

POWER SUPPLY 3-PHASE, 36 V DC DIMENSION Q SERIES

36-42 V DC, 26,7 A

QT40.361
POWER SUPPLY 36VDC 40A

- Width 110mm
- Up to 95,3% efficiency
- 50 % Bonuspower 4s
- DC-OK Relay, active PFC, remote shut-down



PRODUCT DESCRIPTION

The most outstanding features of the DIMENSION QSeries DIN-rail power supplies are the extremely high efficiencies and the small sizes, which are achieved by a synchronous rectification and other technological designs.

Large power reserves of 150% support the starting of heavy loads such as DC-motors or capacitive loads. In many cases this allows the use of a unit from a lower wattage class which saves space and money.

High immunity to transients and power surges as well as low electromagnetic emission makes usage in nearly every environment possible.

The integrated output power manager, the three input fuses and near zero input inrush current make installation and usage simple. Diagnostics are easy due to the DC-ok relay, a green DC-OK LED and the red overload LED.

A large international approval package for a variety of applications makes this unit suitable for nearly every application.

SPECIFICATIONS

| | |
|---|------------|
| Input voltage range | Wide-range |
| Number of phases | 3 |
| Input voltage AC | 380-480 V |
| Input voltage ac min | 323 V AC |
| Input voltage ac max | 576 V AC |
| Inrush current at 400 V ac typical | 5 A |
| Power Factor at 400 V AC, full load. Typical | 0.88 |
| Supply Frequency | 50-60 ±6 % |
| Power consumption at 400 V ac | 1.65 A |
| Output voltage | 36 V DC |

| | |
|---|-----------|
| Output voltage min | 36 V DC |
| Output voltage max | 42 V DC |
| Output Current | 26.7 A |
| Effect | 960 W |
| Power Reduction Of 60 To 70 ° C | 24 W/°C |
| Ripple. max | 130 mV pp |
| Temperature Range Without Derating From | -25 °C |
| Temperature Range Without Derating To | 60 °C |

| | |
|---|----------|
| Efficiency At 400 V AC. Typical | 94.7 % |
| Efficiency At 400 V AC, full load. Typical | 95.3 % |
| Lifetime at 400 V ac, full load and +40 ° C | 71000 h |
| MTBF (IEC 61709) 400 V ac, max loan, +40 °C | 375000 h |

| | |
|--------|--------|
| Width | 110 mm |
| Height | 124 mm |
| Depth | 127 mm |
| Weight | 1.5 kg |

| | |
|------------|--------------|
| Clamp type | Spring-clamp |
|------------|--------------|

| | |
|---|-----------------|
| Series | Dimension Q |
| Approvals | CB, CE, CSA, UL |
| DC relay output | Yes |
| Material Protection | Aluminium |
| Hold-up time at 400 V AC, full load. Typical. | 25 ms |
| IP Class | IP20 |
| Active Transient | Yes |

Fig. 6-1 Output voltage vs. output current in "single use" mode, typ.

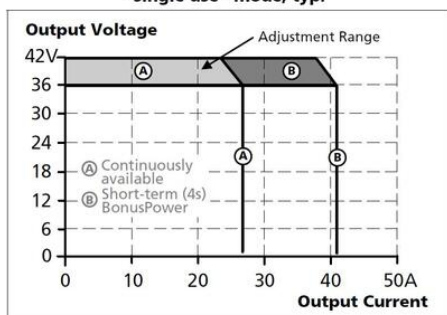


Fig. 6-4 Dynamic overcurrent capability, typ.

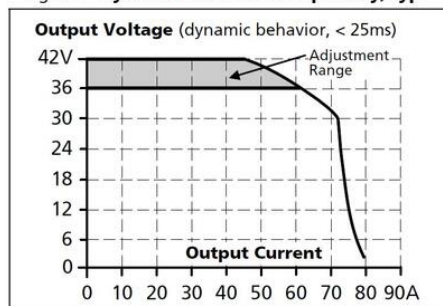


Fig. 17-1 Output current vs. ambient temp.

