

DUCA47-72 – Technical characteristics

POWER SUPPLY			
<i>Voltage</i>	<i>Frequency</i>	<i>Power consumption</i>	<i>Fuse</i>
230V rms ($\pm 10\%$)	45 ÷ 65Hz	< 6VA	Fit external fuse T0,1A
400V rms ($\pm 10\%$)			
MEASUREMENTS AVAILABLE ON THE DISPLAY			
<i>Measurements</i>		<i>Notes</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, Reactive and Apparent Power			
Single-Phase and Three-Phase Power Factor (PF)		With conventional sign for Inductive or Capacitive Load	
Line and Total Active and Reactive Energy		9 digits indication	
MAX, MIN AND AVERAGE (15 MINUTES CALCULATION PERIOD) VALUES			
<i>Max values</i>	<i>Min values</i>	<i>Average values (15 min)</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, Reactive and Apparent Power	Three-Phase Active, Reactive and Apparent Power	Line and Three-Phase Apparent Power	
QUANTITIES SELECTABLE FOR ALARMS (ONLY MODEL DUCA47-72-SP)			
Phase-to-Phase Voltage [$V_{L1-L2}, V_{L2-L3}, V_{L1-L3}$] and Three-Phase Voltage			
Phase-to-Neutral Voltage [$V_{L1-N}, V_{L2-N}, V_{L3-N}$]			
Line and Three-Phase Current			
Active, Reactive and Apparent Single-Phase and Three-Phase Power			
Single-Phase and Three-Phase Power Factor (PF)			
"Count-down" counter			
ACCURACY OF THE MEASUREMENTS			
Voltage:	$\pm 0,5\%$ F.S. ± 1 digit in the range 10Vac÷500Vac rms V_{L-N}		
Current:	$\pm 0,5\%$ F.S. ± 1 digit in the range 50mA÷5A rms		
Active Power:	$\pm 1\% \pm 0,1\%$ F.S. (from $\cos\varphi = 0,3$ Ind. to $\cos\varphi = -0,3$ Cap.)		
Frequency:	40.0 ÷ 99.9Hz: $\pm 0,2\%$ $\pm 0,1$ Hz 100 ÷ 500Hz: $\pm 0,2\%$ ± 1 Hz		
VOLTMETER INPUTS			
Range:	10 ÷ 500V rms (L-N)		
Max non destructive value:	550V rms		
L-N input impedance:	Greater than 8M Ω		
AMMETER INPUTS (USE ALWAYS EXTERNAL CTs)			
Range:	50mA ÷ 5A rms		
Overload:	1,1 permanent		
Max dispersed power:	1,4VA (with $I_{max} = 5A$ rms for each phase input)		
Type of measurement:	Current inputs through internal shunts and using external CTs		
Direction of CTs current:	Detection and automatic adjustment at power up, independent for each phase		
DIGITAL OUTPUTS (ONLY MODEL DUCA47-72-SP)			
Pulse duration:	50ms OFF (min)/50ms ON		
Vmax on contact:	48V (peak DC or AC)		
Max power dissipation:	450mW		
Max frequency:	10 pulses/sec		
I _{max} on contact:	100mA (peak DC or AC)		
Insulation:	750Vmax		
ENERGY COUNT			
Max value for the single and three-phase energy:	4294,9 MWh (MVA _{rh}) con KA = KV = 1		
Accuracy:	Class 1		
AVAILABLE INTERFACES			
RS485 serial interface with galvanic insulation (available protocols: ASCII Ducati and ModBus-RTU)			
4 LED's display with 7 segments			
DIMENSIONS AND WEIGHT			
Dimensions:	72 mm x 72 mm x 90 mm (LxHxW) – IEC61554		
Weight:	about 500g		
PROTECTION			
IP50 on the front panel and IP20 on the terminal blocks			
OPERATIVE CONDITIONS			
Storage temperature:	-10°C ÷ 60°C		
Operating temperature:	0°C ÷ 50°C		
Relative humidity:	90% max. (without condense) at 40°C		