

ENVIRONMENTAL WORKING CHARACTERISTICS

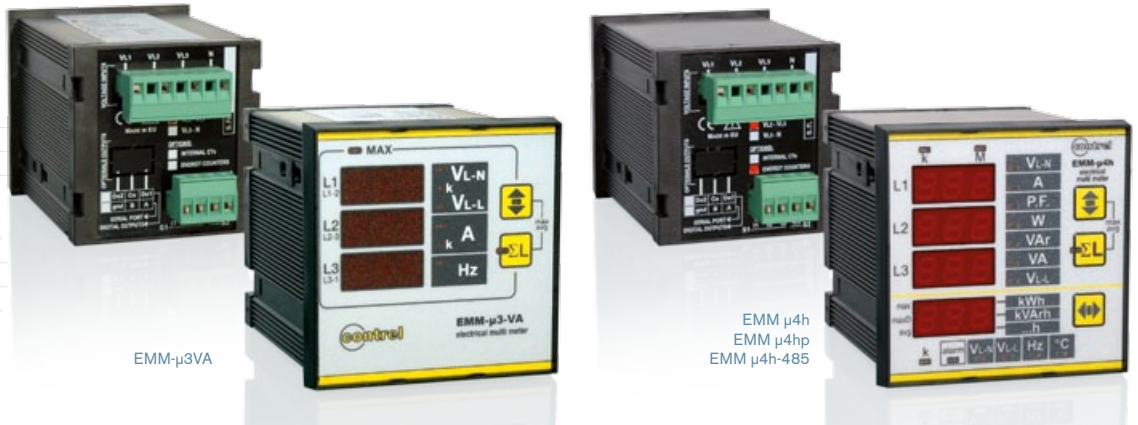
Working T: $-5 \div +50^{\circ}\text{C}$
Storage T: $-15 \div +60^{\circ}\text{C}$
Humidity: $\leq 90\%$

STANDARDS / REGULATION

Safety: 61010-1:2001
EMC: EN61000-6-2
EN61000-6-4
CISPR22-EN55022

ELECTRICAL COMPATIBILITY CE

Energy: EN61036



EMM-μ3VA

EMM μ4h
EMM μ4hp
EMM μ4h-485

EMM >>	μ3VA	μ4h	μ4hp	μ4h-485
Mechanical characteristics	Flush mounting DIN 72 x 72 mm Depth 80 mm Panel cut out 68x68 mm Weight: 0,5 kg			
Auxiliary supply	400 Vac L-L 50-60 Hz (directly from voltage inputs)			
Option C1	230 Vac L-L			
Option C2	110 Vac L-L			
Protection degree	Frontal IP 52 Box IP 20 (IP65 with external cover)			
Voltage inputs	3 inputs 500V max (possible external VT ratio programmable) Voltage max 40kV			
Current inputs	3 inputs 0,05÷5A rms (with external CT ratio programmable) Current max 10000A			
Option 1A	3 inputs 0,01÷1A rms			
Option T	Isolated inputs with internal CT (for use in M.V.)			
Option TT10	direct inputs for current max 16A with closed miniaturized CT			
Option TT50	direct inputs for current max 63A with closed miniaturized CT			
Option TT100	direct inputs for current max 100A with closed miniaturized CT			
Option TTA50	direct inputs for current max 63A with openable miniaturized CT			
Option TTA100	direct inputs for current max 100A with openable miniaturized CT			
Option M	3 inputs 0,05 ÷ 5A rms for measure in 3 single-phase line and or bidirectional			
Measured parameters	V I-I, V I-n		V I-I, V I-n, A	
	A		cosfi, f, ° T, h	
	f		W, Var, VA	
	h		+ kWh, - kWh, + KVarh, - KVarh	
Measuring accuracy	Voltage: < 0.5%		Voltage: < 0.5%	
	Current: < 0.5%		Current: < 0.5%	
	-		Powers: < 1%	
	-		Energies: < 1% class 1 EN61036	
Frequency measure	40 ÷ 100 Hz			
Communication port	-	-	-	1Rs485 Communication protocol MODBUS-RTU baud rate 9600-19200 bps
Digital Outputs	-	-	2 photomos 10÷300Vcc / 150 mA or 10÷250Vca/150 mA max for alarms or re-emission pulses (programmable time of pulse 100÷500 m Sec.).	-
Option P	2 photomos 10÷300Vcc / 150 mA or 10÷250Vca/150 mA max for alarms	-	-	-
Analog outputs	-	-	-	3 outputs 0-20/4-20mA completely programmable definition 16 bit (by external serial/ analog converter Z3A0) *
Option Z3A0	-	-	-	-
Display	3 display with 10 mm red LED (3 digit of 10 mm - 7 segments)	4 displays with 10 mm red LED (3 digit of 10 mm - 7 segments)		

* in this case serial output RS485 can not be used.