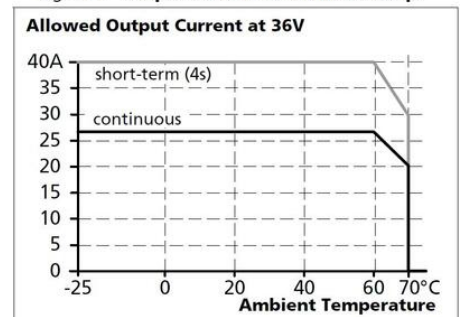


Fig. 6-3 Bonus time vs. output power

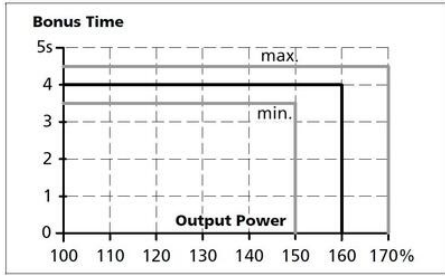


Fig. 11-1 Efficiency vs. output current at 36V, typ.

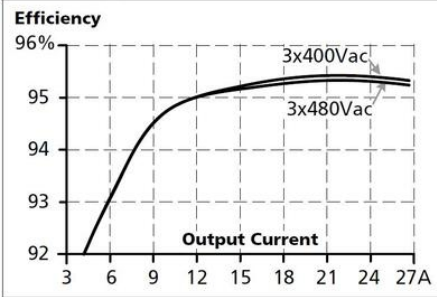
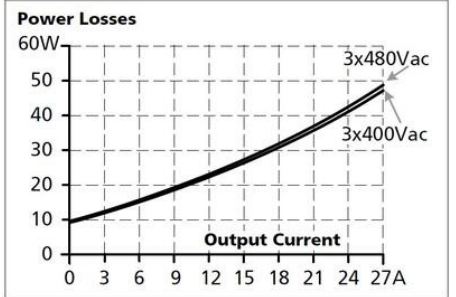


Fig. 11-2 Losses vs. output current at 36V, typ.



Maximal wire length¹⁾ for a fast (magnetic) tripping:

| | 0.75mm ² | 1.0mm ² | 1.5mm ² | 2.5mm ² |
|-------|---------------------|--------------------|--------------------|--------------------|
| C-2A | 51m | 63m | 101m | 143m |
| C-3A | 43m | 57m | 84m | 129m |
| C-4A | 34m | 44m | 64m | 103m |
| C-6A | 15m | 21m | 32m | 49m |
| C-8A | 8m | 11m | 14m | 25m |
| C-10A | 5m | 7m | 9m | 17m |
| C-13A | 2m | 3m | 4m | 8m |
| B-6A | 33m | 43m | 56m | 102m |
| B-10A | 18m | 24m | 37m | 55m |
| B-13A | 9m | 19m | 30m | 47m |
| B-16A | 4m | 6m | 9m | 14m |

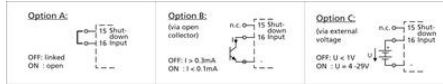


Fig. 15-1 Front side

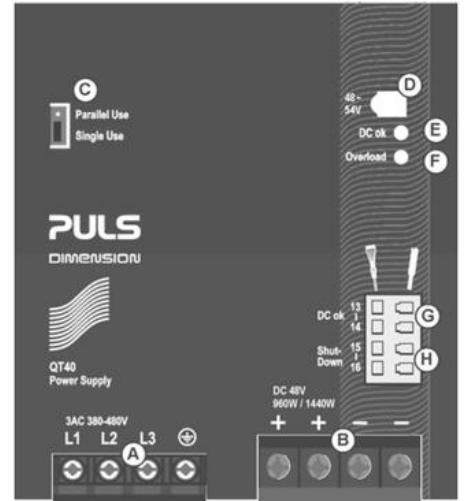


Fig. 22-1 Front view

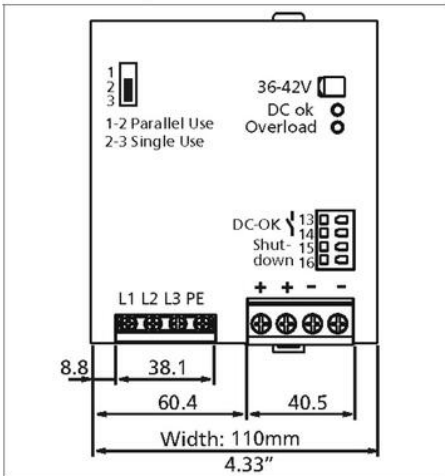


Fig. 6-1 Output voltage vs. output current in "single use" mode, typ.

