# PULS



# Efficient. Easy. Connected.

As a member of the well-known QT series, this version offers a digital communication interface. It is based on the wide-spread IO-Link standard, which allows the adaptation to various fieldbus protocols.

With a comprehensive and well-chosen set of operating data, the QT40.241-B2 enables for preventive maintenance measures. Due to near-time communication (events), failures can be fixed before they occur. Customers will benefit from increased process uptimes and long-term cost savings.



3-phase I 960W I 24V, 40A 95.3% efficiency +50% BonusPower® for 5s 100A for 10ms Active PFC



# Easy Connectivity

IO-Link v 1.1 (IEC 61131-3)
4-pole M12 connector
COM3 (< 230.4 kBaud)
Integrated non-volatile memory

# Benefits at a glance



### **Easy to install**

Adapt it to various fieldbus systems.

Make use of automated parameterization.



### **Save time and costs**

Implement preventative maintenance.

Optimize the utilization of your system.



### Improve customer service

Analyze the quality of the power grid.

Speed up fault analysis and troubleshooting.

# **Technical data**

Output	
Output voltage range	24 - 28V (via potentiometer)
	15 - 28V (remote via IO-Link)
Output current nominal	40A
Output current temporary	60A (5s)
Output transient current	100A (10ms) Uout >20V
Overload behaviour	constant current mode

Input	
AC input voltage nominal	380 - 480V
AC input voltage range	323 - 576V
Power factor	0.92
AC inrush current, typ.	< 4.5A

General	
Efficiency	95.3%
Lifetime expectancy (40°C)	69kh
MTBF SN29500, IEC 61709	685kh
Hold-up time, typ.	25ms
Operating temperature	-25°C to 70°C
Dimensions WxHxD	110x124x127mm
Weight	1500g
Warranty	3 years
Approvals (planned)	CE, cULus 61010-2 listed
Order number	QT40.241-B2

Data communication	
Protocol (standard)	IO-Link v1.1 (IEC 61131-9)
Power supply	24V over ComLine
Configuration	upload IODD, plug-and-play
Transmission speed	< 230.4 kBaud
Transmission distance	up to 20m
Transmission medium	3 wires
Memory	8Kbit EEPROM
Connector	PG male connector
Thread	M12
No. of pins	4, A code

All parameters are specified at nominal values, 3x400Vac, 50Hz, 25°C ambient temperature and 5 minutes run-in time unless otherwise noted.

#### Standards and Approvals



# **Trusted technology**

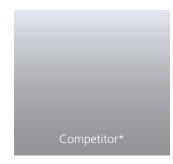
The QT series consists of powerful and highly reliable industrial grade power supplies. They are the result of more than a decade of application experience in demanding industries like global machine building and automotive.

The compact design and very low inrush currents enable a high engineering flexibility.

Integrated current reserves provide strong load start-up support. An output power manager distributes the load current in parallel use homogenously among the units. This ensures the utmost available lifetime.

### **Compact design**





#### **Long lifetime**



\* Average of the top 5 competitors in the 960W class.

# **Data logging**

### **Acyclical parameters**

#### **Device information (static)**

Manufacturer name

Product name

Serial number

Hardware and firmware inspection status

ON DEMAND

#### **Device information (dynamic)**

Device runtime

Remaining lifetime in years

Temperature of the air flow

#### Input parameters

Transient counter Input voltage

#### **Output parameters**

Output voltage

Load level in %

### **Cyclical process data**

Output current (every 2ms)

WRITE

PUSH

#### **Remote functions**

Switch on power supply Switch off power supply Setting the output voltage

#### **Events**

DC warning Bonus Power

Overload

Temperature too high Input voltage too high Input voltage too low Power supply failure

Maintenance required

PUSH

#### **IO Device Description (IODD)**

Learn more about the device profile and the communication network profile of the QT40.241-B2.

Download the IODD on our website:



### **IO-Link: Benefits and integration**

#### **Persistent**

The configuration data of the power supply is saved by the IO-Link Master, making replacements easier and faster.

#### **Flexible**

Adaptation to various fieldbus systems is possible because the IO-Link Master operates as a flexible interface between protocol levels.

#### Reliable

Stable data transmission at all times because the IO-Link module is powered by the communication line.

