

## DUCA47 / DUCA47-96 – Technical characteristics

<b>POWER SUPPLY</b>			
<i>Voltage</i>	<i>Frequency</i>	<i>Power consumption</i>	<i>Fuse</i>
230V rms (+15% -10%) 240V rms (+10% -15%) 115V rms (+15% -10%) 120V rms (+10% -15%)	45 ÷ 65Hz	< 6VA	<b>Fit external fuse T0,1A</b>
<b>MEASUREMENTS ON THE DISPLAY</b>			
<i>Parameter</i>		<i>Note</i>	
Frequency			
Phase-to-Neutral Voltage [ $V_{L1-N}$ , $V_{L2-N}$ , $V_{L3-N}$ ]		True RMS	
Phase-to-Phase Voltage [ $V_{L1-L2}$ , $V_{L2-L3}$ , $V_{L1-L3}$ ] and Three-Phase Voltage		True RMS	
Line and Three-Phase Current		True RMS	
Line and Three-Phase Active Power			
Line and Three-Phase Reactive Power			
Line and Three-Phase Apparent Power			
Power Factor (PF) for each phase and three-phase		With conventional sign for Inductive or Capacitive load	
Line and total active energy		9 digits indication	
Line and total reactive energy		9 digits indication	
<b>MAX MIN AND AVERAGE (15 MINUTES CALCULATION PERIOD) VALUES</b>			
<i>Max values</i>	<i>Min values</i>	<i>Average value (15 min. calculation period)</i>	
Phase-to-Neutral Voltage [ $V_{L1-N}$ , $V_{L2-N}$ , $V_{L3-N}$ ]	Phase-to-Neutral Voltage [ $V_{L1-N}$ , $V_{L2-N}$ , $V_{L3-N}$ ]	Line and Three-Phase Active Power	
Line Current	Line Current	Line and Three-Phase Reactive Power	
Line and Three-Phase Active Power	Three-Phase Active Power	Line and Three-Phase Apparent Power	
Line and Three-Phase Reactive Power	Three-Phase Reactive Power		
Line and Three-Phase Apparent Power	Three-Phase Apparent Power		
<b>ACCURACY OF THE MEASUREMENTS</b>			
Voltages		±0,5% F.S. ±1 digit in the range 10Vac÷500Vac rms $V_{L-N}$	
Currents		±0,5% F.S. ±1 digit in the range 50mA÷5A rms	
Active power		±1% ±0,1% F.S. (from $\cos\varphi = 0,3$ Ind. to $\cos\varphi = -0,3$ Cap.)	
Frequency		40.0 ÷ 99.9Hz: ±0,2% ±0,1Hz 100 ÷ 500Hz: ±0,2% ±1Hz	
<b>VOLTMETER INPUTS</b>			
Range		10 ÷ 500V rms (L-N)	
Max non-destructive value		550V rms	
L-N input impedance		Greater than 8M $\Omega$	
<b>AMMETER INPUTS (USE ALWAYS EXTERNAL CTs)</b>			
Range		50mA ÷ 5A rms	
Overload		1,1 permanent	
Max dispersed power (with $I_{max} = 5A$ rms), for each phase input		1,4VA	
Type of measurement		Current inputs through internal shunts and using <b>external CTs</b>	
Direction of CTs current		Detection and automatic adjustment at power up, independent for each phase	
<b>ENERGY COUNT</b>			
Max value for the single phase energy		4294,9 MWh (MVA $r_h$ ) with $K_A = K_V = 1$	
Max value for three-phase energy		4294,9 MWh (MVA $r_h$ ) with $K_A = K_V = 1$	
Accuracy		Class 1	
<b>DIMENSIONS AND WEIGHT</b>			
6 DIN rail model		105 mm x 90 mm x 63 mm (LxHxW)	
Panel mounting model 96x96		96 mm x 96 mm x 103 mm (LxHxW)	
Weight 6 DIN rail model		About 350g	
Weight panel mounting model 96x96		About 500g	
<b>PROTECTION</b>			
IP50 on the front panel and IP20 on the terminal blocks			
<b>OPERATING CONDITIONS</b>			
Operating temperature		0°C ÷ 50°C	
Storage temperature		-10°C ÷ 60°C	
Relative humidity		90% max. (without condense) at 40°C	