

BETA Measuring Three-Phase Measuring Devices

E-counters instabus KNX EIB

Technical specifications

			7KT1 162	7KT1 165
Standards				
Supply				
Rated control voltage U_e		V AC	230	
Operating range U_e			0.80 ... 1.20	
Rated frequency		Hz	50	
Operating frequency range		Hz	45 ... 65	
Power consumption	per phase	VA	0.8	
Measuring inputs				
Connection type			Direct	Transformer
Voltage		V	400	
Operating range voltage		V	320 ... 480	
Current		A	63	5
Operating range current	direct connection transformer connection	A A	0.005 ... 63	0.005 ... 6
Minimum operational current		mA	5	
Current factor	of transformer, input in full digits	FAI	0 ... 255	
Frequency		Hz	50	
Operating frequency range	distortion factor $\leq 3\%$; symmetric sinus curve	Hz	45 ... 65	
Overload capability				
Voltage	duration: phase/N	V	276	
	1 second: phase/N	V	460	
	duration: phase/phase	V	480	
	1 second: phase/phase	V	800	
Current	duration	A	76	6
	1 second	A	126	10
Display				
Rate	LCD H x W readout data	mm x mm	Double 8 x 4	
	7-digit with decimal points		See table on page 11/23. Active/reactive	
Active energy	drum-type register H x W: 7-digit with 1 decimal	mm x mm		
Display period		/s	0.5	
Storage of measured values		kWh	EEPROM	
Measuring accuracy				
	at 23 °C ± 1 °C			
Active energy	according to IEC 61036	class	2	
Safety				
Supply measuring circuit isolation			Electrical	
Rated insulation voltage		V	600	
Rated impulse withstand voltage	inputs against ground for 1 min. at 50 Hz	kV	4	
Overvoltage category	VDE 0110 T1		III	
Pulse output, S0 interface				
	according to IEC 61393/ DIN 43864			
	IR test output LED	Imp/Wh	10	
	terminals, output	Imp/kWh	10	1
	minimum pulse duration	ms	125	
	external voltage	V DC	5 ... 30	
	current	mA	10 ... 20	
	resistance	k Ω	0.5 ... 1.5	
<i>instabus</i> KNX EIB interface				
Standard			EIS 9	
Readout data			1)	
Terminals				
Main current paths	$\pm$ screw (Pozidriv)		2	
Supply/control terminals	blade for slotted screw	mm	0.4 x 2.5	
Conductor cross-sections	rigid (max.)	mm ²	1 x 10	
Main current paths	rigid (min.)	mm ²	1 x 1.5	
Conductor cross-sections	rigid (max.)	mm ²	1 x 2.5	
Supply/control terminals	flexible, with end sleeve	mm ²	1 x 0.75	

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Ambient conditions					
Temperature	storage	°C		-40 ... +70	
	operation	°C		0 ... +55	
Relative air humidity	storage	%		≤ 98	
	operation	%		≤ 80	
Minimum vibration	amplitude at 50 Hz	mm		± 0.25	
Degree of pollution	VDE 0110-1			2	
Degree of protection	(terminal area)			IP40 (IP20)	