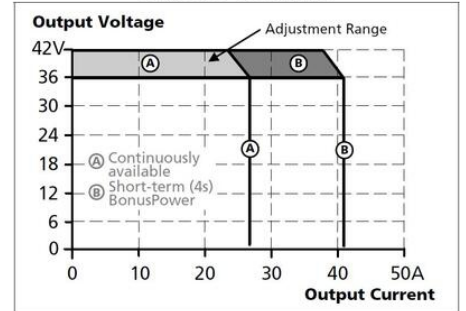


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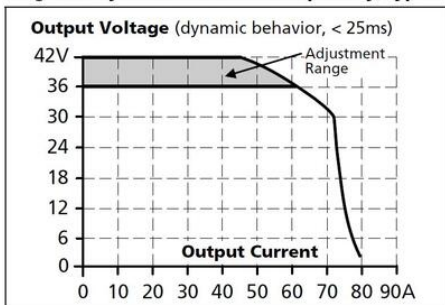


Fig. 17-1 Output current vs. ambient temp.

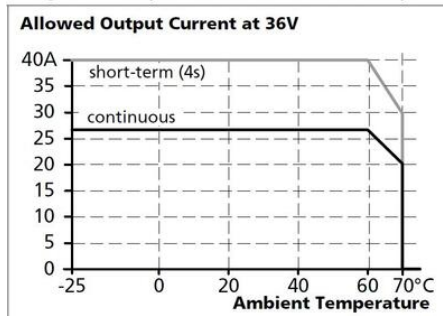


Fig. 6-3 Bonus time vs. output power

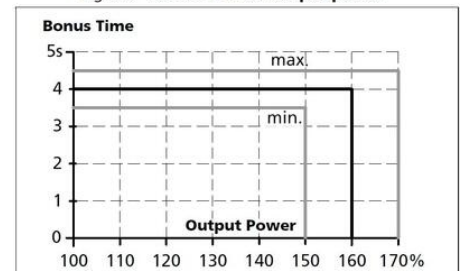


Fig. 11-1 Efficiency vs. output current at 36V, typ.

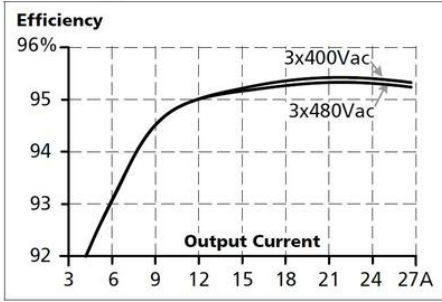
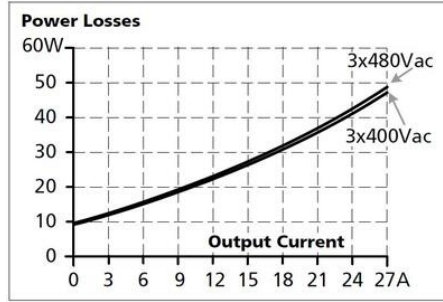


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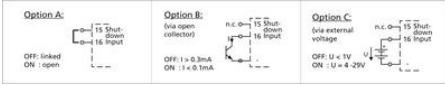


Fig. 15-1 Front side

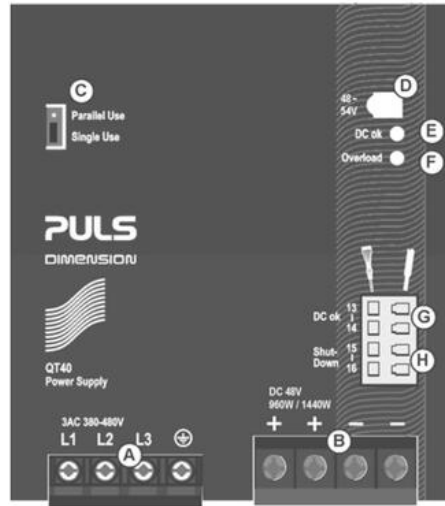


Fig. 22-1 Front view

