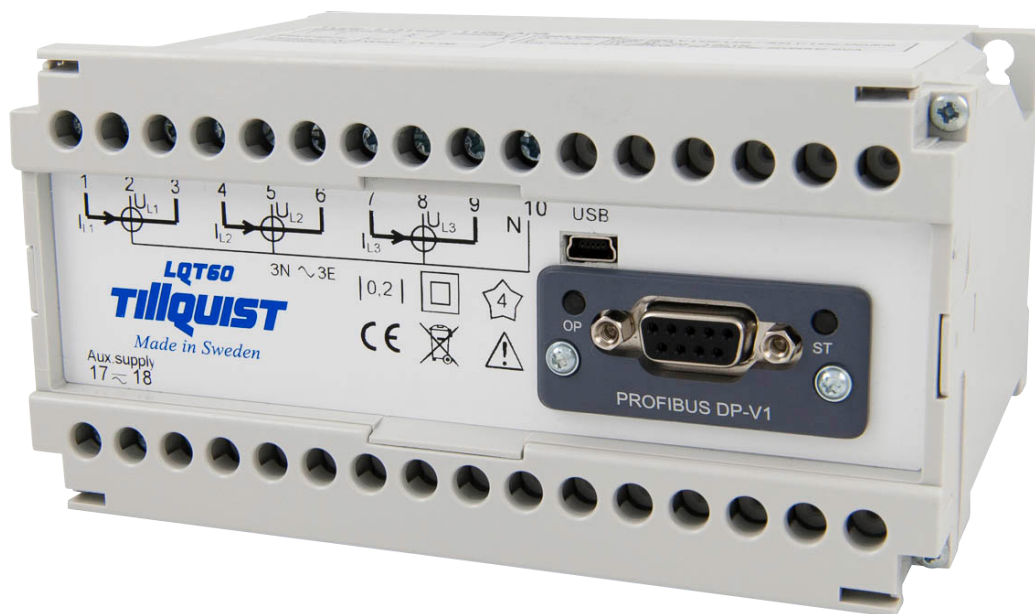


LQT60F

ULTRA FAST TRANSDUCER FOR ELECTRICAL NETWORKS



LQT60F - PROFIBUS is an ultra fast transducer for electrical networks. The design is made for fast control loops with high accuracy, example control of excitation equipment for generator.

Model LQT60F

Input	Voltage			
	Voltage range (Un *)	100 – 400 V main voltage (nominal)		
	Measuring range	0 – 500 V TRMS		
	Overload voltage	1.5 x Un – continuously, 2 x Un – 10 s		
	Consumption	U x 1 mA / phase		
	Frequency	10... <u>40...70</u> ...120 Hz		
	Current			
	Current (In *)	1 – 5 A (nominal)		
	Measuring range	0,0025 – 10 A TRMS		
	Overload current	2 x In continuously, 10 x In 15 s, 40 x In 1 s		
	Consumption	<0.05 VA / phase		
	Supply voltage			
	Power supply	24 – 250 VDC, 80 – 250 VAC		
	Burden	max 8 VA		
(* nominal range Un, In according to SS EN 60688)				
Output	Communication			
	Serial	PROFIBUS DP-V1		
Measured Quantity	U RMS	0-300 V (Phase – Neutral)		
	I RMS	0 – 12A		
	P RMS	± 10800 W		
	Q RMS	± 10800 W		
	Frequency	10 – 120 Hz		
Measuring accuracy	10 – 40 Hz	40 – 70 Hz	70 – 120 Hz	
	U, I, P, Q	1 %	Accuracy class 0.2 (according to SS EN 60688)	1 %
Response time	< 10 ms (50 Hz)			
General data	Galvanic isolation	Supply, in- and output are galvanically isolated		
	USB	1 port for configuration		
Temperature	-10...+55 °C (operation), -40...+70 °C (storage)			
	Temperature coefficient less than 0.1% / 10 °C			
Test voltage	4 kV AC / min			
Inputs	overvoltage cat. III			
Pollution degree	2			
Dimension (B x H x D)	150 x 70 x 73 mm – DIN-rail			
Weight	ca 0.5 kg			
Standards	SS-EN 60688 Transducers			
	SS-EN 601010 Safety			
	EN 61000-6-2 / -6-4 / -6-5			

Model LQT60F

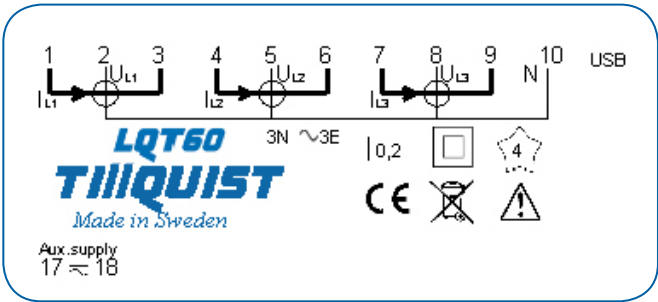
Profibus data:

Parameter	Range		Bus value	Sgn	Byte	Type	Note
Bus Inc Num	-	-	65535	>=0	1,2	Word (uint16_t)	-
Data Inc Num	-	-	65535	>=0	3,4	Word (uint16_t)	-
I_RMS	0-12	A	0-65535	>=0	5,6	Word (uint16_t)	(I1+I2+I3)/3
U_RMS	0-300	V	0-65535	>=0	7,8	Word (uint16_t)	(U1+U2+U3)/3 L-N
P_RMS	± 10800	W	± 10800000	+/-	9,10,11,12	Double Word (int32_t)	P=P1+P2+P3
Q_RMS	± 10800	Var	± 10800000	+/-	13,14,15,16	Double Word (int32_t)	Q=Q1+Q2+Q3
Frekvens	0-300	Hz	0-65535	>=0	17,18	Word (uint16_t)	-

The measured values are calculated and updated synchronously with the input frequency.
50 Hz = 1.25ms, 60 Hz = 1.04 ms.

Data Increment Number increase with every new measured value.

Bus Increment Number increase with every new message.



Connection

- 3 phase 3 wire unbalance load
- 3 phase 4 wire unbalance load