

EMM 4h | μ 4h | R4h

DIGITAL MEASURING INSTRUMENTS - FLUSH MOUNT LED MULTIMETERS



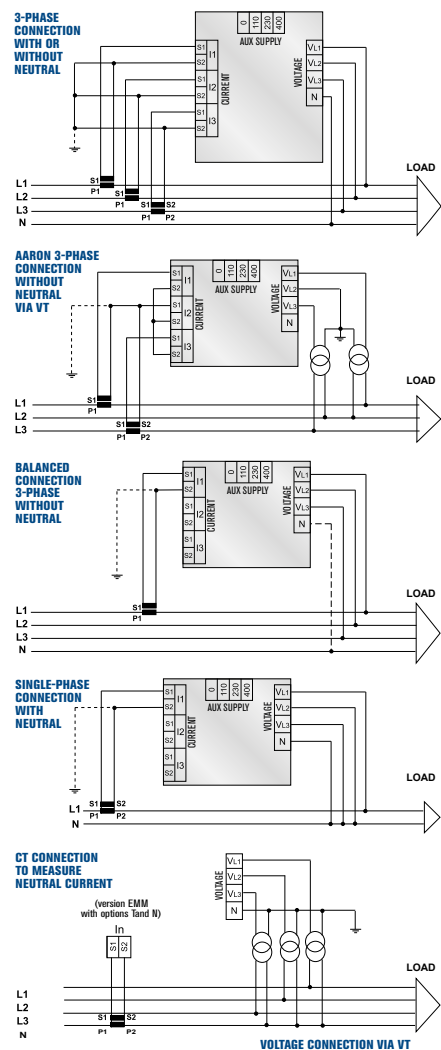
TECHNICAL CHARACTERISTICS	EMM-4h	EMM- μ 4h	EMM- R4h	
AUXILIARY SUPPLY				
Nominal voltage U_s	110 - 230 - 400 VAC	400VAC (directly by the voltage inputs)	400VAC (directly by the voltage inputs)	
Operating voltage range	$\pm 15\%$	$\pm 15\%$	$\pm 15\%$	
Power consumption	4VA	3VA	3VA	
Frequency	50 - 60 Hz	45 - 65 Hz	45 - 65 Hz	
VOLTAGE INPUTS				
Measurement range	20...500VAC L-L (20...290VAC L-N)	20...500VAC L-L (20...290VAC L-N)	20...500VAC L-L (20...290VAC L-N)	
Method of measuring	True RMS value	True RMS value	True RMS value	
Measuring input impedance	1M Ω	1M Ω	1M Ω	
Method of connection	Single-phase, two-phase, three-phase orbanced three-phase system	Single-phase, two-phase, three-phase orbanced three-phase system	Single-phase, two-phase, three-phase orbanced three-phase system	
CURRENT INPUTS				
Reference current	1A (option) or 5A	1A (option) or 5A	1A (option) or 5A	
Measurement range	0,02...5A	0,02...5A	0,02...5A	
Method of measuring	True RMS value	True RMS value	True RMS value	
Overload capacity	+20% by an external current transformer	+20% by an external current transformer	+20% by an external current transformer	
Self-consumption	< 0,5VA	< 0,5VA	< 0,5VA	
ACCURACY				
Measures	Voltage	0,5%	0,5%	0,5%
	Current	0,5%	0,5%	0,5%
	Power	1 %	1 %	1 %
	Frequency	0,5%	0,5%	0,5%
	Active energy	Class 1	Class 1	Class 1
INSULATION				
Insulation voltage	3kVAC for 1 minute	3kVAC for 1 minute	3kVAC for 1 minute	
AMBIENT CONDITION				
Storage temperature	-10...+60°C	-10...+60°C	-10...+60°C	
Storage temperature	-25...+80°C	-25...+80°C	-25...+80°C	
HOUSING				
Version	Flush mount 96 x 96 mm	Flush mount 72 x 72 mm	Flush mount 96 x 96 mm	
Degree of protection	IP42 on front IP20 Housing and terminals	IP52 on front IP20 Housing and terminals	IP52 on front IP20 Housing and terminals	
Weight	500g	500g	500g	
CERTIFICATIONS AND COMPLIANCE				
Reference standards	IEC/EN 50081-2, IEC/EN 61000-6-2, IEC/EN 61010-1, IEC/EN 61036-1			
OPTIONS				
ORDER CODE	DESCRIPTION			
C1	Auxiliary Supply 20 \pm 60 VAC/CC (version EMM-4h) - Auxiliary Supply 230 VAC (versions EMM-R4h, EMM- μ 4h)			
C2	Auxiliary Supply 90 \pm 250 VAC/CC (version EMM-4h) - Auxiliary Supply 110 VAC (versions EMM-R4h, EMM- μ 4h)			
600	Voltage Inputs 600 V (version EMM-4h)			
1A	Rated Current inputs by external CT 1A			
T	Internal Current inputs, galvanically insulated			

