

## POWER SUPPLY 3-PHASE, 24 V DC DIMENSION Q SERIES IO-LINK

QT40.241-B2

Power sup 3x380-480VAC/24VDC,40A IO-link

- IO-Link Interface V1.1
- Output current 30A
- Up to 92.5% efficiency
- 65mm wide
- Hiccup Plus



### PRODUCT DESCRIPTION

### TECHNICAL DATA

#### INPUT DATA

Input voltage range	Wide-range
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
Number of phases	3
Power factor at 400 V ac, full load. Typical	0,88

#### OUTPUT DATA

Output voltage min	24 V DC
Output voltage	24 V DC
Output voltage max	28 V DC
Power	960 W
Output current	40 A

#### EFFICIENCY / LIFETIME / MTBF

MTBF (IEC 61709) 400 V ac, max loan, +40 °C	375000 h
Lifetime at 400 V ac, full load and +40 ° C	69000 h

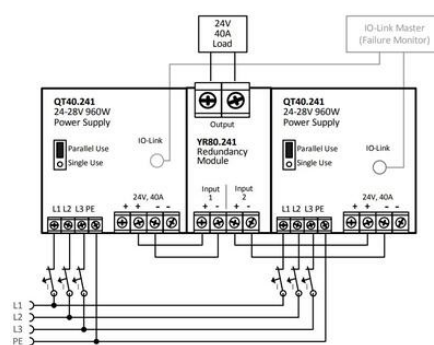
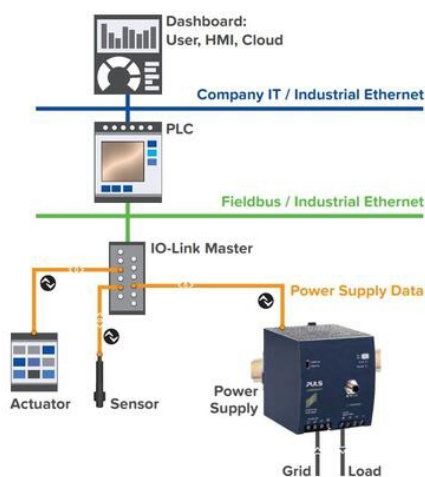
Efficiency at 400 V ac, full load, typical	95,3 %
Efficiency at 400 V ac, typical	94,7 %

## DIMENSIONS

Weight	1,5 kg
Depth	127 mm
Width	110 mm
Height	124 mm

## OTHER

IP class	IP20
Ripple max	100 mV pp
Hold time at 400 V ac, typical full load	25 ms
Power consumption at 400 V ac	1,65 A
Power drop from +60 °C to +70 °C	20 W/°C
Clamp type	Screw in
Temperature min without derating	-25 °C
Series	Dimension Q
Supply frequency	50-60 ±6 %
Approvals	CE
Temperature max without derating	55 °C
Material protection	Aluminium
Type Power Supply	AC-DC
Active Transient	Yes

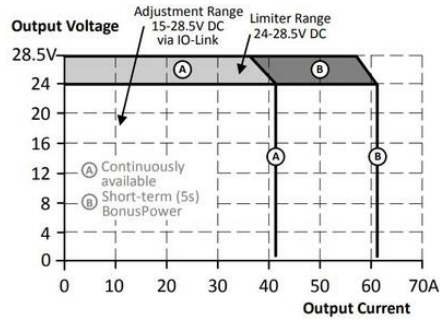


### IO Link Connector – Pin Assignment

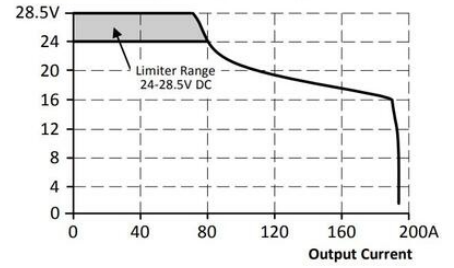


- Pin 1: Supply voltage (+)
- Pin 2: Not connected
- Pin 3: Supply voltage (-)
- Pin 4: Data IN/OUT

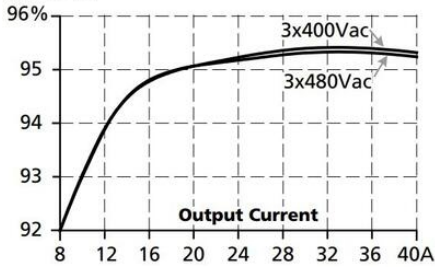
View from the outside to the power supply



### Output Voltage (dynamic behavior, < 10ms)



### Efficiency



### Power Losses

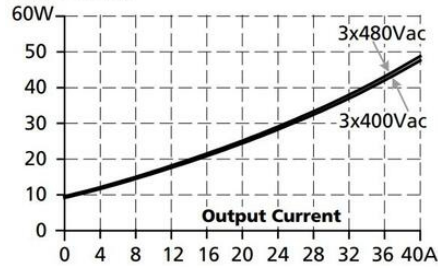
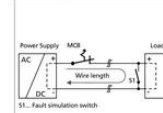


Fig. 24-9 Test circuit



Maximal wire length<sup>\*)</sup> 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>
<b>C-2A</b>	20m	30m	54m	78m
<b>C-3A</b>	26m	35m	50m	74m
<b>C-4A</b>	19m	26m	38m	58m
<b>C-6A</b>	12m	16m	24m	32m
<b>C-8A</b>	8m	12m	17m	25m
<b>C-10A</b>	7m	10m	15m	21m
<b>C-13A</b>	6m	8m	12m	17m
<b>B-6A</b>	19m	26m	35m	50m
<b>B-10A</b>	11m	17m	26m	37m
<b>B-13A</b>	10m	13m	21m	32m
<b>B-16A</b>	8m	11m	18m	28m
<b>B-20A</b>	6m	8m	14m	21m

<sup>\*)</sup> Don't forget to consider twice the distance to the load (or cable length) when calculating the total wire length (in and - wires).

### Allowed Output Current at 24V

