

# LQT60F

## ULTRA FAST TRANSDUCER FOR ELECTRICAL NETWORKS



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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.

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## Model LQT60F

<b>Input</b>	<b>Voltage</b>		
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...40...70...120 Hz		
<b>Current</b>			
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		
<b>Supply voltage</b>			
Power supply	24 – 250 VDC, 80 – 250 VAC		
Burden	max 8 VA		
(* nominal range Un, In according to SS EN 60688)			
<b>Output</b>	<b>Communication</b>		
Serial	PROFIBUS DP-V1		
<b>Measured Quantity</b>			
U RMS	0-300 V (Phase – Neutral)		
I RMS	0 – 12A		
P RMS	± 10800 W		
Q RMS	± 10800 W		
Frequency	10 – 120 Hz		
<b>Measuring accuracy</b>	10 – 40 Hz	40 – 70 Hz	70 – 120 Hz
U, I, P, Q	1 %	Accuracy class 0.2 (according to SS EN 60688)	1 %
<b>Response time</b>	< 10 ms (50 Hz)		
<b>General data</b>	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		

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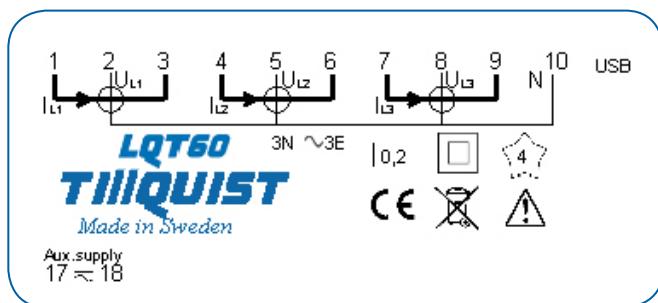
### Profibus data:

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

Our policy is one of continuous improvement and we reserve the right to make changes in design and specifications of any products as engineering advances or necessity requires and revise the above specifications without notice.

REVISION HISTORY	
A1	171025