EMM 4h | μ 4h | R4h

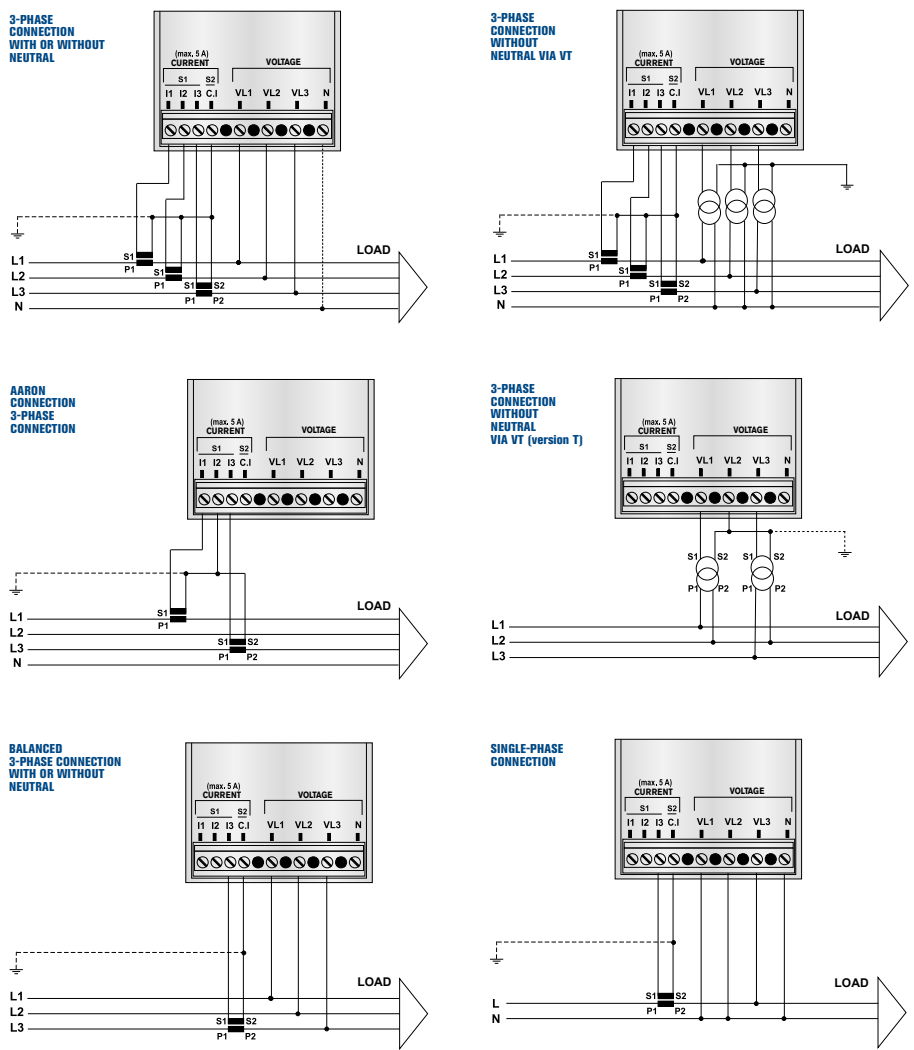
DIGITAL MEASURING INSTRUMENTS - FLUSH MOUNT LED MULTIMETERS

TT - TTA	Current inputs by miniaturized closed CT (TT) or openable CT (TTA)
N	Neutral current input or differential current input
M	Import/Export energy counters
P	2 digital outputs
DI	1 digital input
A	1 analog outputs
COMMUNICATION PORTS	
485	RS485 serial interface
ETH	Ethernet interface with Web server function (version EMM-4h)
PF/S	Profibus-DP interface (version EMM-4h)
M-Bus	M-Bus interface (version EMM-4h)
LON	LON-Works interface (version EMM-4h)

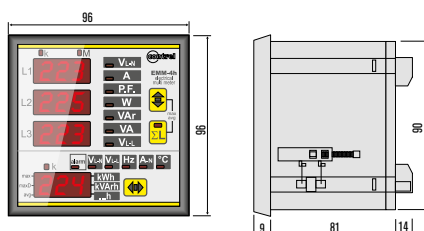
WIRING DIAGRAMS EMM-4h



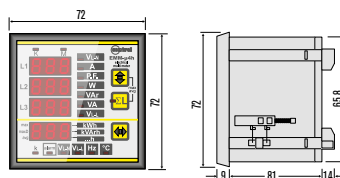
WIRING DIAGRAMS EMM- μ 4h e EMM-R4h



MECHANICAL DIMENSIONS EMM-4h



MECHANICAL DIMENSIONS EMM- μ 4h



MECHANICAL DIMENSIONS EMM-R4h

