DC
Inrush current at 120 V ac typical	4 A
Inrush current at 230 V ac typical	7 A
Input voltage range	Wide-range
Power factor at 120 V ac, full load. Typical	0.95
Power factor at 230 V ac, full load. Typical	0.9
Number of phases	1

### OUTPUT DATA

Output voltage	36 V DC
Output voltage min	36 V DC

<b>Output voltage max</b>	42 V DC
<b>Output current</b>	13.3 A
<b>Power</b>	480 W

## EFFICIENCY / LIFETIME / MTBF

<b>Efficiency at 120 V ac, full load, typical</b>	92.5 %
<b>Efficiency at 230 V ac, typical</b>	93.3 %
<b>Efficiency at 230 V ac, full load, typical</b>	94 %
<b>Lifetime at 120 V ac, full load and +40 ° C</b>	61000 h
<b>Lifetime at 230 V ac, full load and +40 ° C</b>	84000 h
<b>MTBF (IEC 61709) 230 V ac, max load, 40 ° C</b>	469000 h

## DIMENSIONS

<b>Width</b>	82 mm
<b>Height</b>	124 mm
<b>Depth</b>	127 mm
<b>Weight</b>	1.2 kg

## OTHER

<b>Approvals</b>	ABS, CB, CE, CSA, GL, UL
<b>Hold time at 120 V ac, typical full load</b>	32 ms
<b>Hold time at 230 V ac, typical full load</b>	51 ms
<b>IP class</b>	IP20
<b>Clamp type</b>	Spring-clamp
<b>Material protection</b>	Aluminium
<b>Supply frequency</b>	50-60 ±6 %
<b>Ripple max</b>	100 mV pp
<b>Series</b>	Dimension Q
<b>Power consumption 120 V ac</b>	4.56 A
<b>Power consumption 230 V ac</b>	2.48 A
<b>Power drop from +60 °C to +70 °C</b>	12 W/°C
<b>Temperature min without derating</b>	-25 °C
<b>Temperature max without derating</b>	60 °C

<b>Type Power Supply</b>	AC-DC
<b>DC relay output</b>	Yes

Fig. 6-1 Output voltage vs. output current, typ.

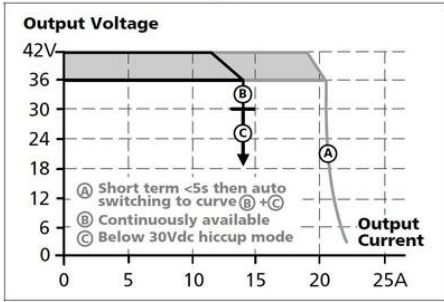


Fig. 15-1 Output current vs. ambient temp. typ.

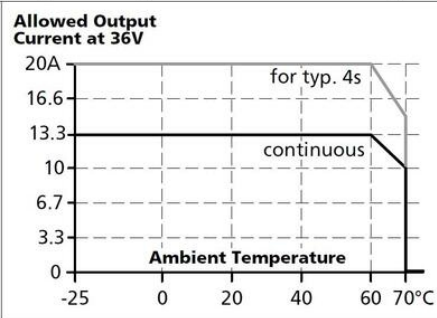


Fig. 6-2 Bonus time vs. output power

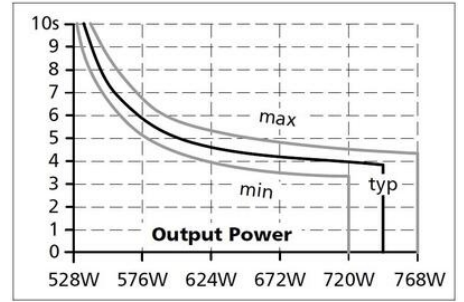


Fig. 6-3 Short-circuit on output, hiccup mode (typ.)

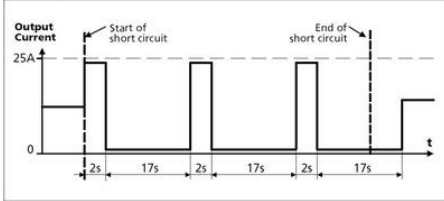


Fig. 9-1 Efficiency vs. output current at 36V, typ

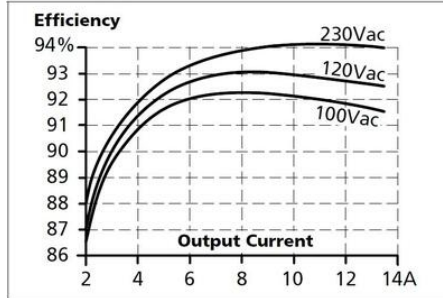
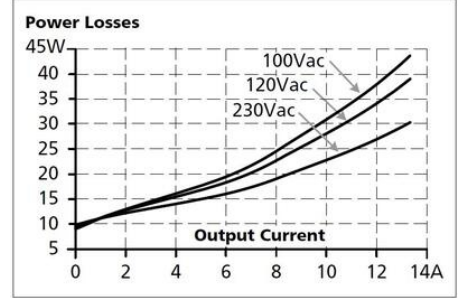


Fig. 9-2 Losses vs. output current at 36V, typ.



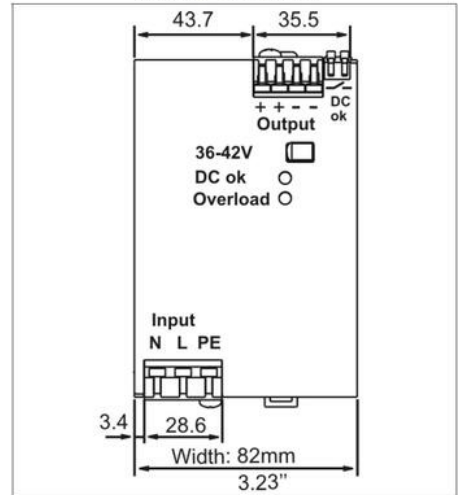
Maximal wire length\*) for a fast (magnetic) tripping:

	0.75mm <sup>2</sup>	1.0mm <sup>2</sup>	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>
C-2A	51m	68m	92m	152m
C-3A	36m	51m	71m	112m
C-4A	26m	33m	49m	77m
C-6A	13m	17m	19m	39m
C-8A	5m	7m	10m	15m
C-10A	4m	5m	8m	11m
C-13A	1m	2m	3m	4m
B-6A	25m	30m	46m	71m
B-10A	11m	15m	19m	35m
B-13A	7m	12m	16m	26m
B-16A	-	1m	2m	3m

Fig. 13-1 Front side



Fig. 20-1 Front view



Side view

