OEM Automatic Ltd
Address: Whiteacres, Whetstone Leicester, LE8 6ZG
0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

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

36-42 V DC, 26,7 A

QT40.361
PSU 3PH 380-480V ac I/P 36V dc 26.7A 960W O/P

- 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.

TECHNICAL DATA

INPUT DATA

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
Input voltage range	Wide-range
Power factor at 400 V ac, full load. Typical	0.88
Number of phases	3

OUTPUT DATA

Output voltage	36 V DC
Output voltage min	36 V DC
Output voltage max	42 V DC
Output current	26.7 A
Power	960 W

EFFICIENCY / LIFETIME / MTBF

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

DIMENSIONS

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

OTHER

Approvals	CB, CE, CSA, UL
Hold time at 400 V ac, typical full load	25 ms
IP class	IP20
Clamp type	Spring-clamp
Material protection	Aluminium
Supply frequency	50-60 ±6 %
Ripple max	130 mV pp
Series	Dimension Q
Power consumption at 400 V ac	1.65 A
Power drop from +60 °C to + 70 °C	24 W/°C
Temperature min without derating	-25 °C
Temperature max without derating	60 °C

Active Transient	Yes
DC relay output	Yes

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

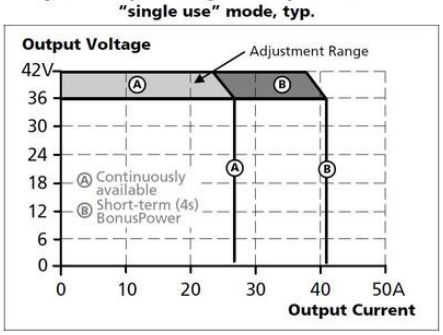


Fig. 6-4 **Dynamic overcurrent capability, typ.**

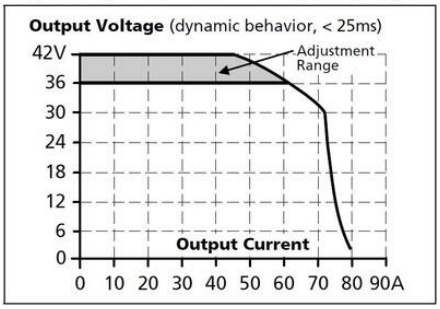


Fig. 17-1 **Output current vs. ambient temp.**

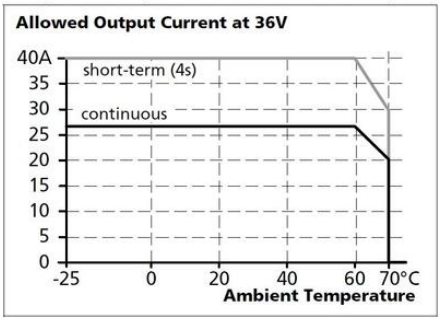


Fig. 6-3 **Bonus time vs. output power**

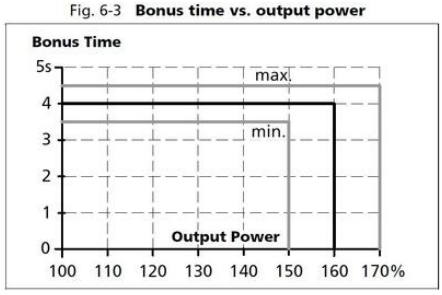


Fig. 11-1 **Efficiency vs. output current at 36V, typ.**

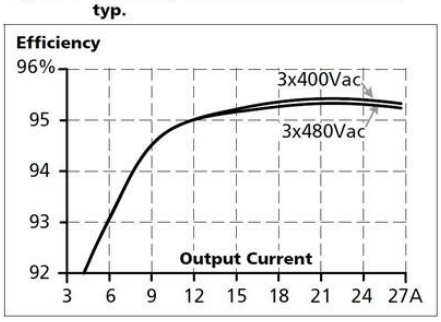
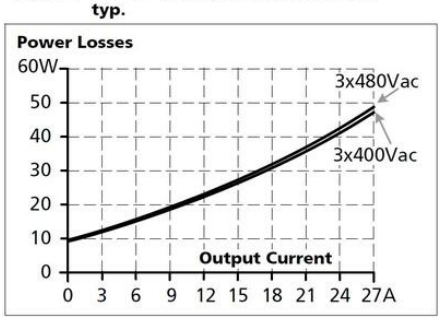


Fig. 11-2 **Losses vs. output current at 36V, typ.**



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

	0.75mm²	1.0mm²	1.5mm²	2.5mm²
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

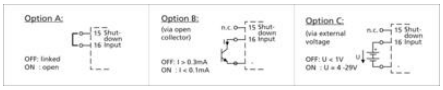


Fig. 15-1 **Front side**

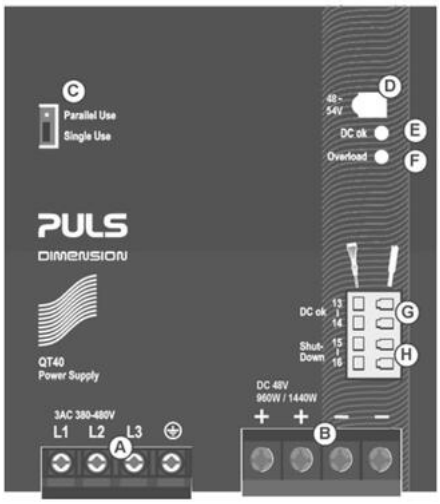
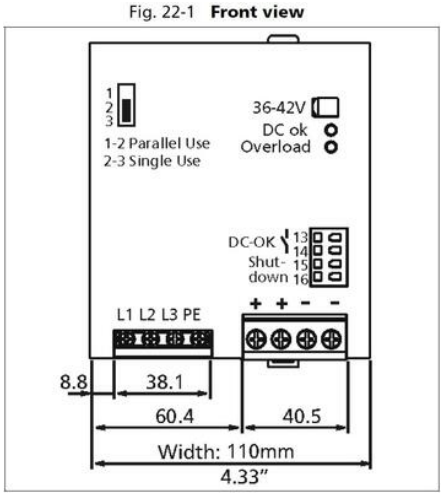
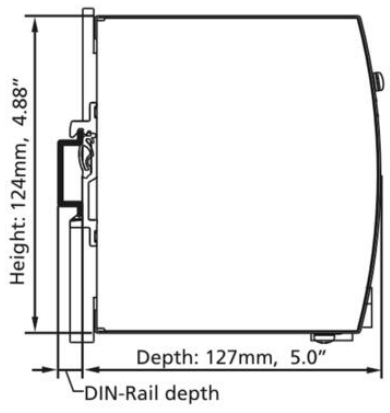


Fig. 22-1 **Front view**





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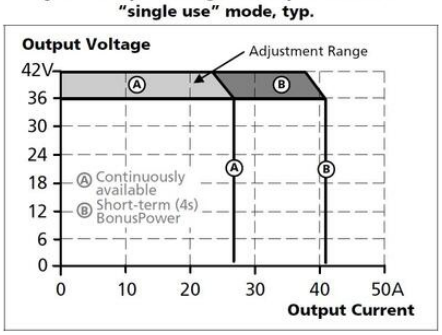

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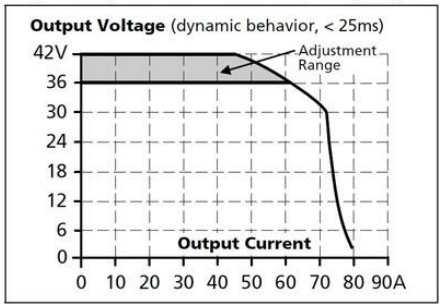

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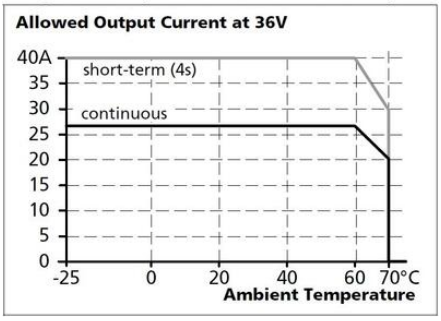


Fig. 6-3 **Bonus time vs. output power**

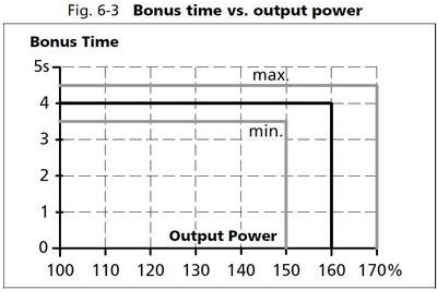


Fig. 11-1 **Efficiency vs. output current at 36V, typ.**

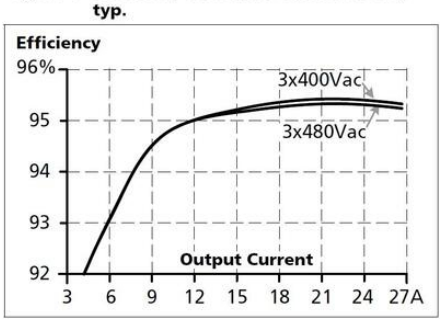
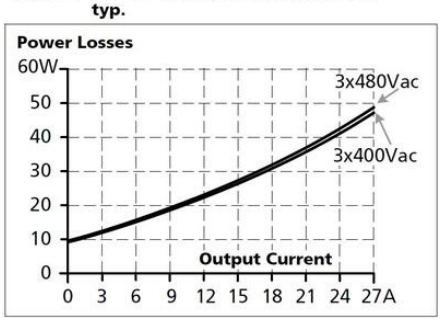


Fig. 11-2 **Losses vs. output current at 36V, typ.**



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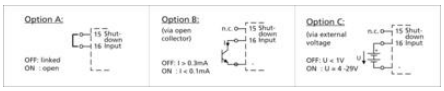

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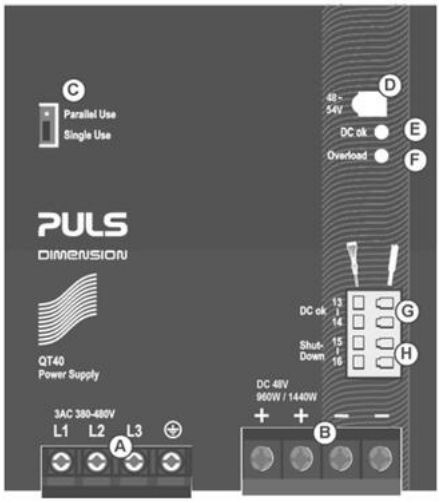

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